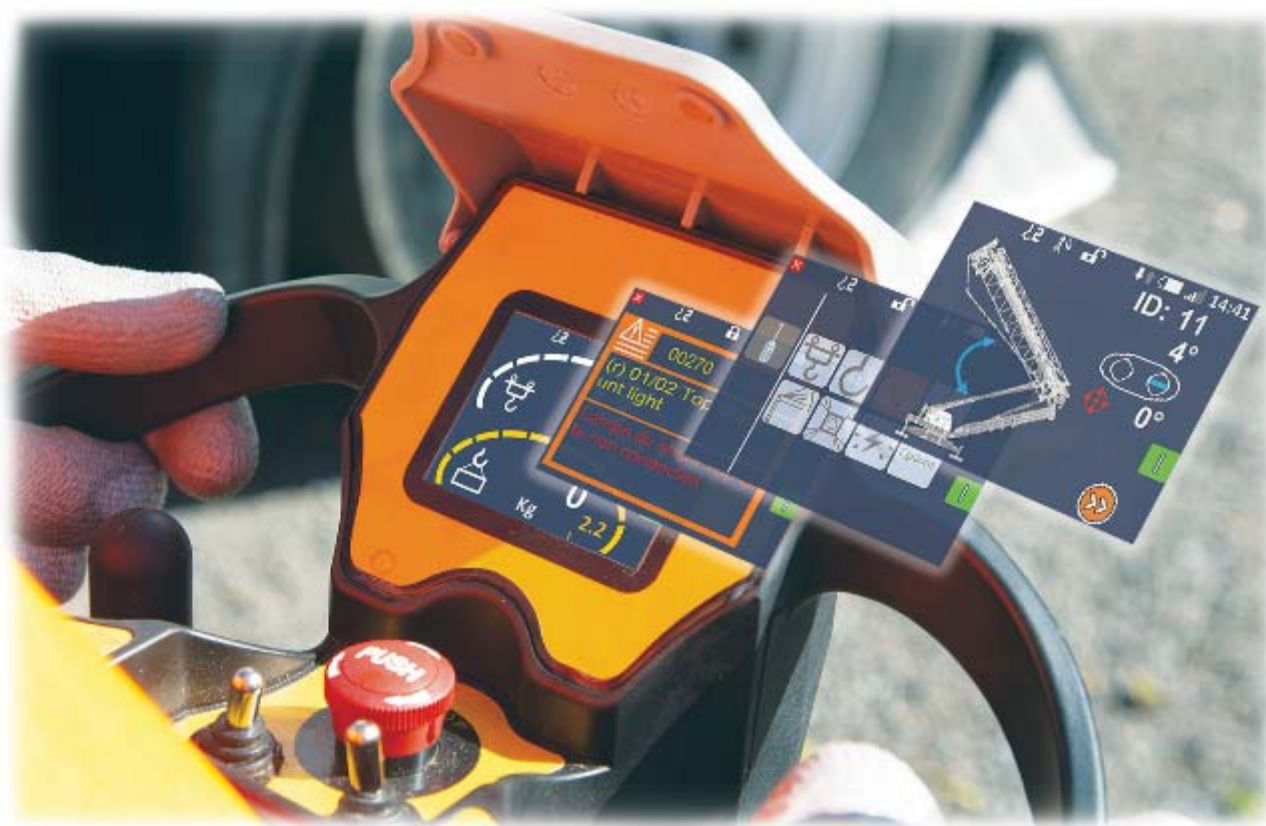




Imprint

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1 'CCS' system / V1.13

1.1 Foreword

The **CCS** manual delivered with the crane contains all of the information relative to the use and maintenance of the **CCS** system in its "factory setting" version.

During the lifespan of the crane, the **CCS** system could be updated with new software versions. In this case, it is possible to consult the manual corresponding to the versions installed on the crane in the '**GTL**' tool.

The list of activated options must be recorded before performing the software update in order to reconfigure these options once the update is complete.

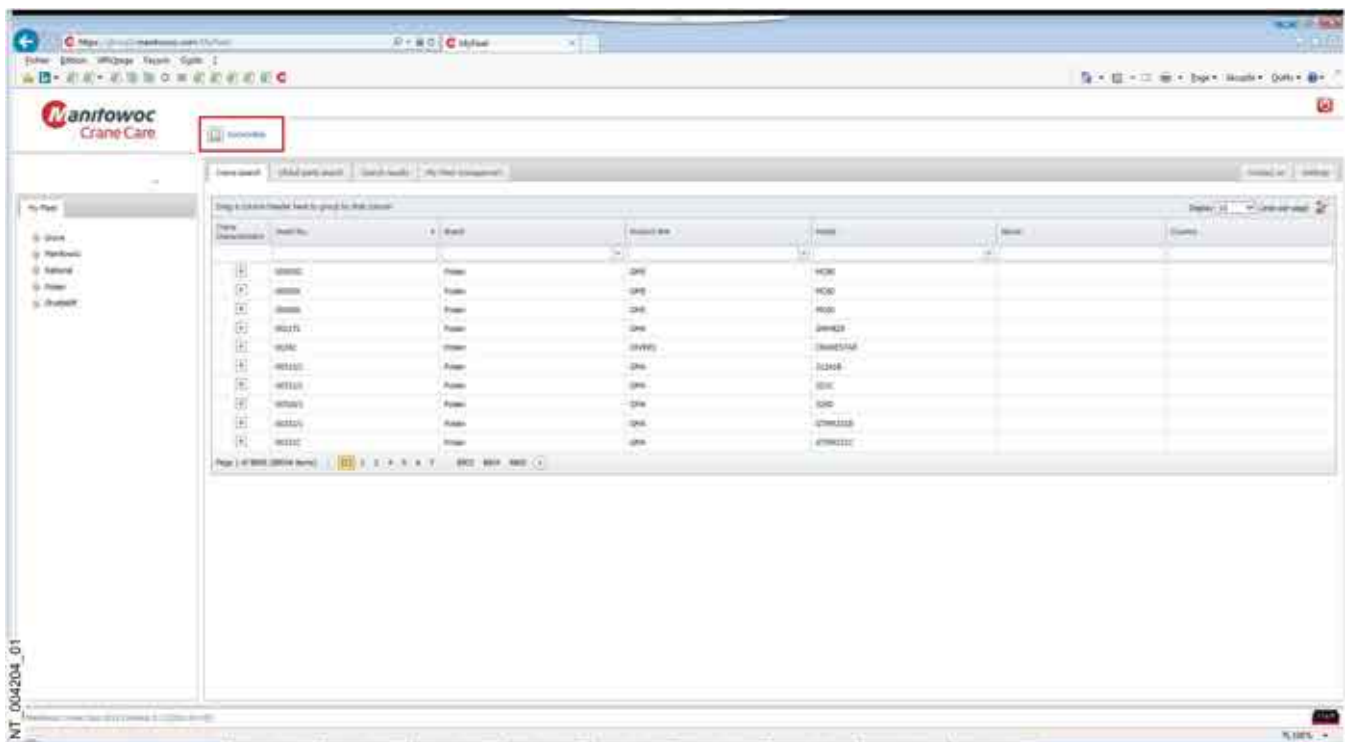
1.2 Accessing the CCS manual corresponding to the software version installed on the crane

Procedure

1. Accessing the '**GTL**' Internet site.

Technical data

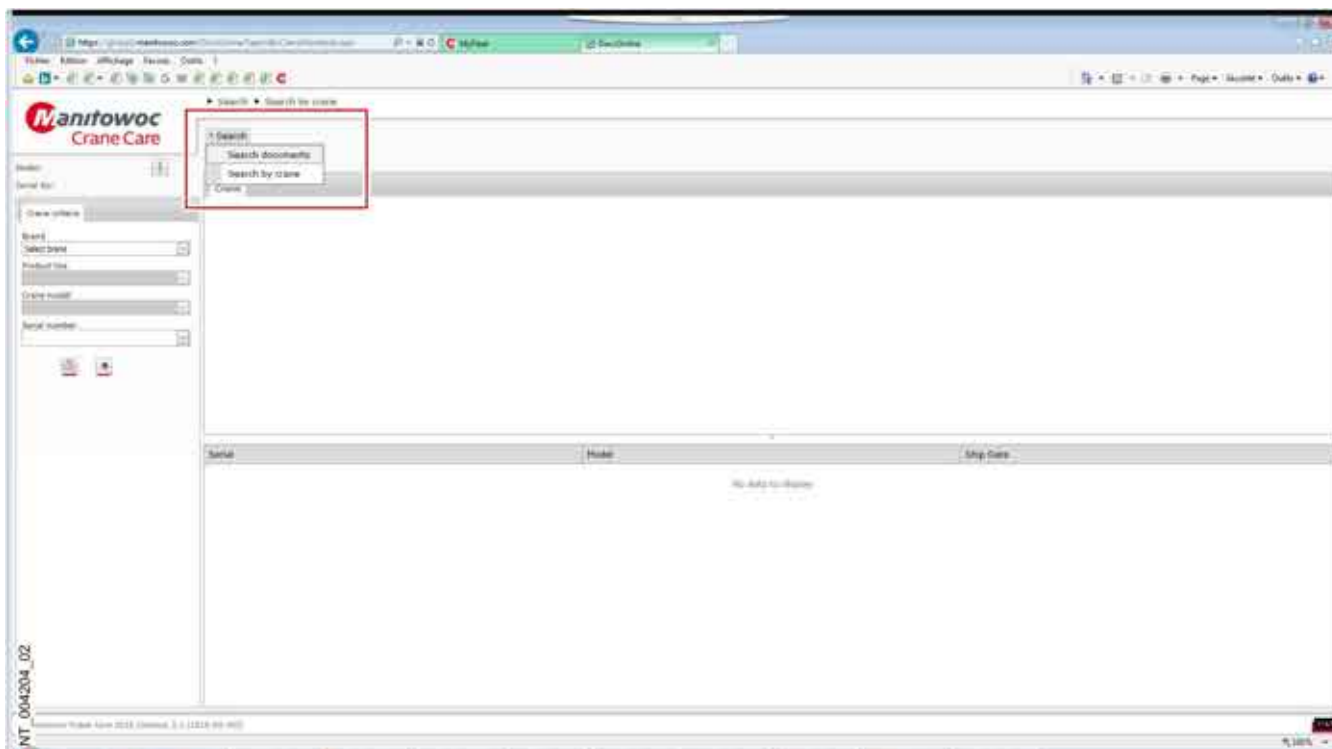
<https://gtl.erp2.manitowoc.com/MyFleet/>



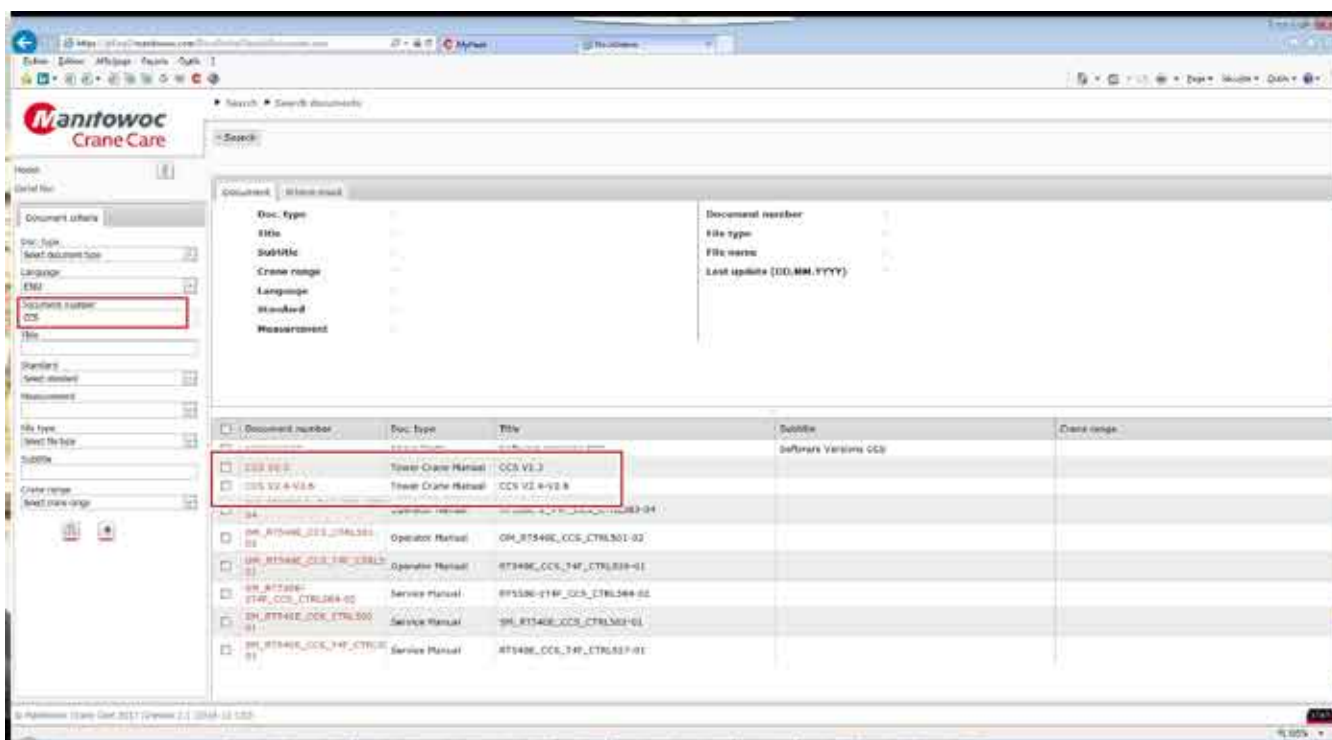
2. Selecting the '**DocsOnline**' menu.

1. 'CCS' system / V1.13

1.2 Accessing the CCS manual corresponding to the software version installed on the...



3. Selecting the **"Search"** menu and then the **"Search documents"** submenu.



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4. Fill in the **"Document number"** field with the term **CCS**.
5. Confirm by clicking the  symbol or pressing the **"Enter"** key on your keyboard.
 - ◁ The list of documents corresponding to the different **CCS** manual versions appears.
6. Select the document corresponding to the software version displayed on the computer screen **CCT** ➡ page 1-3.

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**Note**

The document is downloadable and printable.

For the same software version, the manual contents can be added to and updated. You must take into consideration the printing date of the manual to ensure having downloaded or printed the latest version.

Displaying the software versions in the system CCS**Accessing the "Menu" screen****Note**

Procedure to be followed on the **CCT**

**Note**

Procedure to be followed from the home screen.

7. Press the key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Maintenance" menu

8. Select the **"Maintenance"** menu using the arrows then press the key to confirm.
 - ◁ The **"Maintenance"** menu is displayed.

Accessing the "Version" sub-menu

9. Use the arrows to select the **"Version"** sub-menu, then press the key to confirm.
 - ◁ The **"Version"** sub-menu is displayed.

Accessing the "SCM computer" sub-menu

10. Use the arrows to select the **"SCM computer"** sub-menu, then press the key to confirm.
 - ◁ The software version present on the crane is displayed: example V1.14.XX

Returning to the home screen

11. Press the key as many times as is necessary to return to the home screen.
 - ◁ The home screen is displayed.

1.3 CCS system with radio control - General notes

1.3.1 Foreword

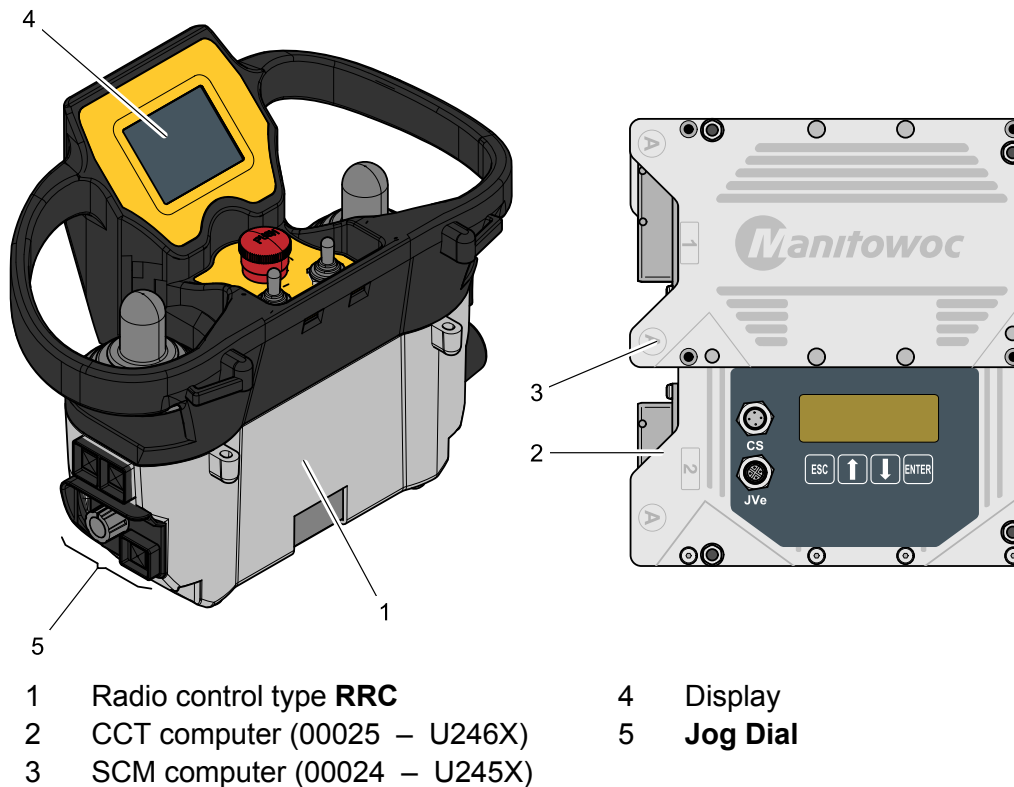
The **CCS** (Crane Control System) is the name given to the set of components which make up the crane's control, checking, measuring, and communication system. The **CCS** system comprises a computer, control unit (radio control), and sensors. All **CCS** system components communicate with each other over a CANopen network.

The CCS performs several functions:

- Control and supervision of erecting and dismantling (GMA)
- Adjusting and managing the safety devices
- Aid to and optimization of driving

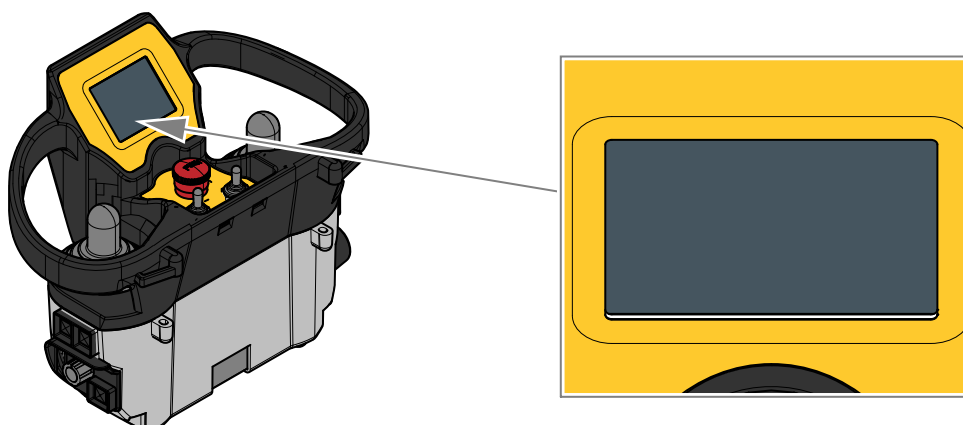
- Aid to diagnostics and troubleshooting
- Receiving mode (GME)

1.3.2 Overview



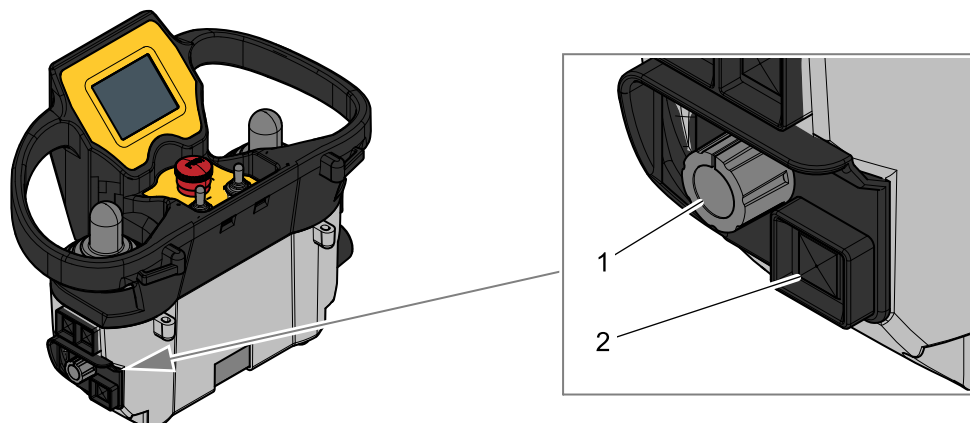
1.3.3 Radio control

Screen



The radio control has a 2.4-inch color LCD screen with a 320 x 240 pixel resolution. This display allows you to view all the screens for driving, parameter settings, maintenance, troubleshooting, and fitting/dismantling.

The Jog Dial

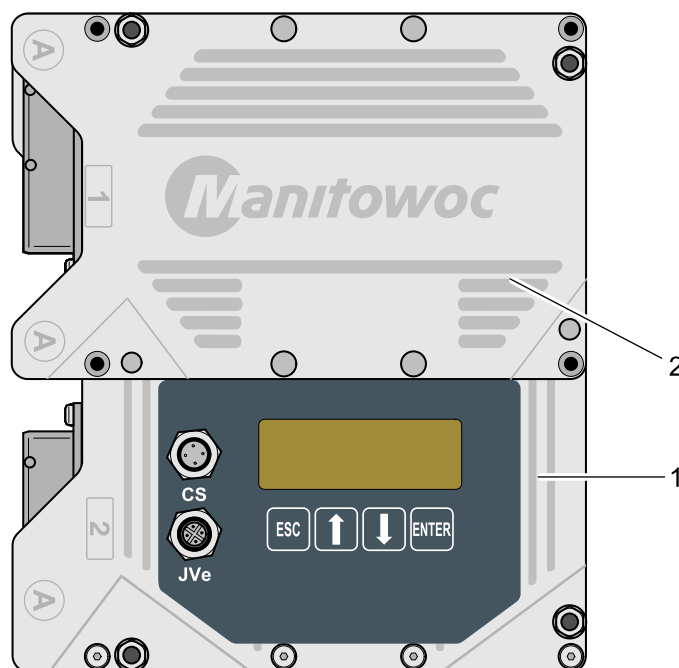


The **Jog Dial** is used for browsing on the screen. It consists of:

- A dial **(1)** for browsing and validating.
- An ESC (escape) key **(2)**.

1.3.4 The computer

The computer located in the crane main control panel has two components:



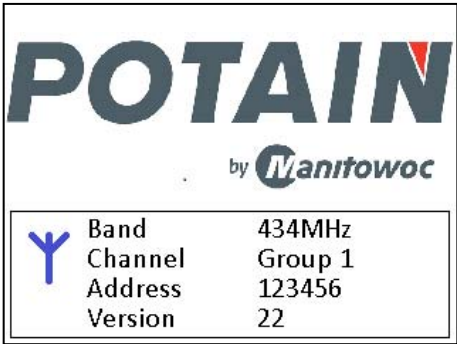
- The **CCT** computer **(1)** comprises an indicator and a keyboard.
- The **SCM** computer **(2)** manages all the safety devices on the crane.

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NT_003852_06

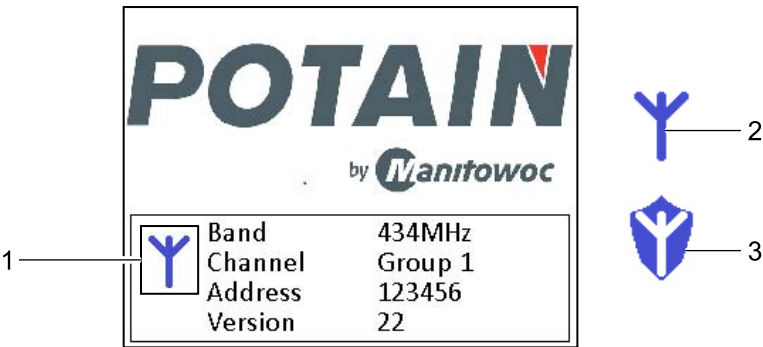
1.3.5 Display and navigation

Starting



When the radio control is started, the display shows an initialization screen for 5 seconds.

Note
Wait for the complete initialization of the system.



Depending on the status of the radio link chosen, the pictogram in the (1) zone is not the same. Pictogram (2) is displayed if the secured radio link is not activated. Pictogram (3) is displayed if the secured radio link is activated.

Backlighting of the radio control screen

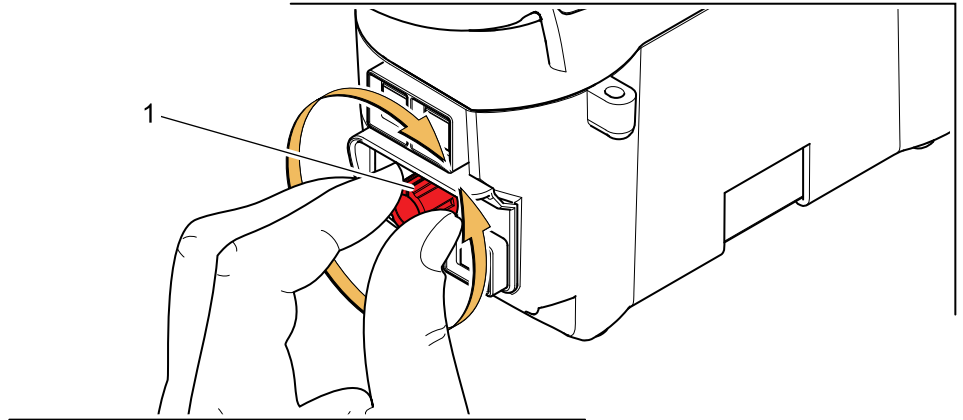
The radio control screen is backlit for better visibility of the information.

Note
By default, the backlighting remains active.

In order to save the battery, the "Backlighting" function can be activated. As soon as the function is activated, the backlighting turns off if no action is taken on the radio control for one minute. To turn it back on, just one action on the radio control is needed.

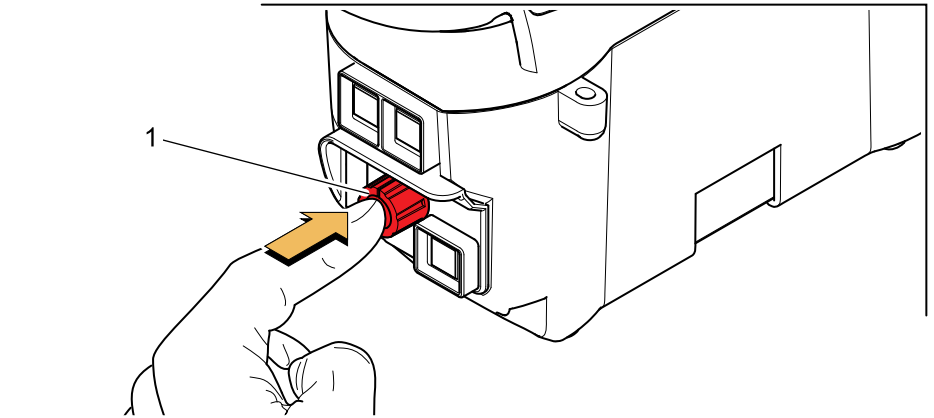
Browsing with the Jog Dial

Dial



The dial **(1)** is used to browse through the menus, scroll through a list, and enter values.

- Turning the dial forward allows you to scroll right or down, or to increase an entered value.
- Turning the dial backward allows you to scroll left or up, or to decrease an entered value.

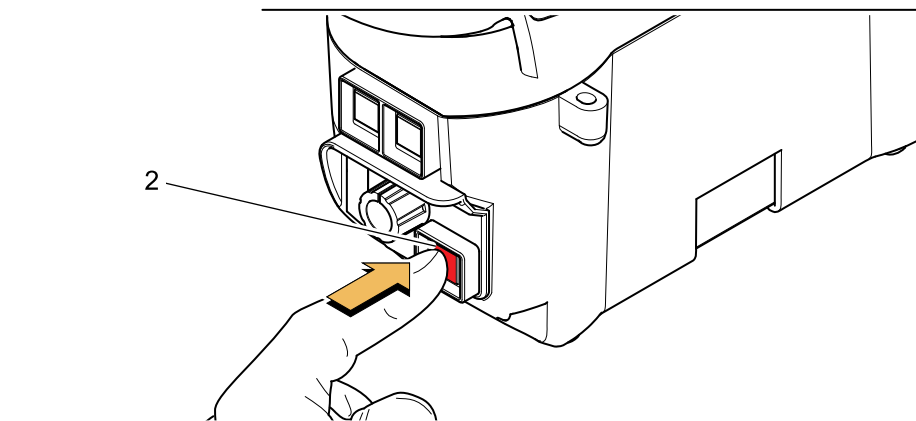


Pressing on the dial **(1)** allows you to validate a position, a calibration, a selection, or a value.

NT_004124_05

NT_004124_06

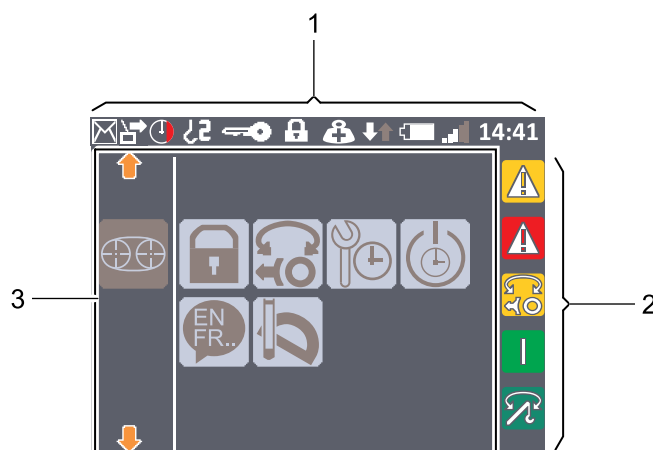
The "ESC" key



Key **(2)** allows you to exit a menu or an adjustment without validating, and to display the menu screen.

The screens

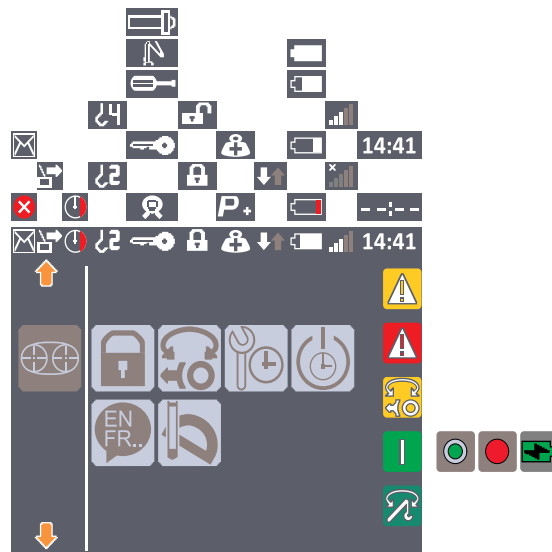
Screen composition



A screen displayed on the radio control display is made up of three zones:

- The first is a horizontal status bar **(1)**.
This horizontal bar at the top of the screen makes it possible to display several types of information such as the time, battery charge status, radio communication status, and the status of certain functions.
- The second is a vertical status bar **(2)**.
This vertical bar on the right-hand side of the screen makes it possible to display pictograms linked to the status of the crane (stopped, on, standby), active options, and alarms.
- The third is made up of the rest of the screen (zone **(3)**). It is the main information area. It displays the indicators, menus and screens relating to the fitting and dismantling of the crane.

Status bar pictograms



Vertical status bar pictograms

	Permanent: Crane in operation Flashing: Crane in standby		Emergency stop button pressed
	Crane switched off		Power supply through battery
	Pre-alarm: Load, moment or wind speed		Alarm: Load, moment or wind speed
	Weathervaning indicator		Weathervaning authorization ⁽¹⁾ ⁽¹⁾ Only for MR type crane

Radio link

	Radio signal level Note The more white bars there are, the better the radio link		No radio link
--	---	--	---------------

Time indicator

	Local time (adjustable)		Radio link absent Note If the radio link is absent, the time indicator is replaced by this pictogram
--	-------------------------	--	---

Radio control battery charge level

	Battery fully charged		Battery partially charged
	Battery weakly charged		Battery very weakly charged Note Plan to recharge the battery

Radio communication activity

	Radio communication activity		
--	------------------------------	--	--

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Message and fault notification

	Presence of one or more faults		Presence of a notification (maintenance deadline)
---	--------------------------------	---	---

Specific modes of the crane

	"Shunt" mode		"Fitting" mode
	"Commissioning" mode		2-fall rope reeving
	"Configuration/Teach-in programming" mode		4-fall rope reeving

Password

	Locked		Unlocked
---	--------	---	----------

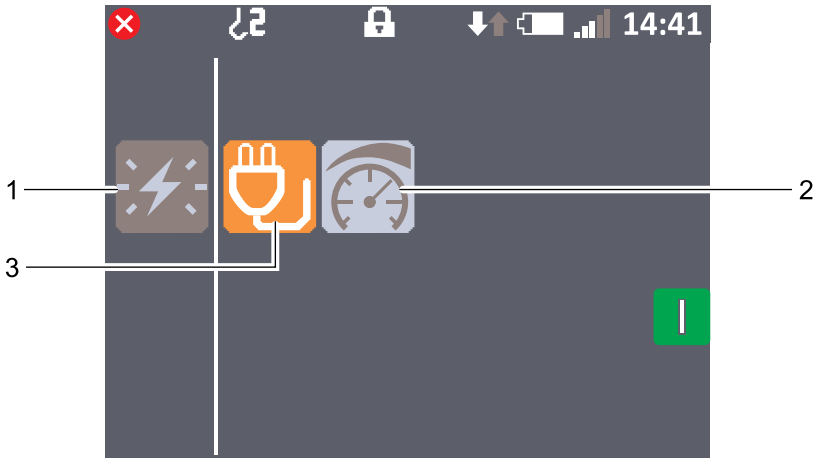
Miscellaneous

	"Potain +" function		Presence of additional ballast
	Prohibited zone interference system		

Miscellaneous

	2-fall rope reeving		
---	---------------------	--	--

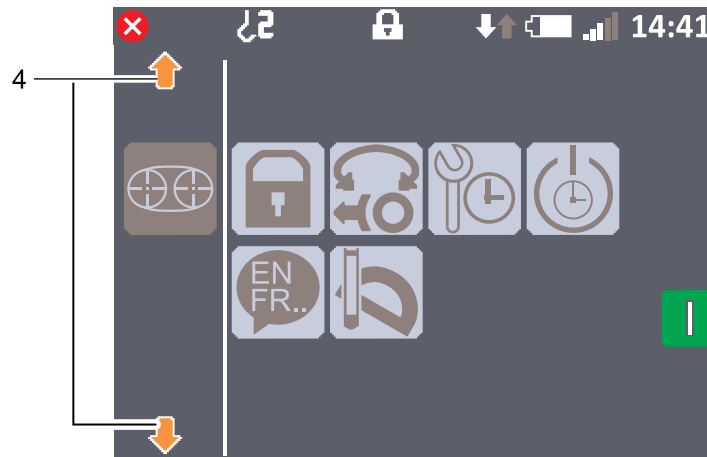
Reading pictograms



A pictogram **(1)** representing the screen or the displayed menu is a light blue color on a dark gray background. It is displayed on the left-hand side of the radio control screen.

A pictogram **(2)** representing a submenu or a setting is a dark gray color on a light blue background when it is not selected.

A pictogram **(3)** representing a submenu or a setting is a light gray color on an orange background when it is selected.



The two arrows **(4)** on the left of the radio control screen indicate the possibility of scrolling through the screens.



Some icons may be accompanied by additional symbols to indicate their status:

- The symbol is displayed on a pictogram to indicate that the setting or the displayed value is active.
- The symbol is displayed when a value or a setting entered is not correct.
- The symbol is present on a pictogram to indicate that the menu is protected by an access code.
- The symbols indicate that the value (number, letter or setting) written on the pictogram can be modified.

List of pictograms

The icons shown on the radio control screen are listed in the tables below. The icons for each screen are grouped below in tables.

Pictograms on the "General/User" screen

	"General/User" screen	  	"Access code" menu
  	"Weathervaning" menu	  	"Counters" menu
  	"Time period for standby" menu	  	"Languages" menu
  	"Units" menu	  	Confirmation
	Brake applications		Operating time counter
	Trolleying		Slewing
	Traveling		Global crane counter
	Hoisting		Minutes
 	French	 	German
 	English	 	Italian
 	Portuguese	 	Spanish
	"°F - lbs - mph" measuring unit		"°C - kg - m/s" measuring unit
	"°C - kg - km/h" measuring unit		

Pictograms on the "Indicators / Folio 3" screen

	"Indicators / Folio 3" screen		Overview of the jib configuration
	Jib length Note "11M" is an example. Other values can be displayed.		Jib angle Note "0DE" is an example. Other values can be displayed.
	Overview of the footing configuration		Square support
	Rectangular support		Overview of the jib options
	Short jib option		Overview of specific load curves
	Additional ballast option. The presence of the additional ballast allows a specific load curve		Overview of telescoping height configuration
	Jib option overview		

Pictograms on the "Target" screen

	"Maintenance target" screen	  	"Working configuration target" menu
  	"Low maintenance position" menu	  	"High maintenance position" menu
  	"Adjusting support with additional ballast" menu		"Degrees" measurement unit
  	Confirmation	  	Jib height
  	Jib angle		

Pictograms on the "Configuration and teach-in programming" screen

	"Configuration and teach-in programming" screen	  	"Trolleying" menu
  	"Zero hoisting" menu	  	"Zero slewing" menu
  	"Load" menu	  	"Jib configuration" menu
  	"Footing configuration" menu	  	"Power supply management" menu
  	"Options" menu	  	"Zero configuration": trolleying, hoisting, and slewing
 	"Maximum trolleying" position	 	"Zero load"
 	"Known load"		"Degrees" measurement unit
 	Rectangular support	 	Square support
 	"Power supply type"	 	"Power control"
	Three-phase power supply		Single-phase power supply 20A
	Single-phase power supply 32A		Power supply through generator

1.3 CCS system with radio control - General notes

	Power supply through battery		Anemometer
	Short jib		Hydraulic support
	Additional ballast		Slewing encoder
	Top site		Anti-collision system
	Phase relay		Temperature sensor
	Ballast on mast		Ballasting derrick
	"Jib folded completely for weathervaning" option		"Jib nose folded" option
	Jib height		Jib angle

Pictograms on the "Messages and diagnostics" screen

	"Messages and diagnostics" screen		"Messages" menu
	"Diagnostics" menu		Fitting diagnostics screen
	Dismantling diagnostics screen		Ballast presence check inductive sensor
	Angle inductive sensor		Folded jib sections 2 and 3 check inductive sensor
	Unfolded jib sections 2 and 3 check inductive sensor		Inductive sensor to check counter-jib locking
	Aligned jib sections 1 and 2 check inductive sensor		Folded jib sections 1 and 2 check inductive sensor
	Aligned mast section check inductive sensor		Folded mast section check inductive sensor

 1 S915S	Safety contact for telescoping rope slack	 1 S932S	Unfolded mast safety contact
 0 S933S	Locked mast safety contact	 1 S934S	Unlocked mast safety contact
 0 S938S	Safety contact for mast telescoped down	 0 S944S	Stop contact for telescoping bottom position
 0 S945S	Stop contact for telescoping top position		

Pictograms on the "Radio control settings" screen

	"Radio control settings" screen	 434 MHz  434 MHz	"Radio frequency" menu Note "434 MHz" is an example. Other values can be displayed.
 Grp . 2  Grp . 2	"Frequency group" menu Note "Grp . 2" is an example. Other frequency groups can be displayed.	 10 min  10 min	"Auto-OFF" menu Note "10 min" is an example. Other values can be displayed.
 	Secured radio link activated	 	Backlighting activated
 	Secured radio link deactivated	 	Backlighting deactivated

"Indicators" screen

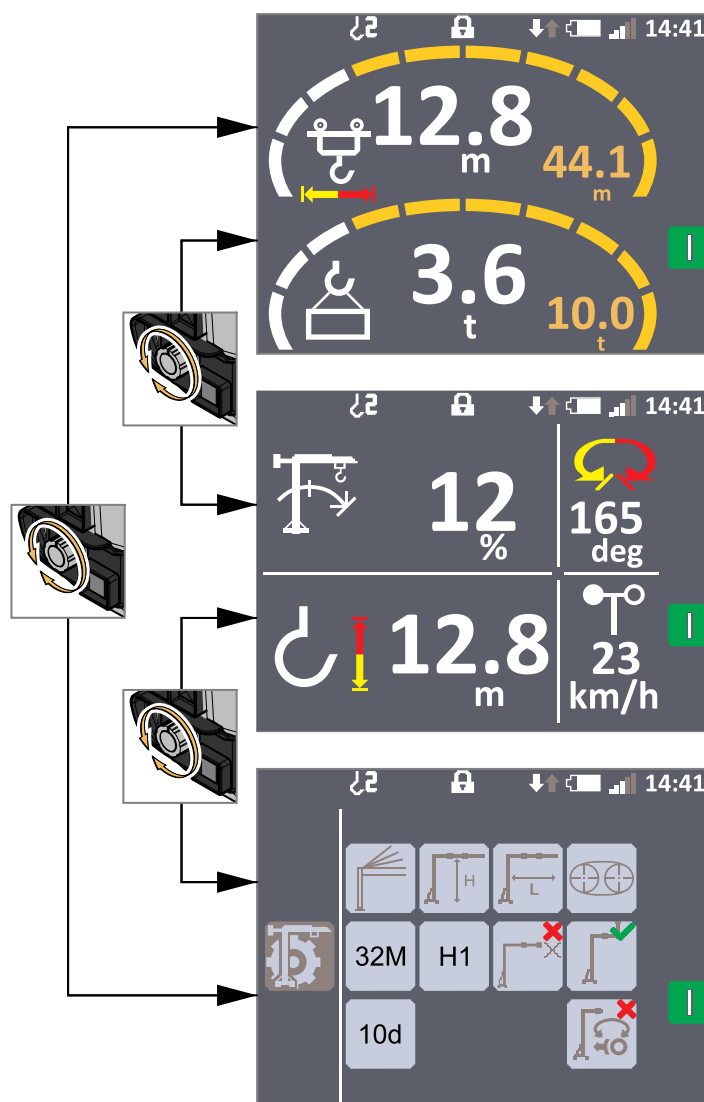


Note

The "Indicators" screen has three folios.

The values and data recorded on this screen are for the crane driver; it is a driving aid.

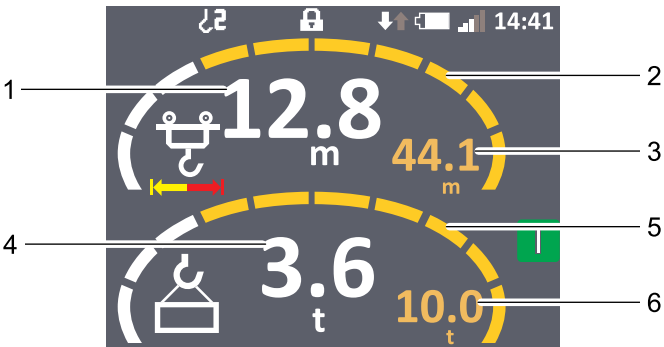
Use the **Jog Dial** of the radio control to scroll through the folios.

**Note**

If the configuration and teach-in programming of the crane have not been done, no value is displayed.

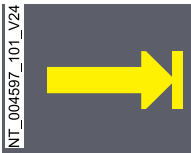
NT_004662_01_V26

Details for Folio 1

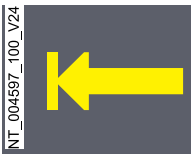


- | | | | |
|---|---|---|--|
| 1 | Actual radius of the hook | 4 | Actual hoisted load |
| 2 | Bar graph representing the percentage of the actual radius of the hook relative to the maximum permissible radius
White areas represent the share (%) used of the maximum permissible radius while the orange areas represent the remaining share. | 5 | Bar graph representing the percentage of the actual hoisted load relative to the maximum permissible load.
White areas represent the share (%) used of the maximum permissible load while the orange areas represent the remaining share. |
| 3 | Maximum permissible radius for the actual hoisted load | 6 | Maximum permissible load for the actual radius of the hook |

Below the symbol representing the trolleying movement, four pictograms indicate the status of the trolleying limit switches:



- Deceleration of trolley out movement.



- Deceleration of trolley in movement.

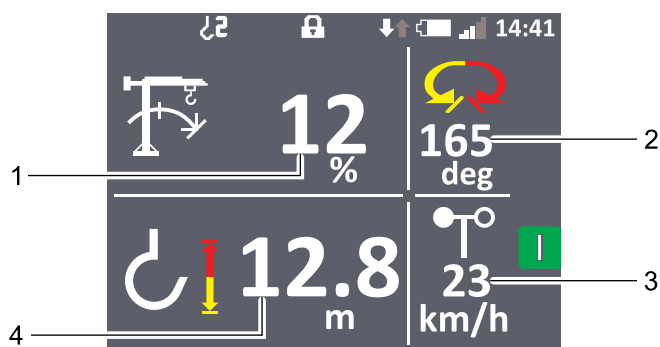


- Stop of trolley out movement.



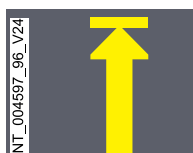
- Stop of trolley in movement.

Details for Folio 2

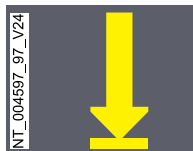


- | | | | |
|---|---|---|-------------|
| 1 | Moment value in % | 3 | Wind speed |
| 2 | Position of the jib (angle) compared to the initial point | 4 | Hook height |

To the right of the symbol representing the hoisting movement, four pictograms indicate the status of the hoisting limit switches:



- Deceleration of hoisting movement.



- Deceleration of lowering movement.



- Stop of hoisting movement.

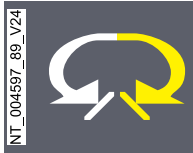


- Stop of lowering movement.

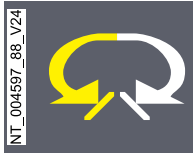
The symbol representing the slewing movement indicates the status of the slewing limit switches:



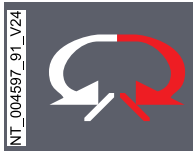
- No deceleration or stop of slewing movement.



- Deceleration of right slewing movement.



- Deceleration of left slewing movement.

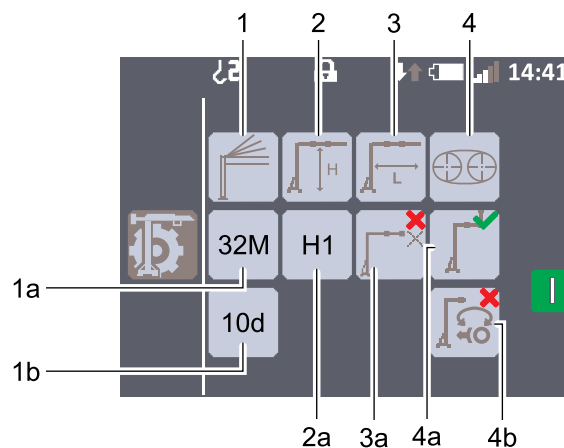


- Stop of right slewing movement.



- Stop of left slewing movement.

Details of folio 3



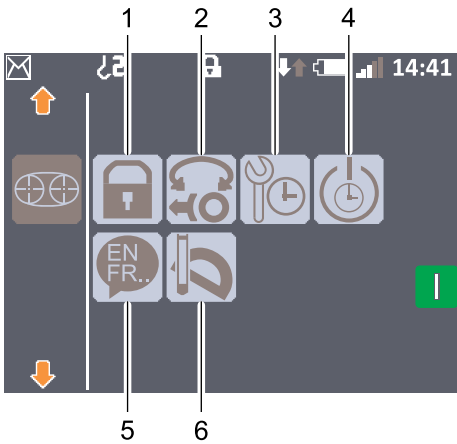
- | | | | |
|----|--|----|--|
| 1 | Overview of the jib configuration | 4a | "Jib nose folded" option |
| 1a | Jib length | | Allows the crane driver to fold or unfold the jib nose for work |
| 1b | Jib angle | 4b | "Jib folded completely for weathervaning" option |
| 2 | Overview of telescoping height configuration | | Allows the crane driver to fully fold the jib at the end of the shift for the purpose of weathervaning (for specific countries only) |
| 2a | Telescoping height | | |
| 3 | Jib option overview | | |
| 3a | Short jib option | | |
| 4 | Overview of the crane driver jib option | | |

"General/User" screen



Note

The "General/User" screen makes it possible to enter the access codes, put the crane in weathervaning, view the crane counters, and set the language and units.



- | | | | |
|---|----------------------|---|--------------------------------|
| 1 | "Access code" menu | 4 | "Time period for standby" menu |
| 2 | "Weathervaning" menu | 5 | "Languages" menu |
| 3 | "Counters" menu | 6 | "Units" menu |

"Maintenance target" screen



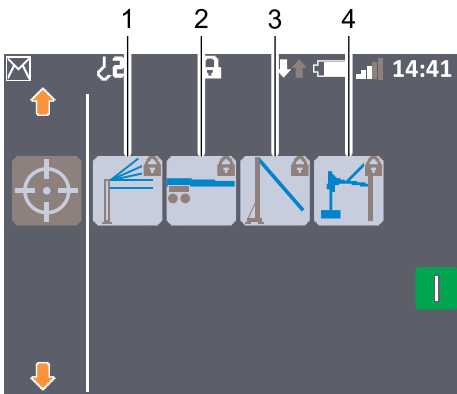
Note

The "Maintenance target" screen makes it possible to place the crane in one of the maintenance positions as desired, or to activate the derrick and then to return to the initial working position.



Note

Access to the "Target" screen menus requires entry of an access code.

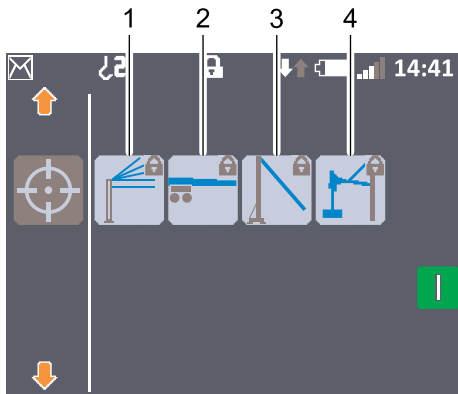


- | | | | |
|---|-------------------------------------|---|---------------------------------|
| 1 | "Working configuration target" menu | 2 | "Low maintenance position" menu |
|---|-------------------------------------|---|---------------------------------|

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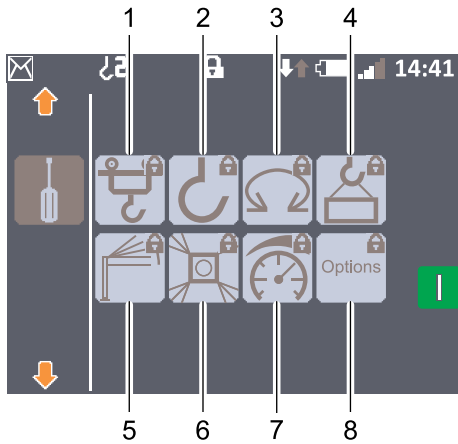


- 3 **"High maintenance position"** menu
4 **"Ballasting derrick"** menu

"Configuration and teach-in programming" screen

Note
The **"Configuration and teach-in programming"** screen is used to program the settings for the crane and calibrate the safety devices.

Note
Access to the **"Configuration and teach-in programming"** screen menus requires entry of an access code.



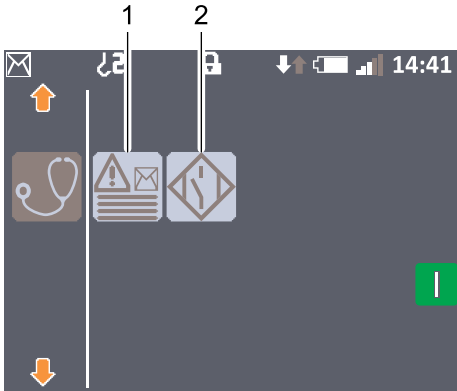
- | | |
|--|---------------------------------------|
| 1 "Trolleying" menu: Zero trolleying and maximum trolleying | 5 "Jib configuration" menu |
| 2 "Zero hoisting" menu | 6 "Footing configuration" menu |
| 3 "Zero slewing" menu | 7 Power Control menu |
| 4 "Load" menu: Zero load and known load | 8 "Options" menu |

"Messages and diagnostics" screen



Note

The **"Messages and diagnostics"** screen makes it possible to view the message log and access the diagnostics help menu.



1 "Messages" menu

2 "Diagnostics" menu

"Radio control settings" screen



Note

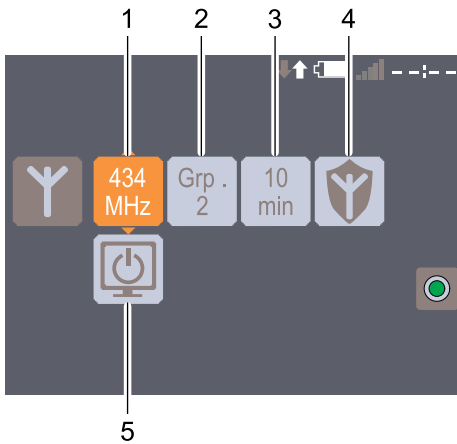
The **"Radio control settings"** screen makes it possible to configure the radio link: Frequency group and secured radio link. The frequency configuration does not need to be done.

This screen also allows you to configure the automatic cutoff time of the radio control **"Auto-OFF"** and to manage the backlighting of the radio control screen.



Note

This screen is under hidden access.



1 "Radio frequency" menu

2 "Frequency group" menu

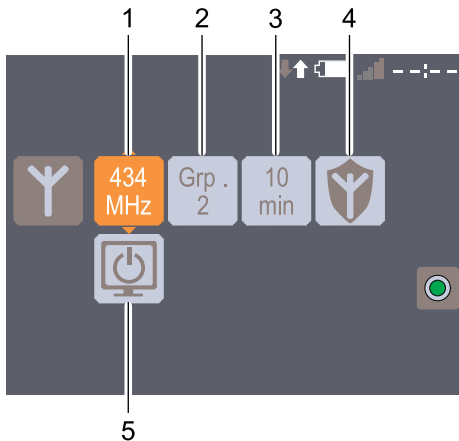
3 "Auto-OFF" menu

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NT_004597_104_V24

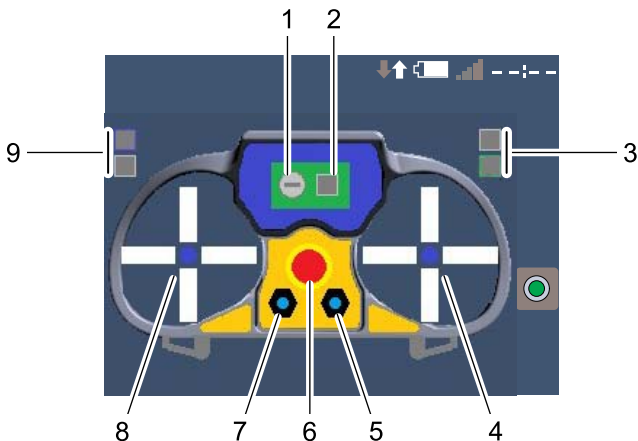
NT_004597_104_V24



- 4 **"Secured radio link" menu**
- 5 **"Backlighting" menu**

"Radio control test" screen

- Note**
The **"Radio control test"** screen makes it possible to test and check the functioning of all the control components of the radio control: Buttons, switches and joy-sticks.
- Note**
All the control components on the radio control are reproduced and visible on this screen.
- Note**
This screen is under "hidden" access.



- 1 **"Jog Dial"**
- 2 **"ESC" key**
- 3 Right keys
- 4 Right **"Joystick"** test area
- 5 Working/fitting position switch
- 6 Emergency stop button
- 7 Three-position switch
- 8 Left **"Joystick"** test area
- 9 Left keys

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1.3.6 Access codes

The access codes give access to certain functions, adjustments, or settings according to the authorization level.

There are four levels of authorization:

- The **"Client"** access code: for the client, this code is specific to the crane and is linked to its serial number. It is valid for the lifespan of the crane.
The **"Client"** access code is available in the letter that came with the delivery of the technical manuals ➡ page 1-27.



Note

This code is specific to this crane and must never be transmitted to a third party or used for another crane. The use of this code is reserved exclusively for the cases listed and described in the technical manual of the crane to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of misuse of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

- The **"Technician"** access code: for technicians having received **CCS** training at the **Manitowoc** training center .
This access code is linked to the technician's ID. It is valid for one year.



Note

Under no circumstances may this code be sent to a third party. The use of this code is reserved exclusively for the cases listed and described in the technical manual to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of misuse of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

- The **"Temporary"** access code: for a client or technician finding themselves in a locked situation.
This access code is valid for 24 hours.
To obtain this access code, contact your usual **Potain** service network agent.



Note

Under no circumstances may this code be sent to a third party. The use of this code is reserved exclusively for the cases listed and described in the technical manual to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of misuse of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

- The **"Replacement"** access code: only valid for one SCM computer. This access code is for replacing the SCM computer; it allows adjustment of the system's time and input of the crane's serial number.
To obtain this access code, contact your usual **Potain** service network agent.

**Note**

Under no circumstances may this code be sent to a third party. The use of this code is reserved exclusively for the cases listed and described in the technical manual to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of mis-use of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

**Note**

Three situations enable the access code to be deactivated:

- Manual stop of the radio control.
- Automatic stop of the radio control via the **"Auto-OFF"** function.
- Pressing the emergency stop button.

Access code rights CCS

	Fitter	Technician	Temporary	Replacement
Adjustments/Settings	YES	Yes	YES	NO
Anti-collision system adjustment	YES	YES	YES	NO
Top Site adjustment	YES	YES	YES	NO
Commissioning mode	YES	YES	YES	NO
Fitting mode	YES	YES	YES	NO
Shunt mode	NO	NO	YES	NO
Serial no. adjustment	NO	NO	NO	YES
System time setting	NO	NO	NO	YES
Free standing height adjustment ⁽¹⁾ ⁽¹⁾ depending on model	NO	NO	YES	NO
Updating software using "CCS Flash"	NO	YES	YES	NO
High maintenance position and low maintenance position ⁽¹⁾ ⁽¹⁾ depending on model	NO	YES	YES	NO

"Fitter" access code

Example of letter with the technical manual:

**Note**

The **"Fitter"** access code is written in the highlighted sentence.

Manitowoc

Charlieu, 06/05/2020
N/REF : **123123**

XXXXXXXXXX
XXX
XXX
XXX

RE: DISPATCH OF TECHNICAL DOCUMENTATION

Dear Sirs,

Please find enclosed the technical documents for your crane:

Type: MDTxxx	Execution: 123456789	Machine N°: 123123
---------------------	-----------------------------	---------------------------

This dispatch comprises the following documents:

1 INSTRUCTION – USB DRIVE - including:

- Operator Manual
- Operator Manual Annexes
- Maintenance Manual
- Parts Manual
- CCS Manual.

Please find attached the CCS customer access code for this crane: **ABC12345**.

This code is specific to this crane and must never be transmitted to a third party or used for another crane. The use of this code is reserved exclusively for the cases listed and described in the technical manual of this crane to the exclusion of any other use.

Because using this code gives access to the machine control, incorrect parameterization can lead to a risky situation in which an accident could occur.

Manitowoc accepts no responsibility in the event of misuse of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane. We wish you safe receipt of these documents and thank you once again for your confidence.

Yours sincerely,



Thierry HERAUT
Technical Publications Manager

Grove.....Manitowoc.....National Crane.....Potain

Manitowoc Crane Group France SAS
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Siège social :
66, Chemin du Moulin Canon - CS 60236 - 69574 DARDILLY Cedex. Tél : +33 (0) 4 72 18 20 20 - Fax : +33 (0) 4 72 18 20 00
Capital : €1 735 310 / RCS Lyon 632045837 / ID. TVA : FR 50 632 045 837

Entering a value or an access code (example)



Note

When navigating, you will sometimes be asked to enter a value or an access code.
Example: 1 2 3 4.

Procedure

1. Press the **Jog Dial** on the radio control.

◁ The first "0" is selected.



Note

"Client" access code:

It is recommended that technicians using this access code receive specific training on the **CCS** at the MCG Training Center .

2. Turn the **Jog Dial** of the radio control to increase the value to "1".
3. Press the **Jog Dial** on the radio control to confirm.
◁ The value increased to "1" is confirmed and the second "0" is selected.
4. Turn the **Jog Dial** of the radio control to increase the value to "2".
5. Press the **Jog Dial** on the radio control to confirm.
◁ The value increased to "2" is confirmed and the third "0" is selected.
6. Turn the **Jog Dial** of the radio control to increase the value to "3".
7. Press the **Jog Dial** on the radio control to confirm.
◁ The value increased to "3" is confirmed and the fourth "0" is selected.
8. Choose one of the following alternatives.

Alternative 1 of 2 – Entering a value:

- ▶ Turn the **Jog Dial** of the radio control to increase the value to "4".
- ▶ Press the **Jog Dial** on the radio control to confirm.
◁ The entire value is validated.
- ▶ Press the confirmation key of the radio control **Jog Dial**.
◁ The value is saved.

Alternative 2 of 2 – Entering an access code:

- ▶ Turn the **Jog Dial** of the radio control to increase the value to "4".
- ▶ Press the **Jog Dial** on the radio control to confirm.
◁ The access code is confirmed.



Note

If the access code entered is correct, the radio control automatically displays the previous screen: indicator screens or crane erection screen.
The icon appears on the horizontal status bar.
If the access code entered is not correct, the icon is displayed below the icon .



Note

Entering a letter is done the same way as for a number.

1.3.7 "Weathervaning" menu

Foreword - "Weathervaning" menu

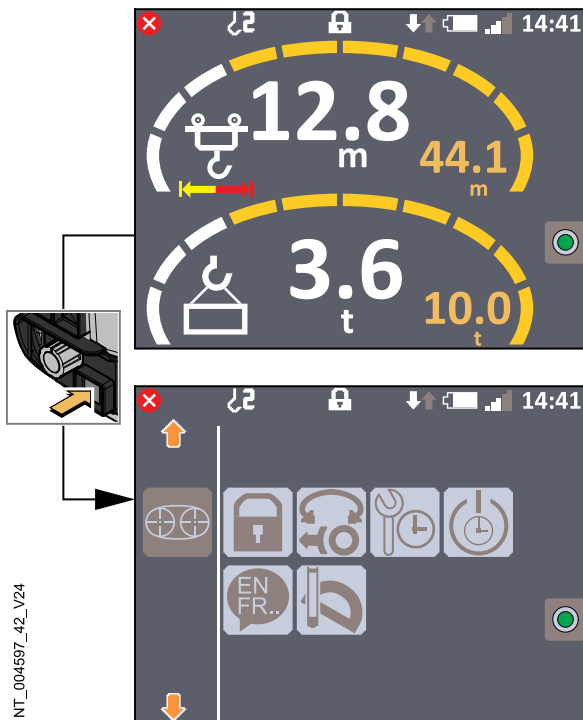
To weathervane the crane using the radio control, the following conditions must be met:

- Crane must be at standstill.
- The emergency stop button on the radio control must be unlocked.

Weathervaning the crane using the radio control

Procedure

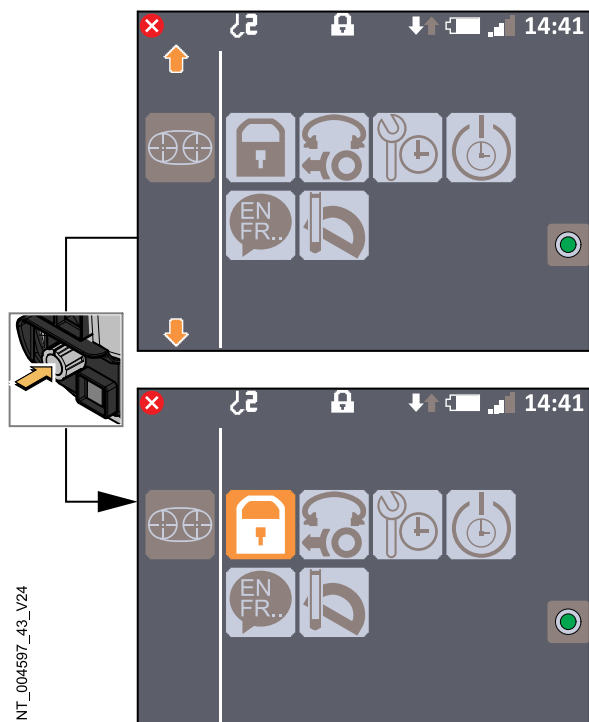
Accessing the "General/User" screen



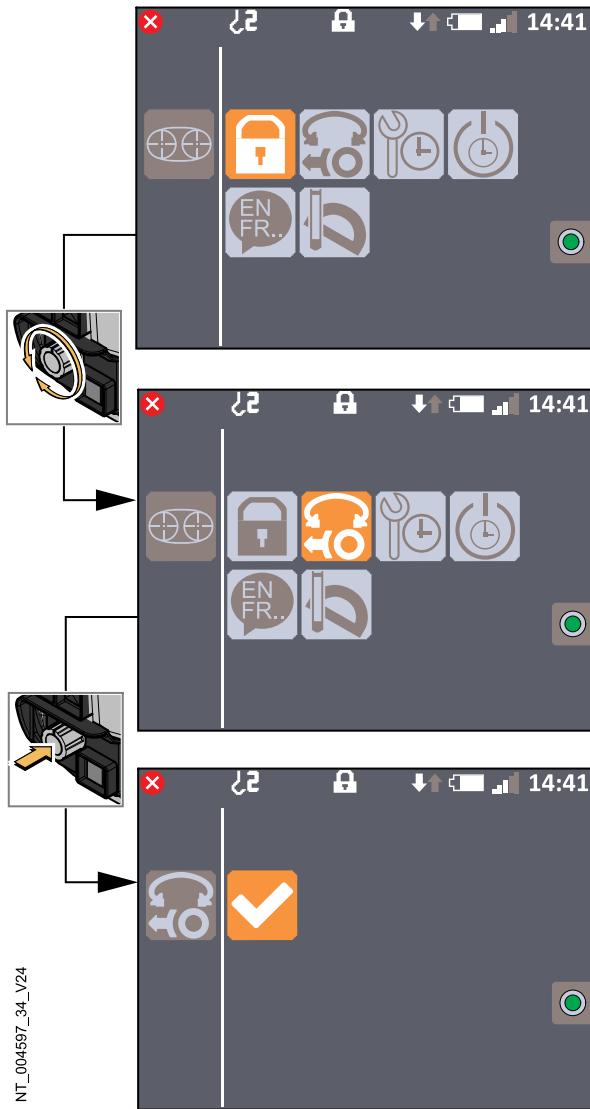
1. Press the **"ESC"** key on the radio control.
 < The **"General/User"** screen is displayed.

Selecting the "Access code" menu

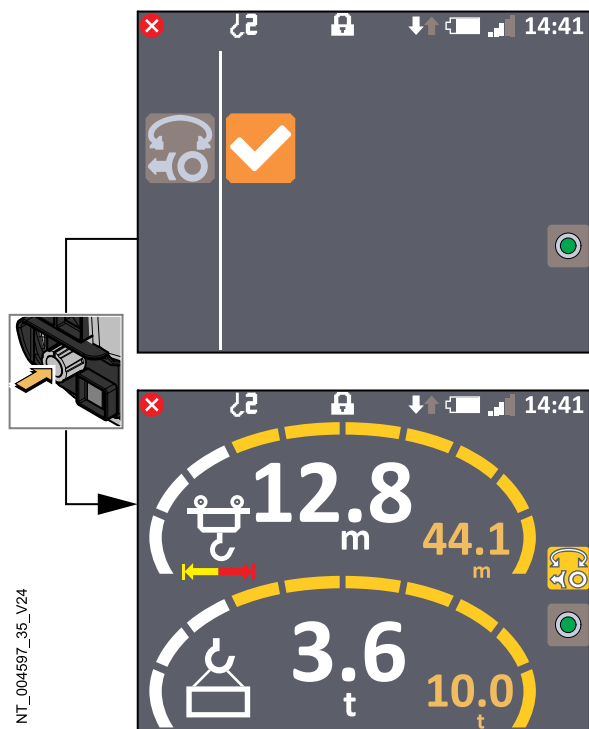
2. Press the **Jog Dial** on the radio control.
◀ The **"Access code"** menu is selected.



Accessing the "Weathervaning" menu



3. Use the **Jog Dial** on the radio control to select the **"Weathervaning"** menu, then confirm by pressing the **Jog Dial** on the radio control.
 - < The **"Weathervaning"** menu is displayed.

Weathervaning the crane using the radio control

4. Press the **Jog Dial** on the radio control.
 - ◁ The indicators screen is displayed.
 - ◁ The icon  is displayed in the status bar on the right of the radio control screen.
 - ◁ The crane is in weathervaning.

1.3.8 "Counters" menu**Foreword - "Counters" menu**

The **"Counters"** menu allows you to view various counters of time and operations for the mechanisms fitted on the crane.

Overview - "Counters" menu

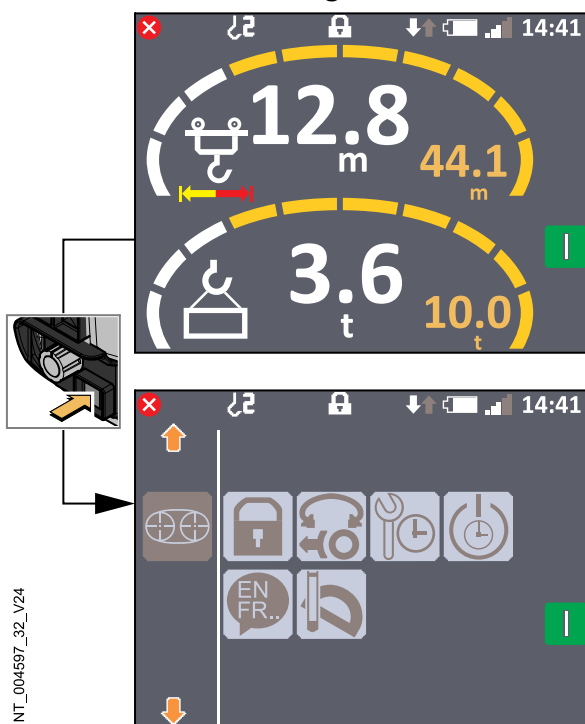
The **"Counters"** menu has five screens.

- Four screens are dedicated to crane movements (hoisting , trolleying , slewing  and traveling ).
Each of these screens indicates the number of brake applications  and the operating time  for the concerned movement.
- The fifth screen  is dedicated to the crane as a whole.
This screen indicates the operating time of one or more simultaneous movements  and the time the crane needs to power up  via (Q100M: Main power switch of crane supply)

Consulting the crane counters

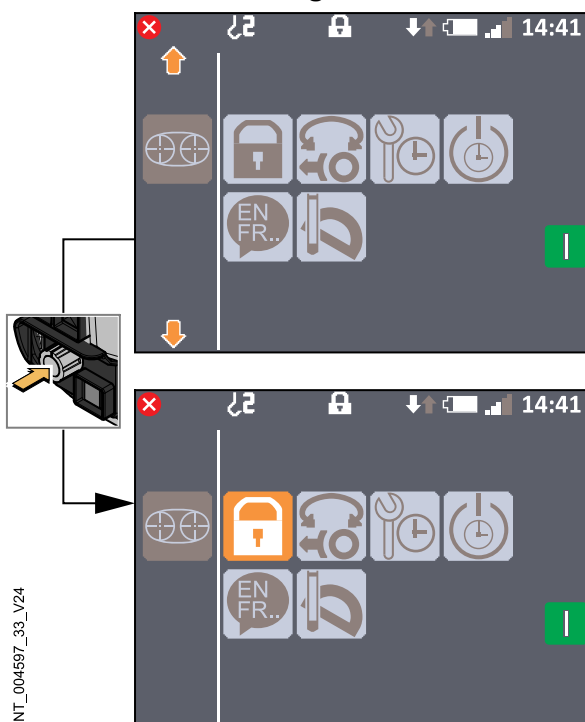
Procedure

Accessing the "General/User" screen



1. Press the **"ESC"** key on the radio control.
 - ◀ The **"General/User"** screen is displayed.

Selecting the "Access code" menu

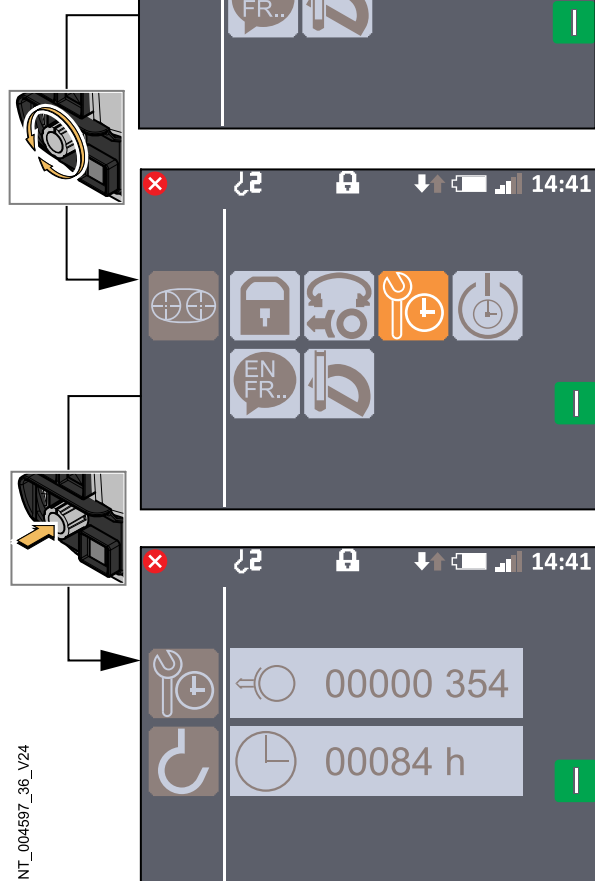


2. Press the **Jog Dial** on the radio control.
 - ◀ The **"Access code"** menu is selected.

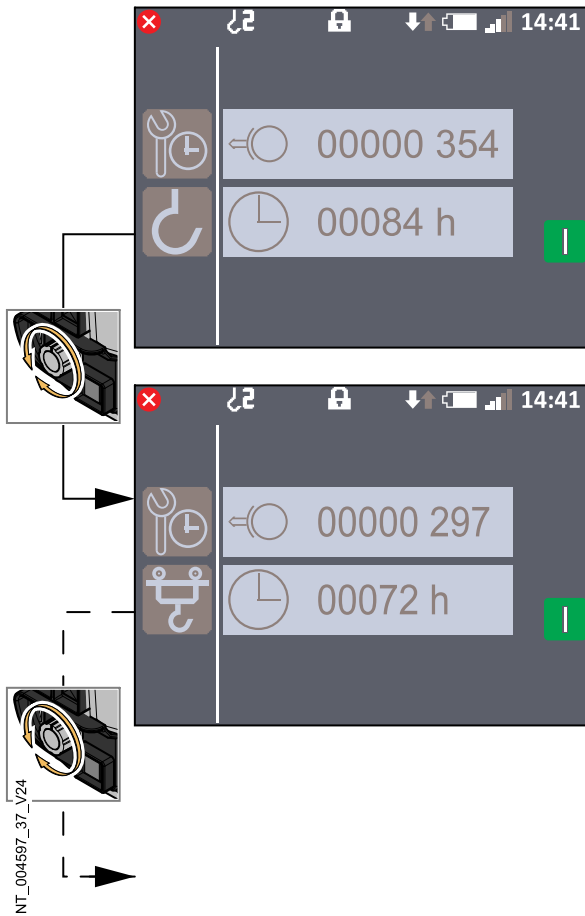
Accessing the "Counters" menu

3. Use the **Jog Dial** on the radio control to select the **"Counters"** menu, then confirm by pressing the **Jog Dial** on the radio control.

◀ The **"Counters"** menu is displayed.

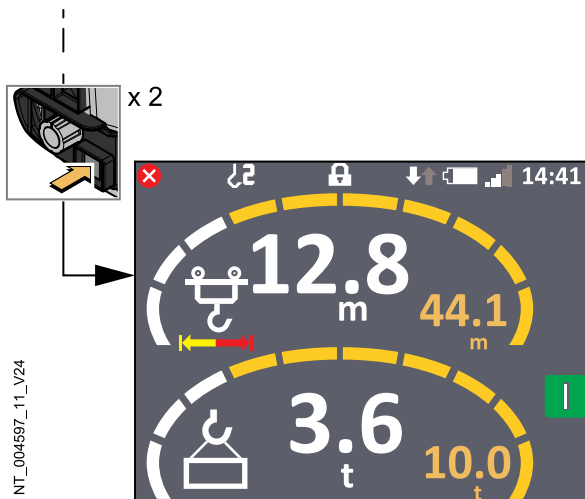


Selecting a "Counters" screen



4. Use the **Jog Dial** on the radio control to select a **"Counters"** screen as desired.

Returning to the "Indicators" screen



5. Press the **"ESC"** key on the radio control twice.
 ◀ The **"Indicators"** screen is displayed.

1.3.9 "Time period for standby" menu

Foreword - "Time period for standby" menu

If no control is carried out on the **Joysticks** of the radio control, after a certain time the crane automatically switches to standby mode.

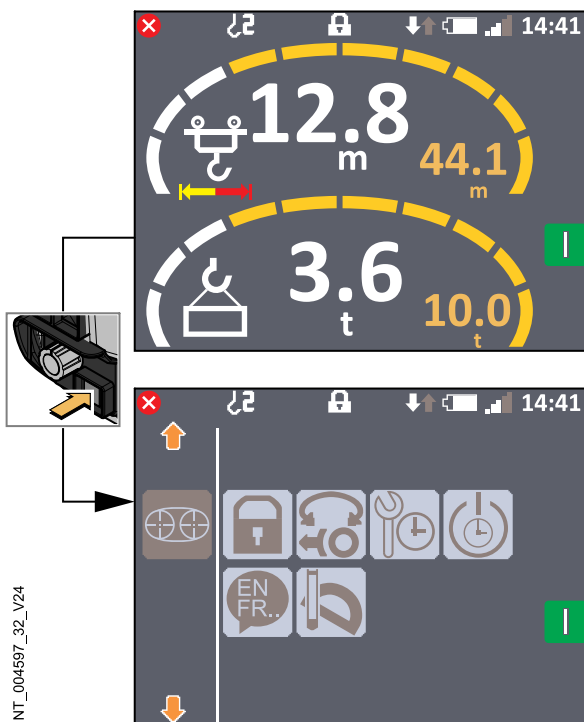
This time limit can be adjusted in the **"Time period for standby"** menu.

Entering the period of inactivity prior to standby

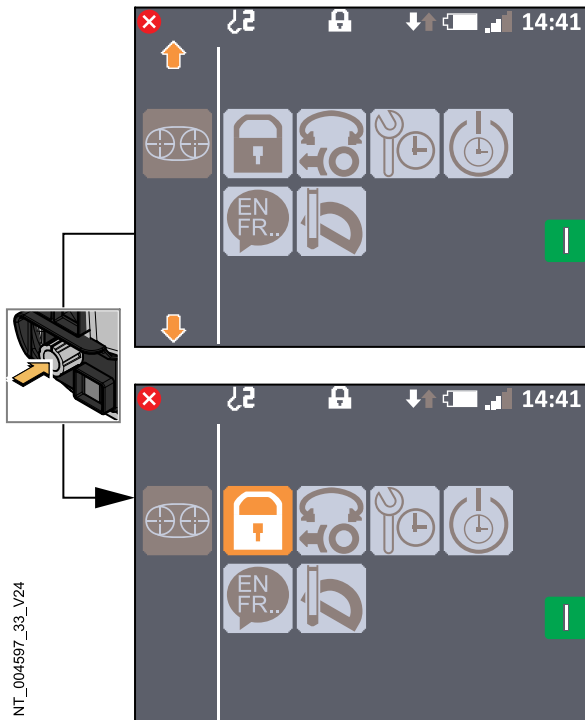
Procedure

Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 ◀ The **"General/User"** screen is displayed.



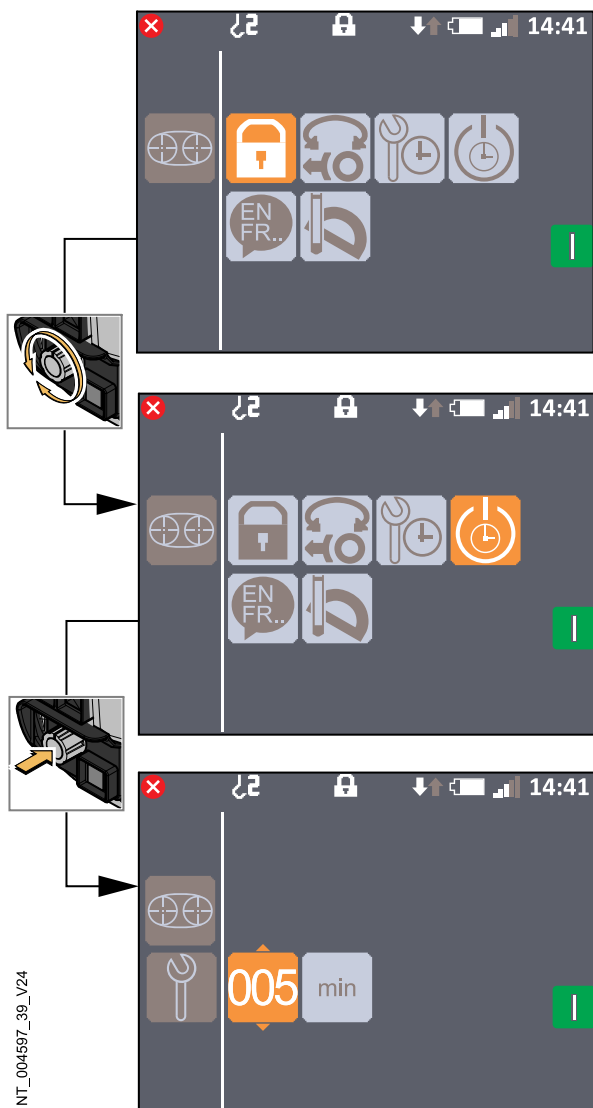
Selecting the "Access code" menu



2. Press the **Jog Dial** on the radio control.
 - ◀ The **"Access code"** menu is selected.

Accessing the "Time period for standby" menu

3. Use the **Jog Dial** on the radio control to select the **"Time period for standby"** menu, then confirm by pressing the **Jog Dial** on the radio control.
 - < The **"Time period for standby"** menu is displayed.



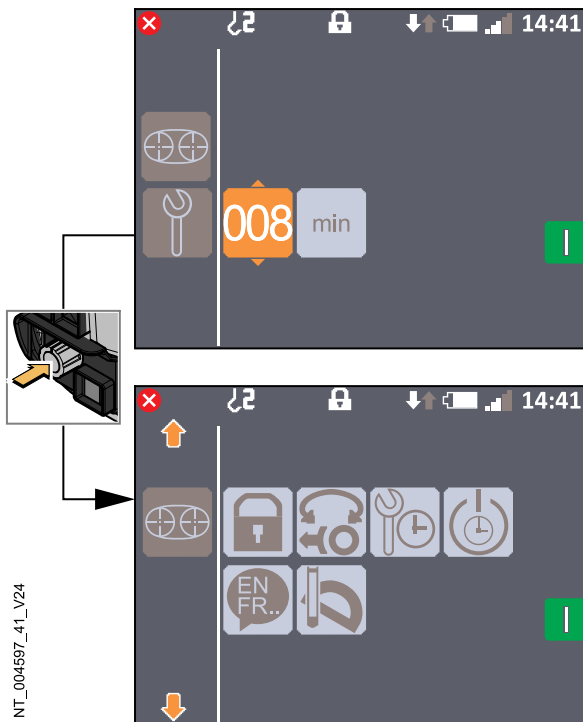
Entering the period of inactivity prior to standby

4. Enter the amount of time of inactivity prior to standby ➡ page 1-28.



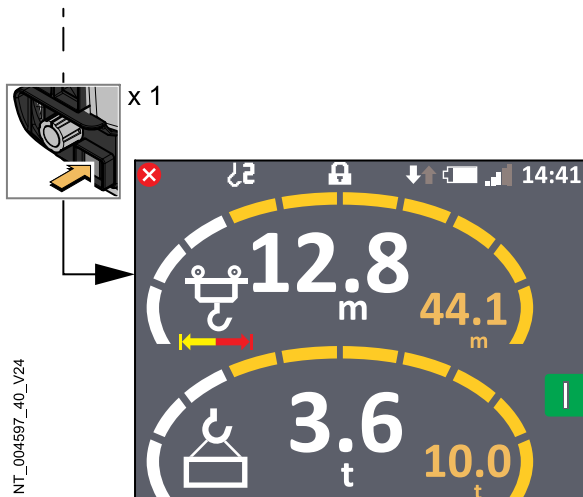
Note

If the value entered is zero, the period of inactivity becomes infinite. The standby function is deactivated.



5. Press the **Jog Dial** on the radio control.
 - ◁ The **"General/User"** screen is displayed.
 - ◁ The value for the time period for standby is saved.

Returning to the "Indicators" screen



6. Press the **Jog Dial** on the radio control.
 - ◁ The **"Indicators"** screen is displayed.

1.3.10 "Languages" menu

Foreword - "Languages" menu

The **"Languages"** menu allows you to select the language of the texts displayed on the screen of the radio control and the **CCT**.



Note

The language chosen using the radio control will also be activated in the **CCT**.

Five languages are available:

- English EN
- French FR

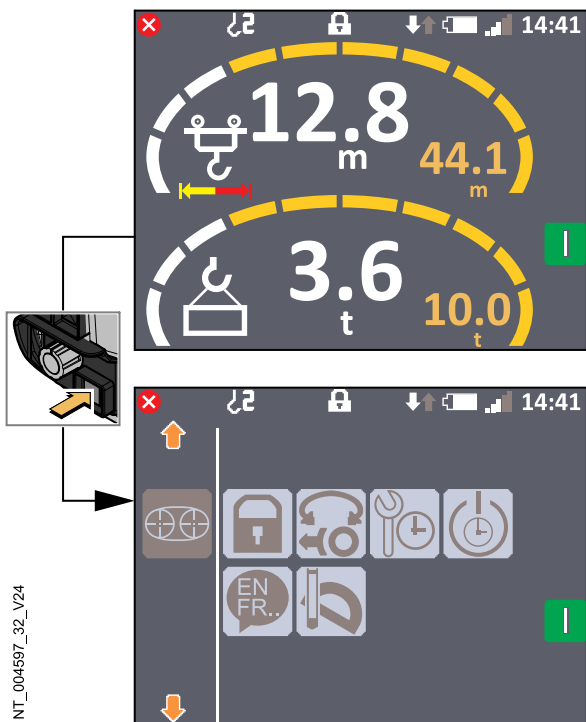
- German DE
- Italian IT
- Portuguese PT

Choosing the language

Procedure

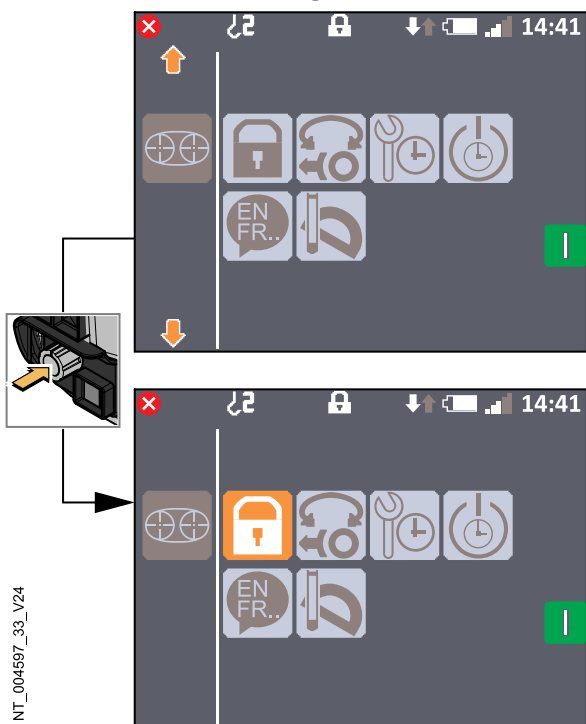
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 ◀ The **"General/User"** screen is displayed.

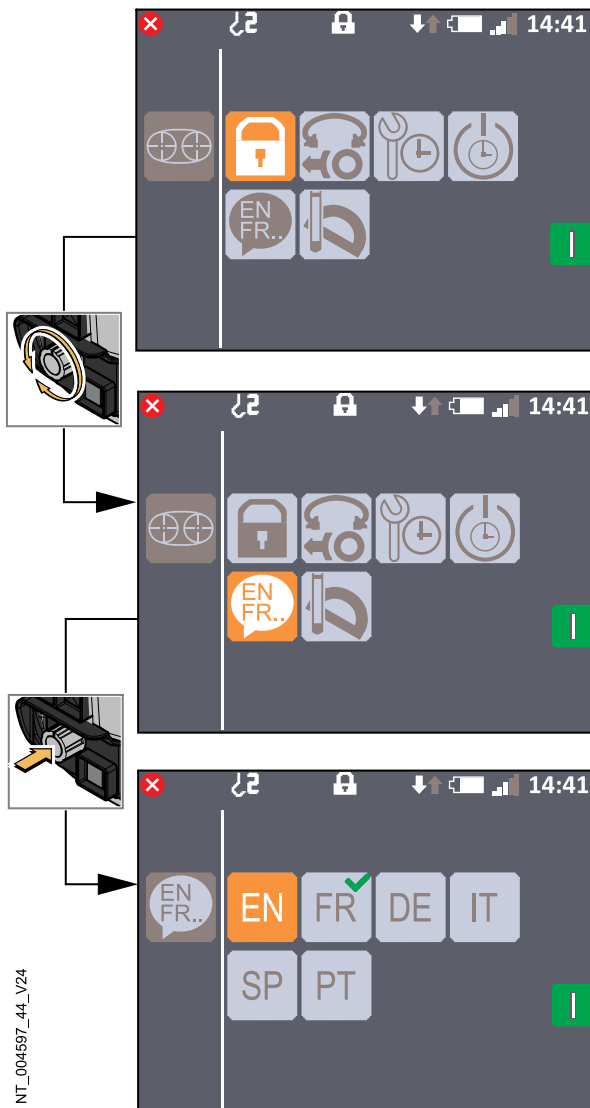


Selecting the "Access code" menu

2. Press the **Jog Dial** on the radio control.
 ◀ The **"Access code"** menu is selected.



Accessing the "Languages" menu



3. Use the **Jog Dial** on the radio control to select the **"Languages"** menu, then confirm by pressing the **Jog Dial** on the radio control.

< The **"Languages"** menu is displayed.

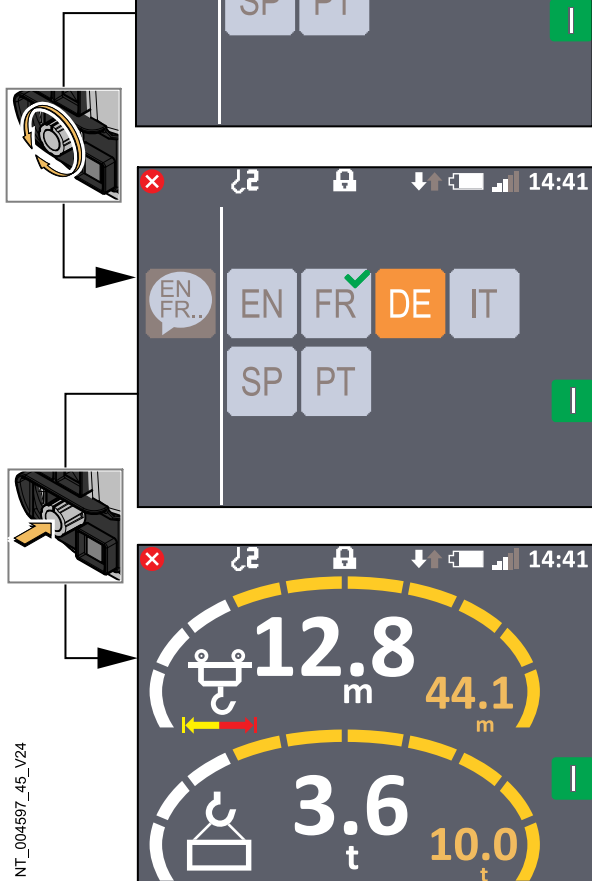
**Note**

The symbol  is displayed on the pictogram for the active language.

Choosing the language

4. Use the **Jog Dial** on the radio control to select the desired language, then confirm by pressing the **Jog Dial** on the radio control.

- ◁ The **"Indicators"** screen is displayed
- ◁ The new operating language is activated.



1.3.11 "Units" menu

Foreword - "Units" menu

**Note**

The unit system chosen using the radio control will also be activated for the values shown on the screen of the **CCT**.

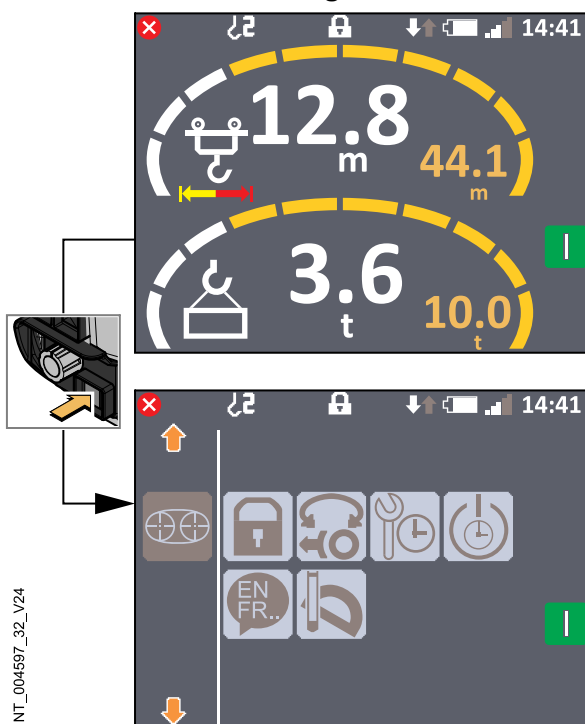
Three possible choices:

- m - °C - kg - km/h 
- Ft - °F - lbs - mph 
- m - °C - Kg - m/s 

Selecting the units of measurement

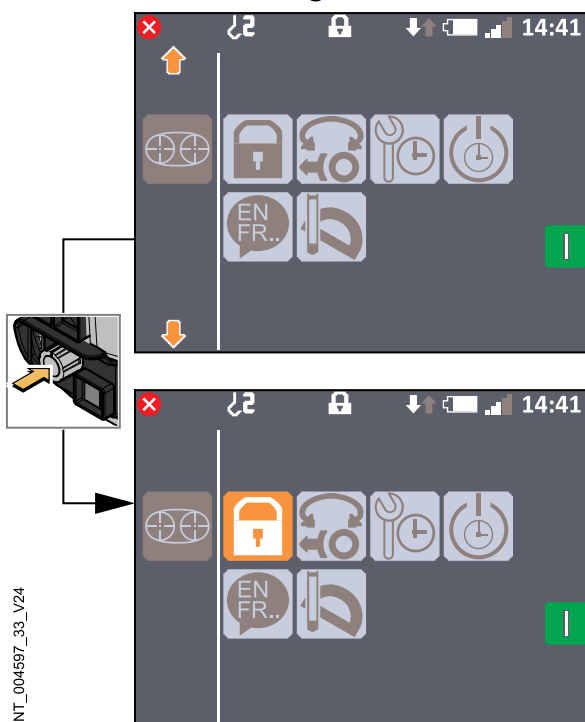
Procedure

Accessing the "General/User" screen



1. Press the **"ESC"** key on the radio control.
 - ◀ The **"General/User"** screen is displayed.

Selecting the "Access code" menu



2. Press the **Jog Dial** on the radio control.
 - ◀ The **"Access code"** menu is selected.

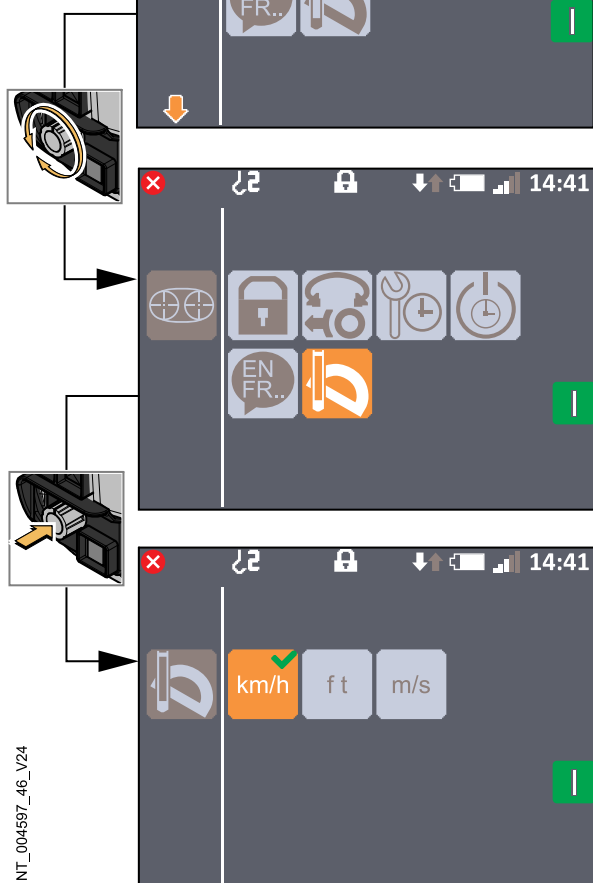
Accessing the "Units" menu

- Use the **Jog Dial** on the radio control to select the **"Units"** menu, then confirm by pressing the **Jog Dial** on the radio control.

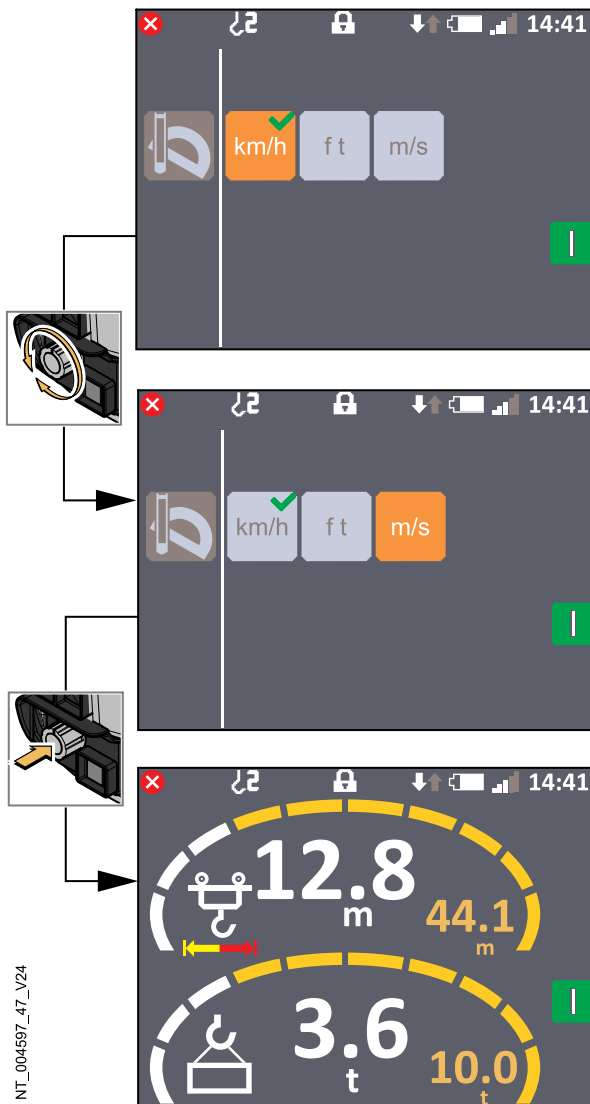
◀ The **"Units"** menu is displayed.

Note

The symbol  is displayed on the icon for the active units of measurement.



Selecting the units of measurement



4. Use the **Jog Dial** on the radio control to select the desired units of measurement, then confirm by pressing the **Jog Dial** on the radio control.
- ◁ The **"Indicators"** screen is displayed.
 - ◁ The new system of measurement is confirmed.

1.3.12 "Working configuration target" menu

Foreword - "Working configuration target" menu

When changing from a maintenance position to a working position or when stopping the ballasting derrick, the **"Working configuration target"** menu allows you to tell the **CCS** system the telescoping height and the jib angle of the crane.



Note

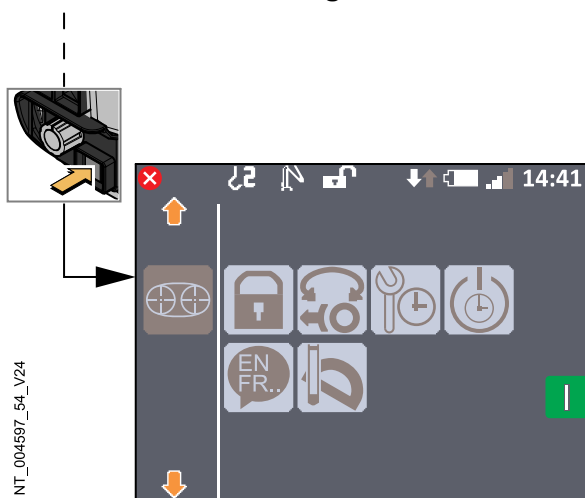
The **"Working configuration target"** menu is used only when exiting the high or low maintenance position or when finishing ballasting operations using the derrick. Therefore, the access code has already been entered.

Selecting the "Working configuration target"

Procedure

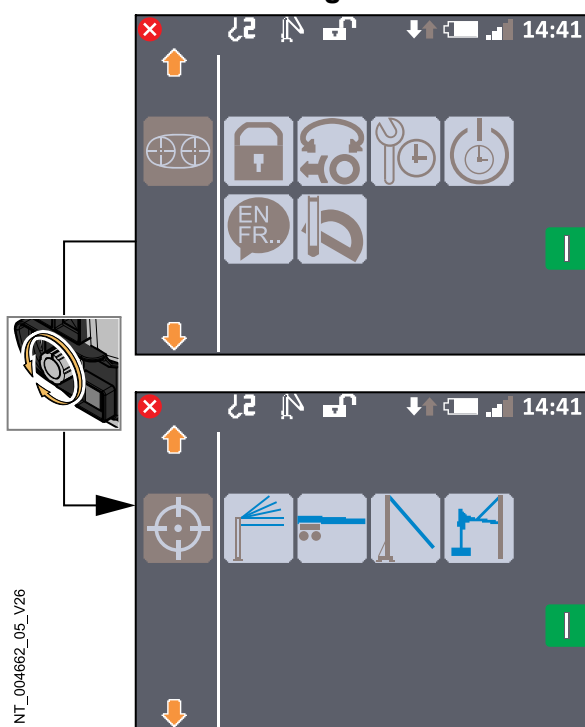
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 ◁ The **"General/User"** screen is displayed.

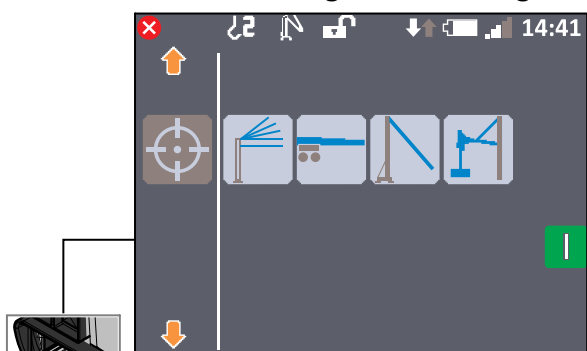


Accessing the "Maintenance target" screen

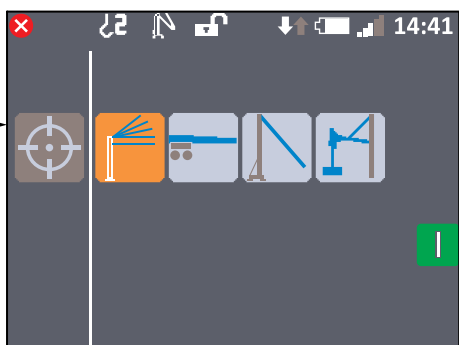
2. Use the **Jog Dial** on the radio control to display the **"Maintenance target"** screen.



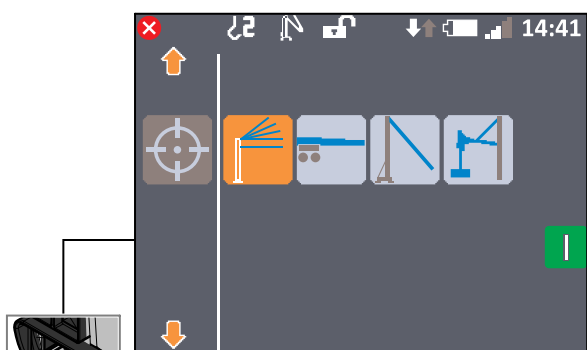
Accessing the "Working configuration target" menu



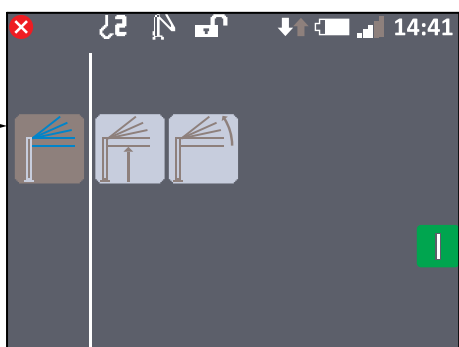
NT_004662_06_V26



3. Press the **Jog Dial** on the radio control.
 - ◁ The **"Working configuration target"** menu is selected.



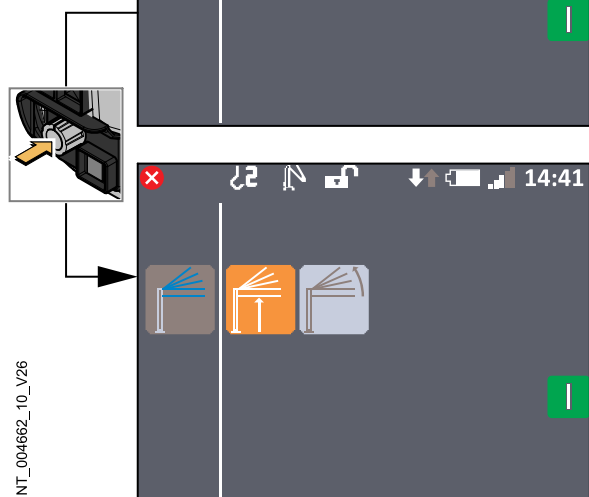
NT_004662_09_V26



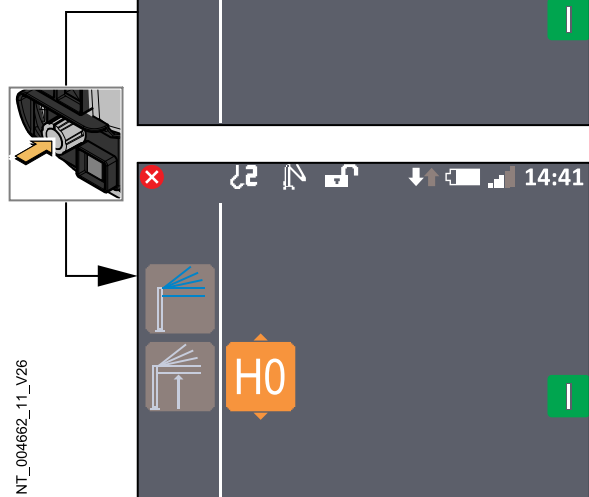
4. Press the **Jog Dial** on the radio control.
 - ◁ The **"Working configuration target"** menu is displayed.

Accessing the "Jib height" menu

5. Press the **Jog Dial** on the radio control.
 ◀ The "Jib height" menu is selected.

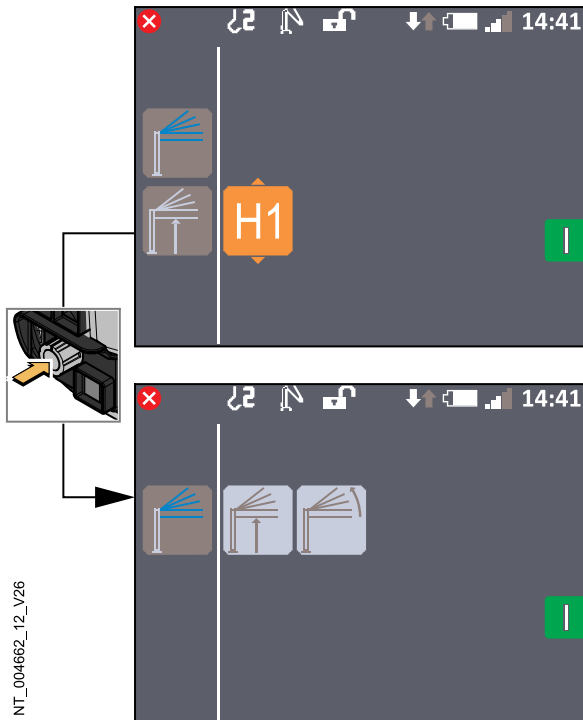


6. Press the **Jog Dial** on the radio control.
 ◀ The "Jib height" menu is displayed.



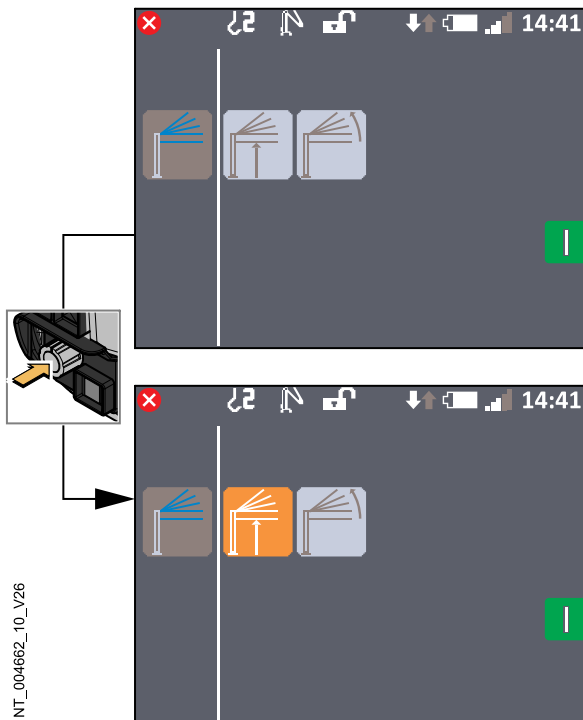
Selecting the "Jib height"

7. Enter the value of the desired jib angle ➡ page 1-28.



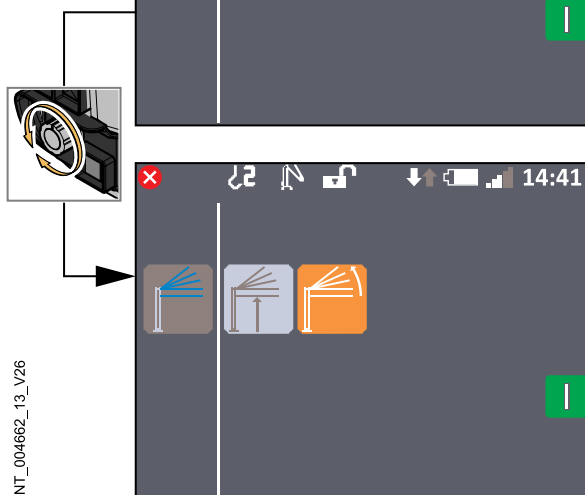
8. Press the **Jog Dial** on the radio control.
 - ◁ The **"Working configuration target"** menu is displayed.
 - ◁ The **"Jib height"** has been saved.

Accessing the "Jib angle" menu

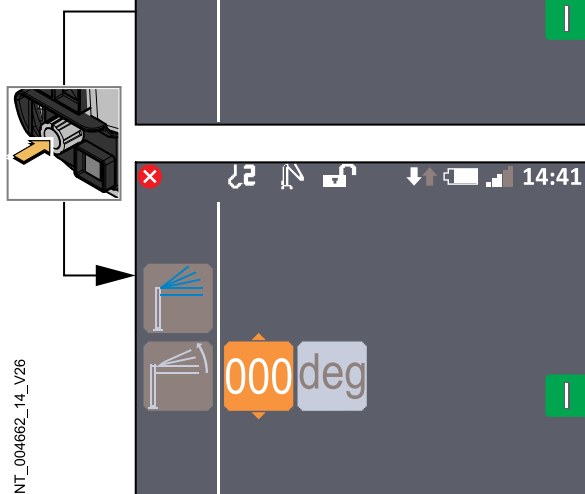


9. Press the **Jog Dial** on the radio control.
 - ◁ The **"Crane height"** menu is selected.

10. Use the **Jog Dial** on the radio control to select the **"Jib angle"** menu.

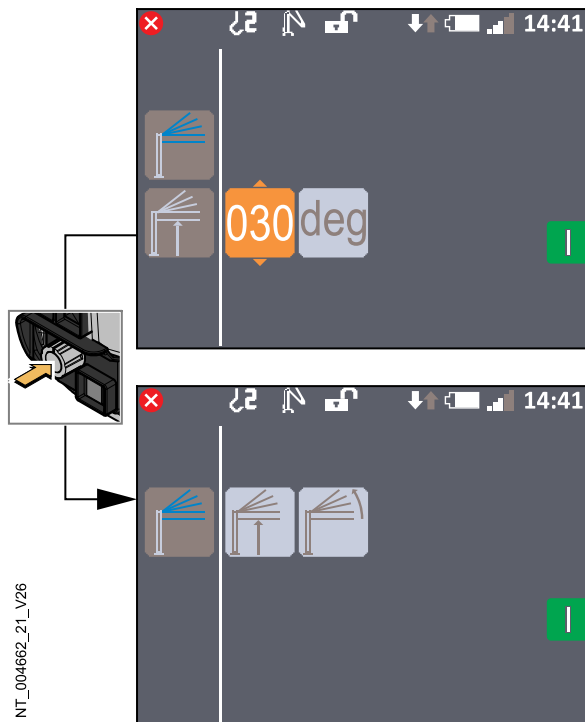


11. Press the **Jog Dial** on the radio control.
 - ◀ The **"Jib angle"** menu is displayed.



Selecting the "Jib angle"

12. Enter the value of the desired jib angle ➡ page 1-28.



13. Press the **Jog Dial** on the radio control.

- ◀ The **"Working configuration target"** menu is displayed.
- ◀ The **"Jib angle"** is saved.

1.3.13 "Low maintenance position" menu

Foreword - "Low maintenance position" menu

The **"Low maintenance position"** menu makes it possible to activate a specific mode to position the crane in the low maintenance position.



Note

The **"Low maintenance position"** menu is used only when switching to the low maintenance position. Therefore, the access code has already been entered.



Note

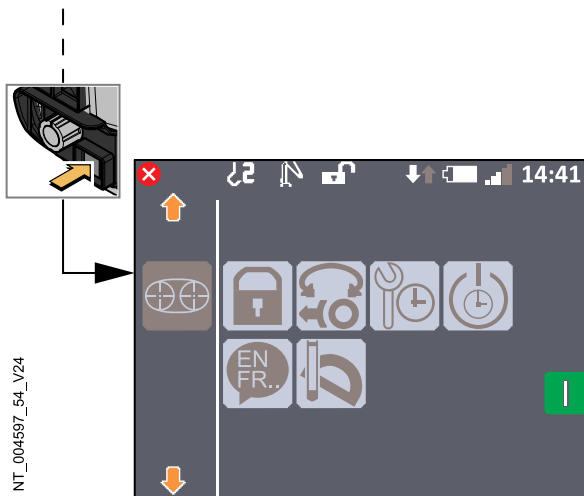
The following procedure contains illustrations that may not exactly reflect the actual physical reality; they may vary according to the crane models but do not interfere with the proper understanding of the procedure.

Confirming the "Low maintenance position"

Procedure

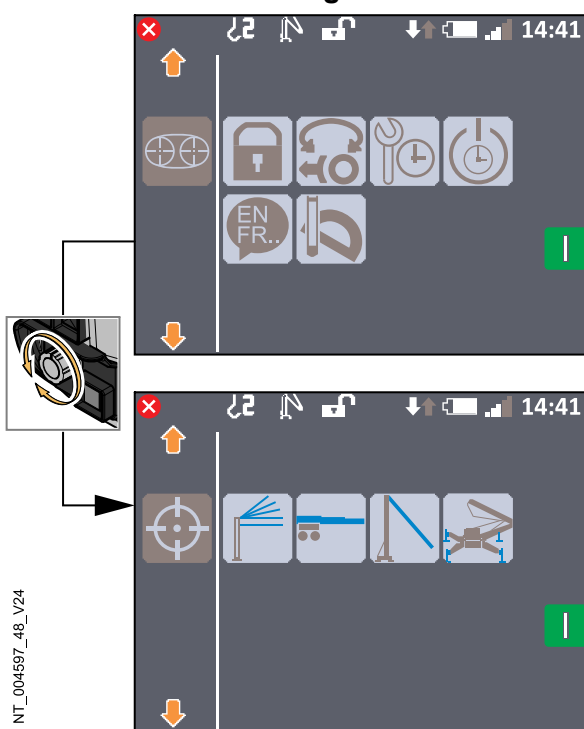
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 - ◁ The **"General/User"** screen is displayed.

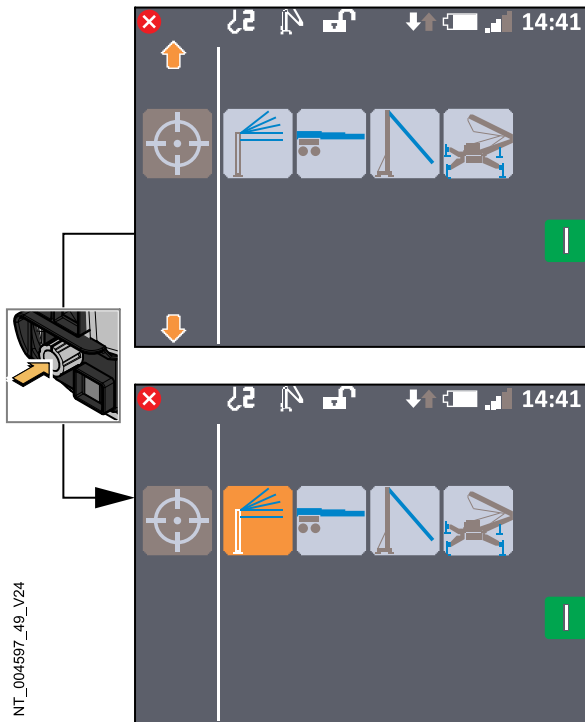


Accessing the "Maintenance target" screen

2. Use the **Jog Dial** on the radio control to display the **"Maintenance target"** screen.



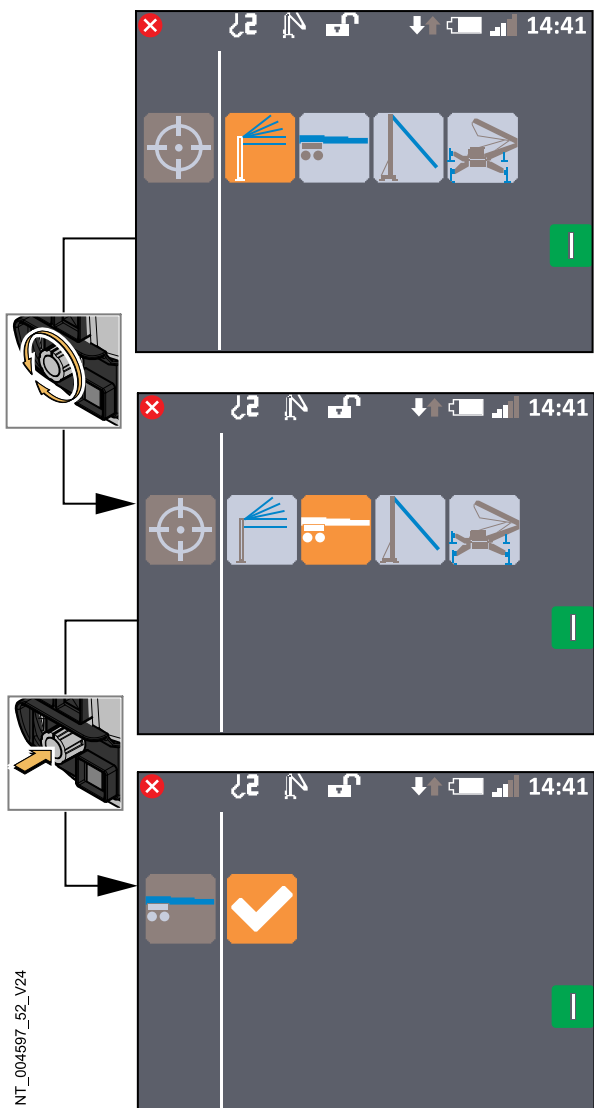
Selecting the "Low maintenance position" menu



3. Press the **Jog Dial** on the radio control.
 - ◁ The "**Working configuration target**" menu is selected.

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4. Use the **Jog Dial** on the radio control to select the **"Low maintenance position"** menu, then confirm by pressing the **Jog Dial** on the radio control.
- ◁ The **"Low maintenance position"** menu is displayed.



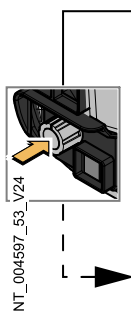
Confirming the "Low maintenance position"

5. Press the **Jog Dial** on the radio control.
- ◁ A **"Fitting/Dismantling"** screen is displayed.
 - ◁ The **"Low maintenance position"** is confirmed.



Note

If confirmation of the **"Low maintenance position"** mode is not possible, the symbol  appears on the confirmation pictogram .



1.3.14 "High maintenance position" menu

Foreword - "High maintenance position" menu

The **"High maintenance position"** menu makes it possible to activate a specific mode to position the crane in high maintenance.



Note

The **"High maintenance position"** menu is used only when switching to the high maintenance position. Therefore, the access code has already been entered.



Note

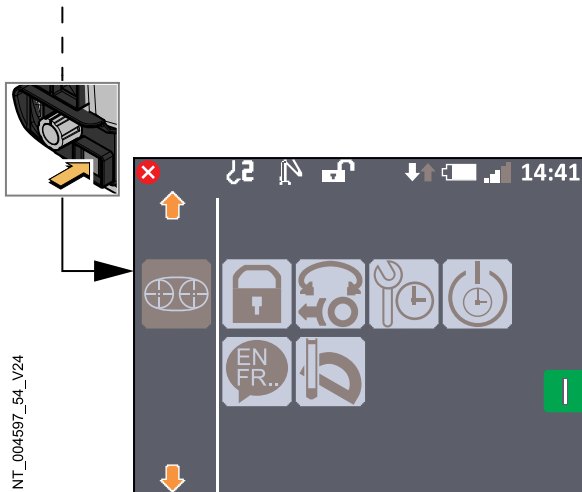
The following procedure contains illustrations that may not exactly reflect the actual physical reality; they may vary according to the crane models but do not interfere with the proper understanding of the procedure.

Confirming the "High maintenance position"

Procedure

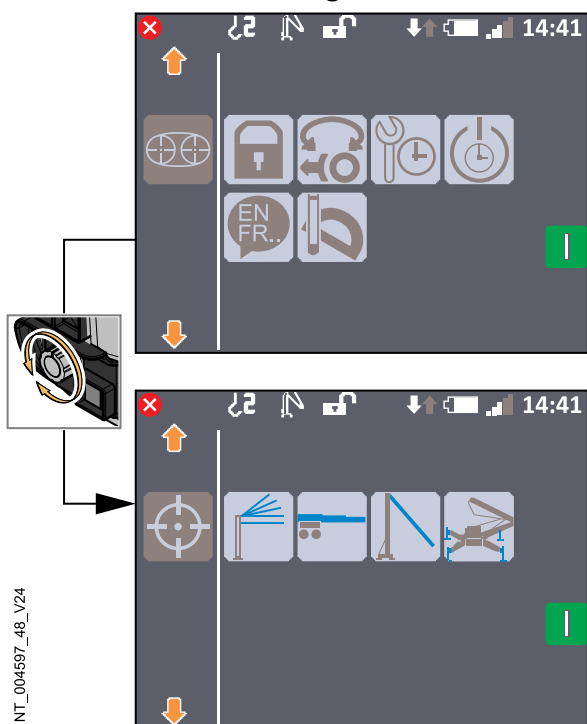
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 - ◀ The **"General/User"** screen is displayed.



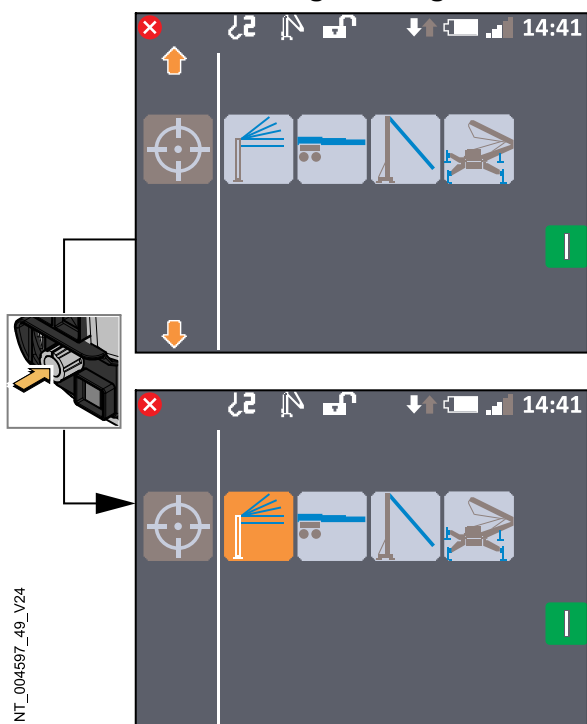
Accessing the "Maintenance target" screen

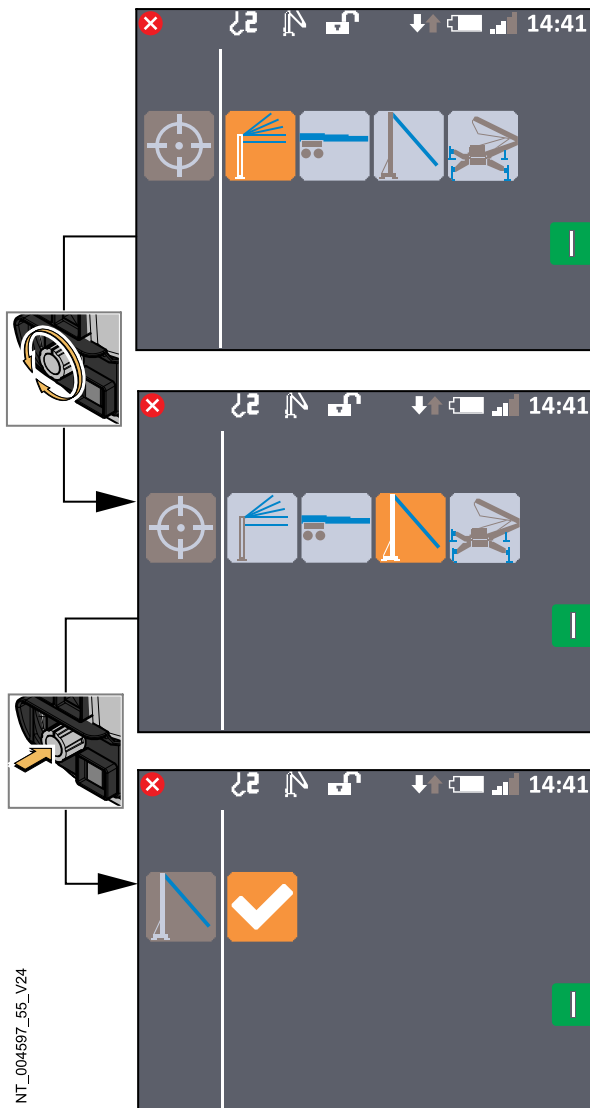
2. Use the **Jog Dial** on the radio control to display the **"Maintenance target"** screen.



Selecting the "High maintenance position" menu

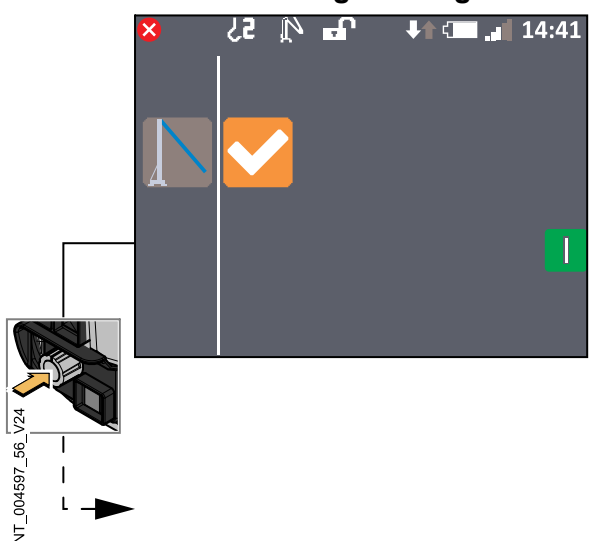
3. Press the **Jog Dial** on the radio control.
 - ◁ The **"Working configuration target"** menu is selected.





4. Use the **Jog Dial** on the radio control to select the **"High maintenance position"** menu, then confirm by pressing the **Jog Dial** on the radio control.
 - ◁ The **"High maintenance position"** menu is displayed.

Confirming the "High maintenance position"



5. Press the **Jog Dial** on the radio control.
 - ◁ A **"Fitting/Dismantling"** screen is displayed.
 - ◁ The **"High maintenance position"** is confirmed.



Note

If confirmation of the **"High maintenance position"** mode is not possible, the symbol  appears on the confirmation pictogram .

1.3.15 "Ballasting derrick" menu

Foreword - "Ballasting derrick" menu

The **"Ballasting derrick"** menu makes it possible to operate the ballasting derrick outside of the usual procedure for fitting or dismantling the crane: for example, for rectification of a crane configuration.



Note

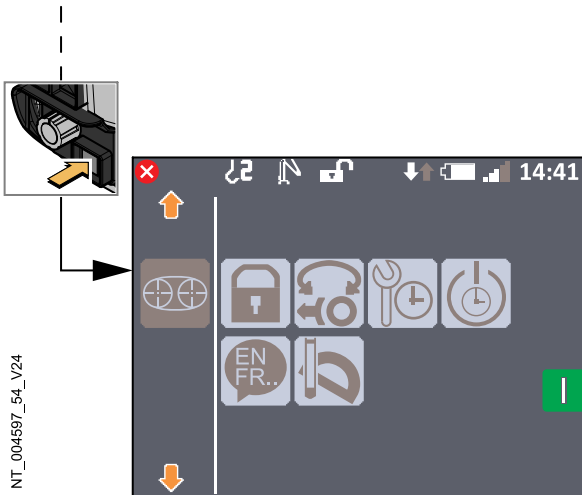
In order to operate the ballasting derrick, the crane must be equipped with the **"Ballasting derrick"** option and this option must be activated in the **"Options"** menu.

Putting the "Ballasting derrick" into operation

Procedure

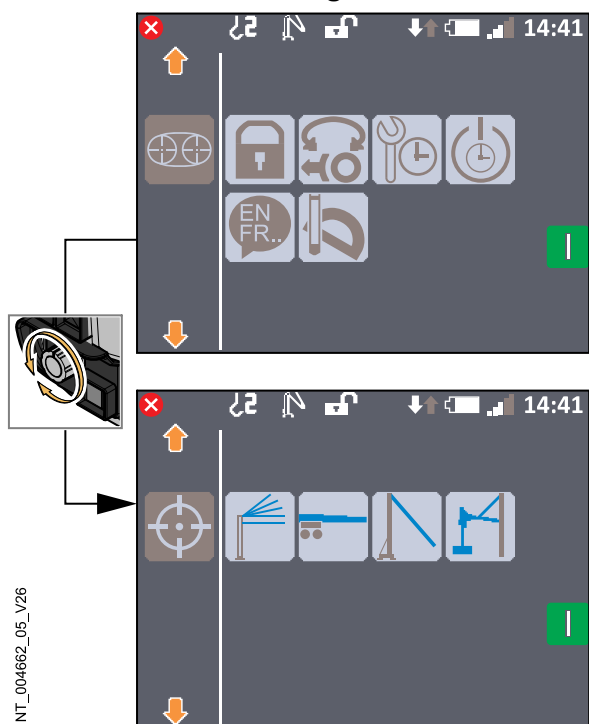
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 < The **"General/User"** screen is displayed.



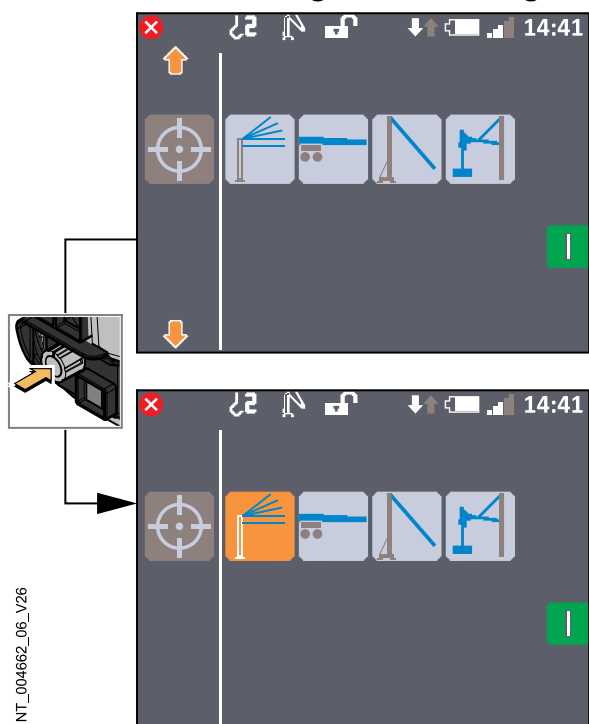
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Accessing the "Maintenance target" screen



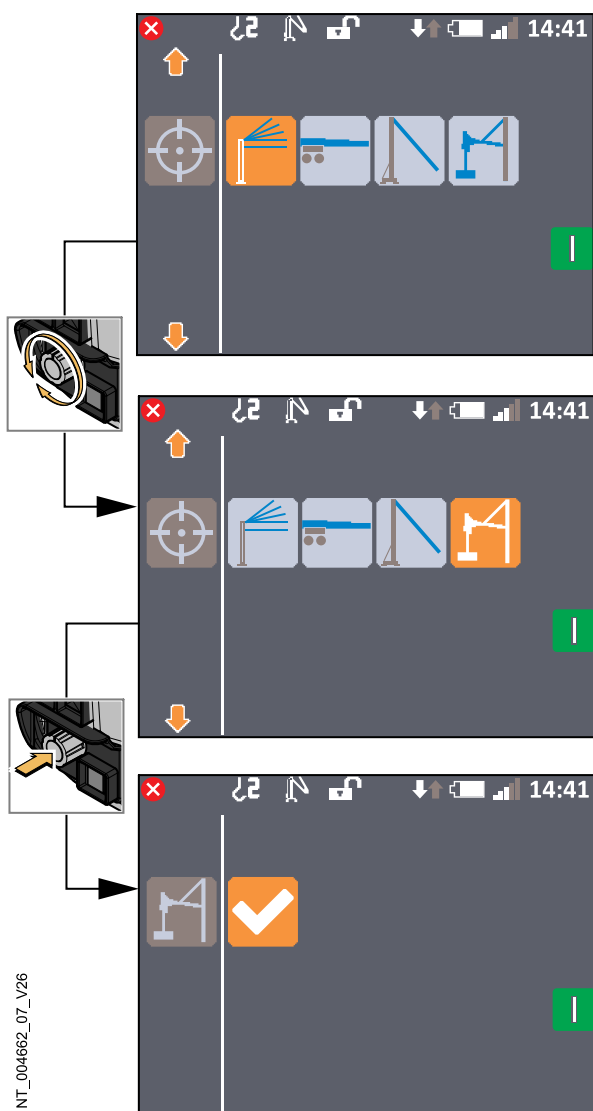
2. Use the **Jog Dial** on the radio control to display the **"Maintenance target"** screen.

Selecting the "Ballasting derrick" menu

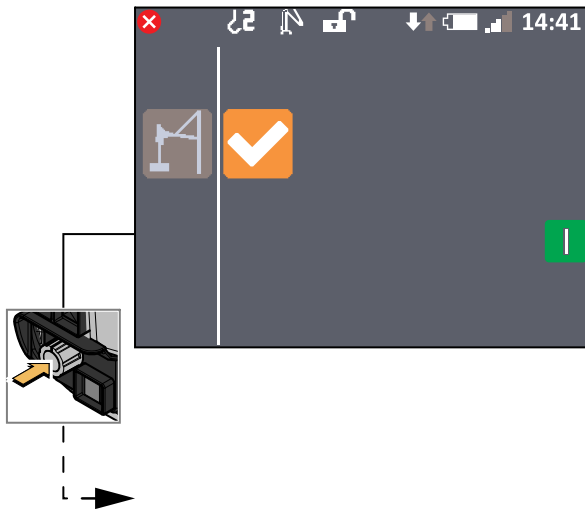


3. Press the **Jog Dial** on the radio control.
 - ◀ The **"Working configuration target"** menu is selected.

4. Use the **Jog Dial** on the radio control to select the **"Ballasting derrick"** menu, then confirm by pressing the **Jog Dial** on the radio control.
 - ◁ The **"Ballasting derrick"** menu is displayed.



Validating operation of the ballasting derrick



5. Press the **Jog Dial** on the radio control.
 - < A **"Fitting/Dismantling"** screen is displayed.
 - < Operation of the ballasting derrick is activated.

**Note**

If operation of the ballasting derrick is not possible, the symbol **✗** appears on the validation pictogram .

NT_004662_08_V26

1.3.16 "Teach-in programming" of the crane using the radio control

Foreword - Teach-in programming using the radio control

**DANGER****Risk of falling crane**

During teach-in programming or maintenance, the limit switches, load limiters, and moment cutouts are deactivated.

- During maintenance or teach-in programming of the system, the operator must take care not to exceed the limit switches, load limiters, and moment cutouts. The operator must observe the specifications on the type plate.

**Note**

The **"Configuration and teach-in programming"** menu is used to calibrate the safety devices. The information is also used to display driving assistance data on the **"Indicators"** screen.

In the **"Configuration and teach-in programming"** menu, all movements are operable; the speeds are limited to 50% of their maximum values.

**Note**

Incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

**Note**

The values, options, and equipment mentioned in this procedure are given as examples only.

Perform the configuration and teach-in programming of the crane using only the values, options, and equipment corresponding to the crane.

**Note**

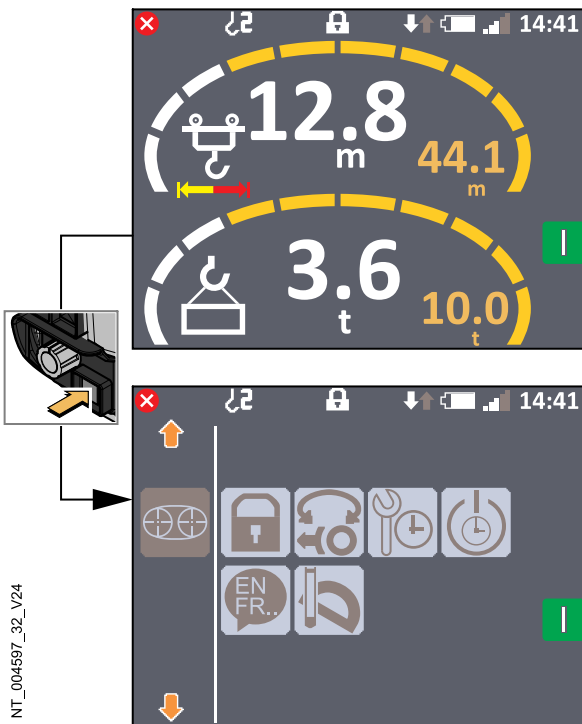
The following procedure contains illustrations that may not exactly reflect the actual physical reality; they may vary according to the crane models but do not interfere with the proper understanding of the procedure.

Entering an access code

Procedure

Accessing the "General/User" screen

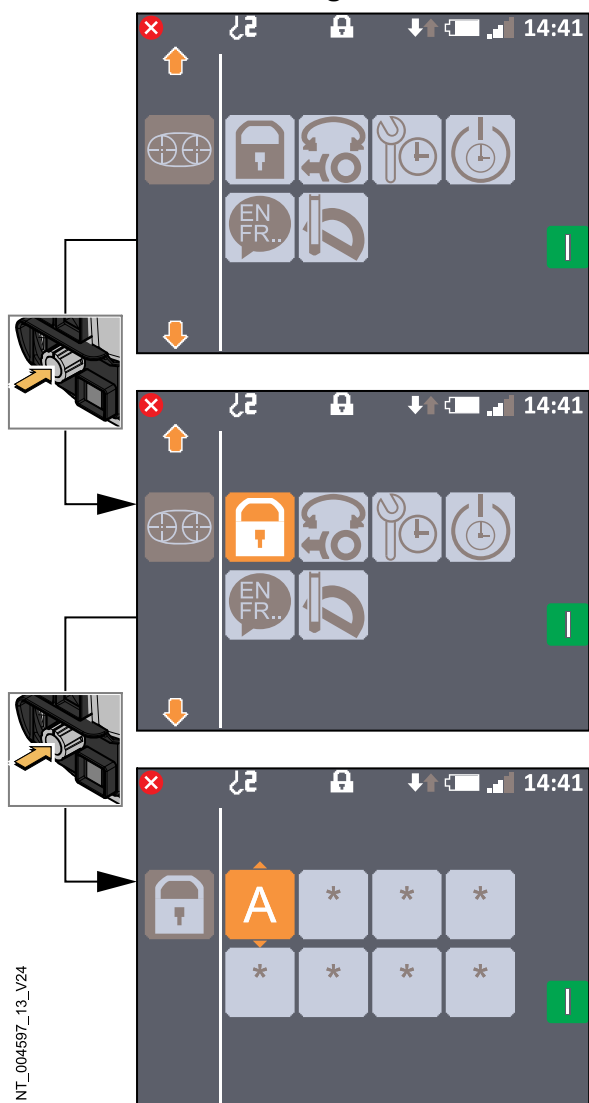
1. Press the **"ESC"** key on the radio control.
 - ◁ The **"General/User"** screen is displayed.



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Accessing the "Access code" menu



2. Press the **Jog Dial** on the radio control twice.
 - ◀ The screen for entering an **"Access code"** is displayed.

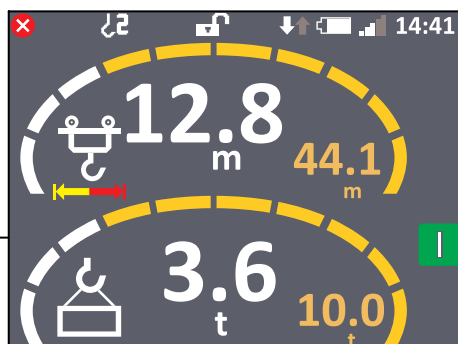
Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

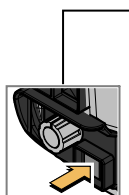
Setting the "Configuration and teach-in programming"

Procedure

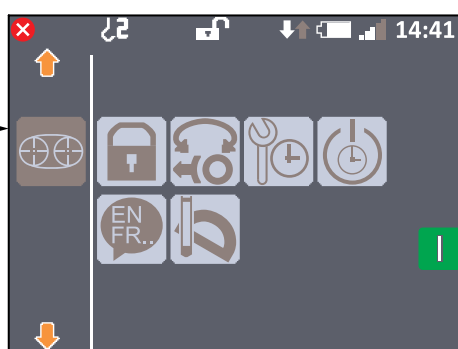
Accessing the "General/User" screen



1. Press the **"ESC"** key on the radio control.
 - ◁ The **"General/User"** screen is displayed.

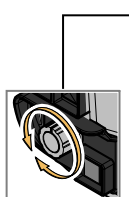


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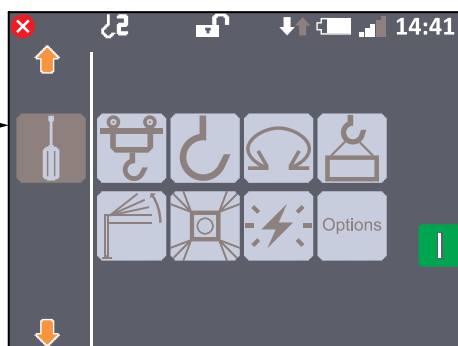
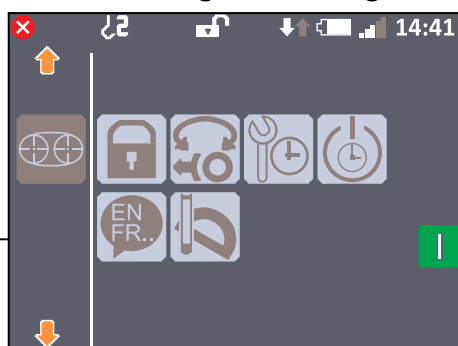


Accessing the "Configuration and teach-in programming" screen

2. Use the **Jog Dial** on the radio control to display the **"Configuration and teach-in programming"** screen.

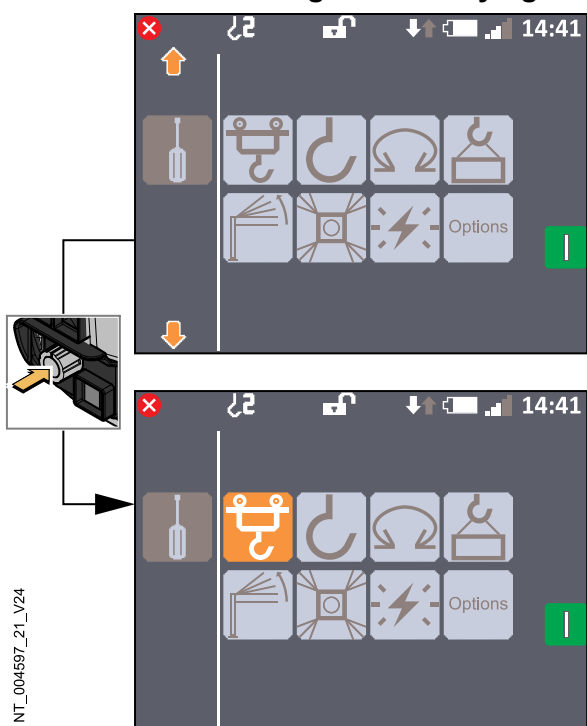


NT_004597_15_V24



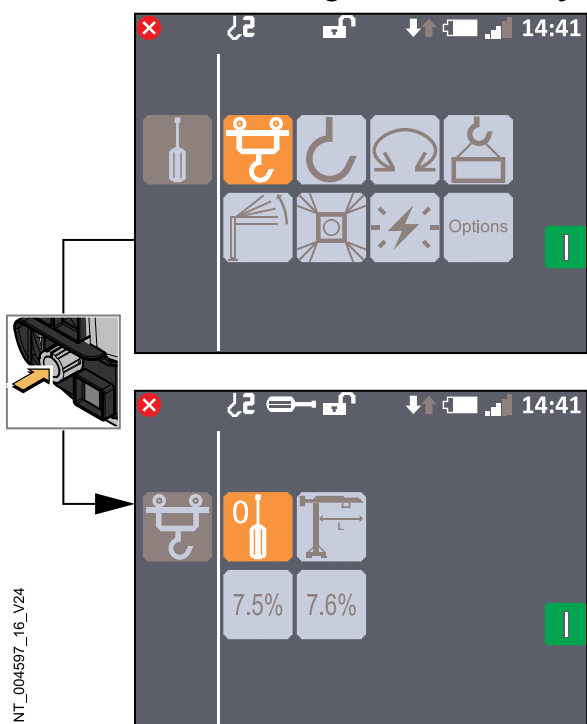
Saving the "Zero trolleying" position

Selecting the "Trolleying" menu



3. Press the **Jog Dial** on the radio control.
 < The **"Trolleying"** menu is selected.

Accessing the "Zero trolleying" submenu



4. Press the **Jog Dial** on the radio control.
 < The **"Zero trolleying"** submenu is displayed.

Saving the "Zero trolleying" position



Note

Saving the "Zero trolleying", "Zero hoisting", and "Zero slewing" parameters can shift the position of the zones defined in the "Top Site" option and offset the calibration of the interference system. After saving the "Zero trolleying", "Zero hoisting", and "Zero slewing" parameters, the zones must therefore be redefined in the "Top Site" option and the interference system must be recalibrated.

5. Make an downward hoisting movement to position the top of the pulley block at the distance (d) from the lowest point of the trolley.

Technical data	
Distance (d) between the top of the pulley block and the lowest point of the trolley	1 m



CAUTION

Risk of damage to the equipment

Moving the trolley too quickly toward the stops on the jib foot or jib nose may cause damage to the stops.

- Move toward the stops at reduced speed.

6. Carry out a trolley in movement to bring the trolley into contact with the stops at the jib foot.

- ◁ The trolley is in "Zero trolleying" position.



Note

When positioning the trolley, do not perform either a trolley out movement or a hoisting movement.

7. Check the two percentage values written on the "Zero trolleying" screen.

Result 1

The two values are within the recommended range.

- Continue the teach-in programming procedure.

Result 2

One or two value(s) are not within the recommended range.

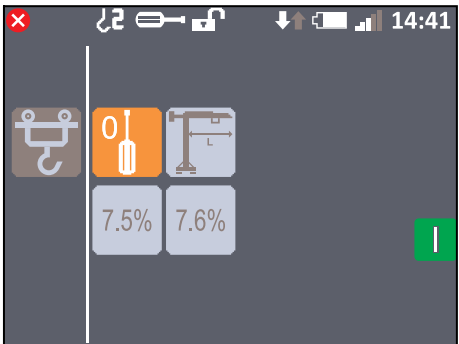
- Place the crane in transport position.
- Adjust the trolleying potentiometers.

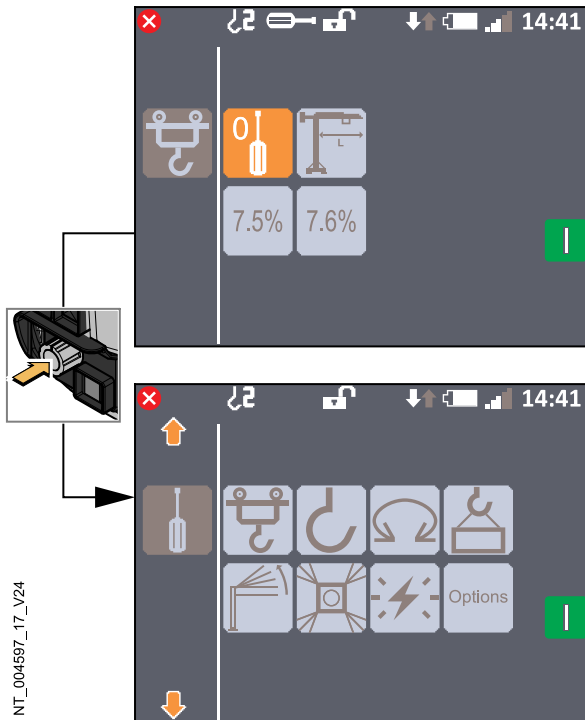
►► page 1-132



Note

To adjust the trolleying potentiometers, the crane must be in transport position.



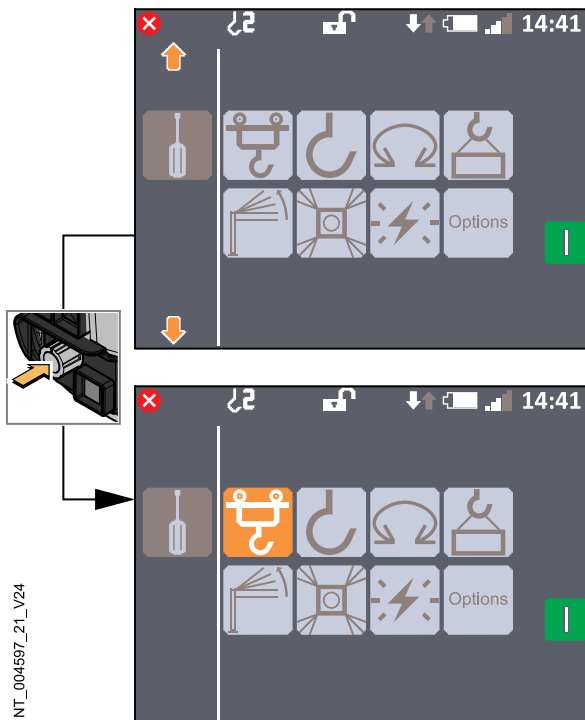


8. Press the **Jog Dial** on the radio control.
 - ◁ The **"Configuration and teach-in programming"** screen is displayed.
 - ◁ The **"Zero trolleying"** position has been saved.

**Note**

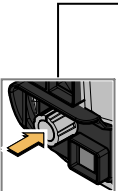
If the **"Zero trolleying"** position is not saved correctly, the symbol **✗** appears on the icon for the **"Zero trolleying"** submenu.

Saving the "Maximum radius" Selecting the "Trolleying" menu

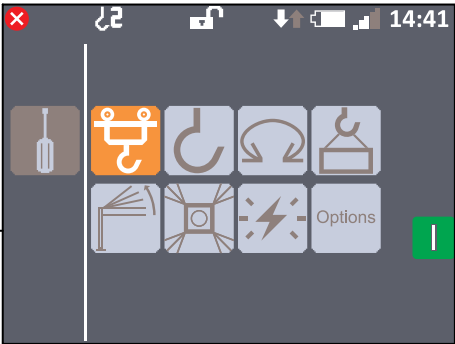


9. Press the **Jog Dial** on the radio control.
 - ◁ The **"Trolleying"** menu is selected.

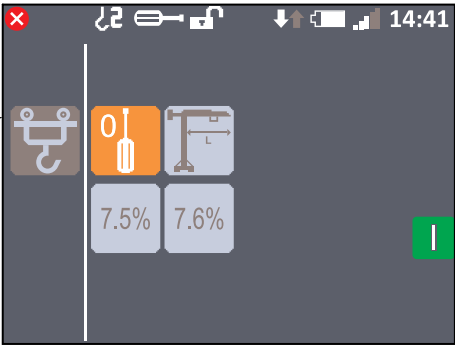
Accessing the "Maximum trolleying" submenu



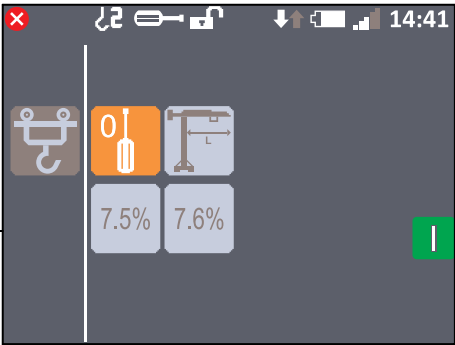
NT_004597_16_V24



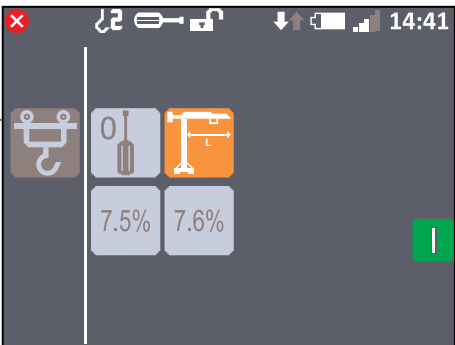
10. Press the **Jog Dial** on the radio control.
 ◀ The **"Zero trolleying"** submenu is displayed.



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11. Use the **Jog Dial** on the radio control to select the **"Maximum trolleying"** submenu.



Saving the "Maximum trolleying" position



CAUTION
Risk of damage to the equipment

Moving the trolley too quickly toward the stops on the jib foot or jib nose may cause damage to the stops.

- ▶ Move toward the stops at reduced speed.

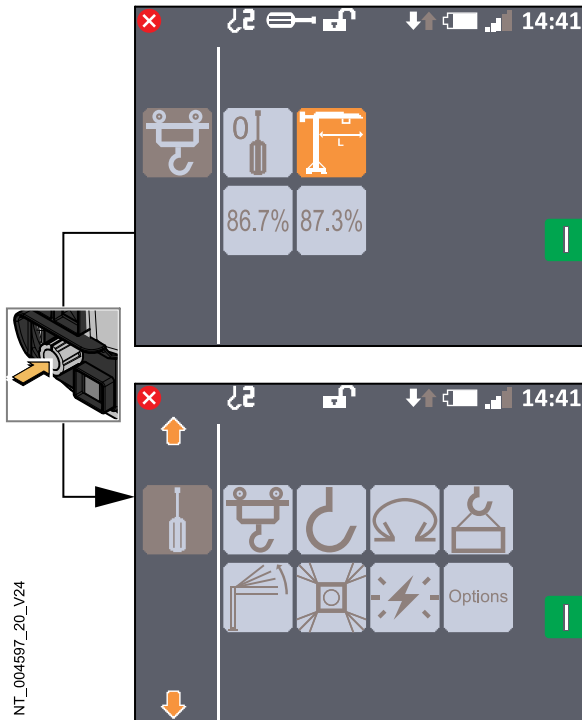
12. Perform a trolley out movement to place the trolley in contact with the jib nose stops.

◁ The trolley is in **"Maximum trolleying"** position.



Note

When positioning the trolley, do not perform either a trolley in movement or a hoisting movement.



NT_004597_20_V24

13. Press the **Jog Dial** on the radio control.

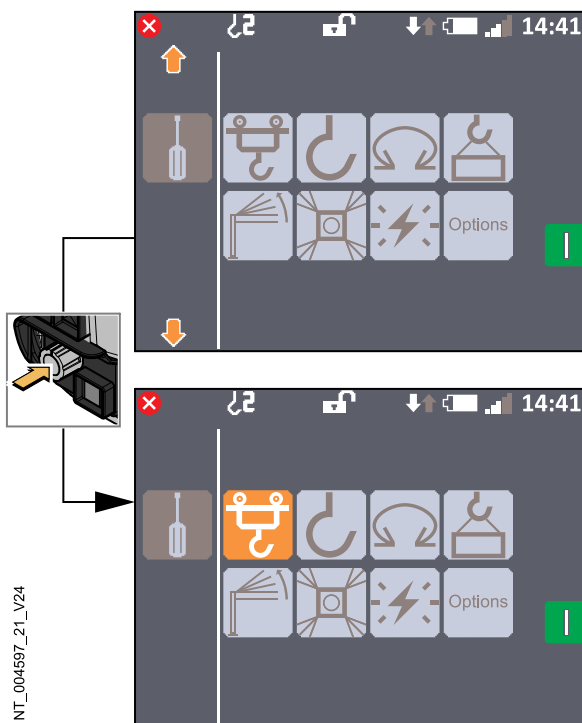
- ◁ The **"Configuration and teach-in programming"** screen is displayed.
 ◁ The **"Maximum trolleying"** position has been saved.



Note

If the **"Maximum trolleying"** position is not saved correctly, the symbol **✗** appears on the **"Maximum trolleying"** icon

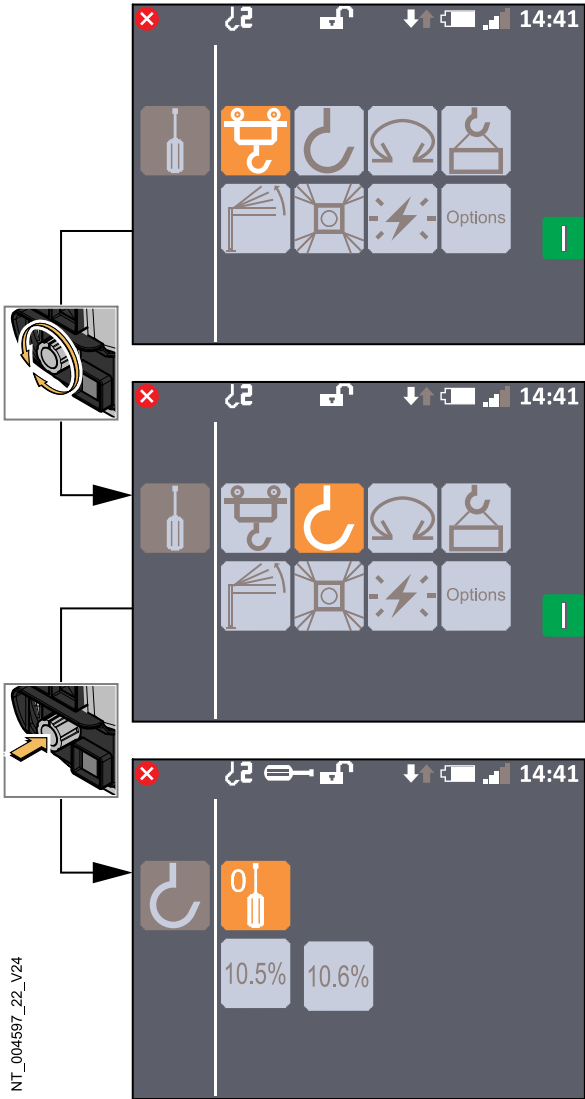
Saving the "Zero hoisting" Selecting the "Trolleying" menu



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14. Press the **Jog Dial** on the radio control.
 ◁ The **"Trolleying"** menu is selected.

Accessing the "Zero hoisting" submenu



15. Use the **Jog Dial** on the radio control to select the **"Zero hoisting"** menu, then confirm by pressing the **Jog Dial** on the radio control.
- ◀ The **"Zero hoisting"** menu is displayed.

Saving the "Zero hoisting"



Note Saving the **"Zero trolleying"**, **"Zero hoisting"** and **"Zero slewing"** can shift the position of the zones defined in the **"Top Site"** option and offset the calibration of the interference system. The zones must therefore be redefined in the **"Top Site"** option and the interference system recalibrated after saving **"Zero trolleying"**, **"Zero hoisting"** and **"Zero slewing"**.

16. Perform a trolley in movement to position the trolley at the jib foot without reaching the stops.
17. Make an upward hoisting movement to position the top of the pulley block at the distance (d) from the lowest point of the trolley.

Technical data	
Distance (d) between the top of the pulley block and the lowest point of the trolley	0.6 m

- ◀ The pulley block is in **"Zero hoisting"** position.

18. Check the two percentage values written on the **"Zero hoisting"** screen.

Result 1

The two values are within the recommended range.

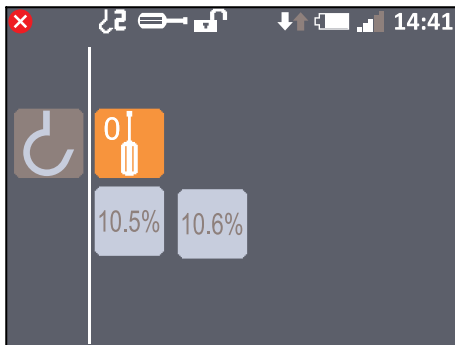
- ▶ Continue the teach-in programming procedure.

Result 2

One or two value(s) are not within the recommended range.

- ▶ Adjust the hoisting potentiometers.
➡ page 1-134

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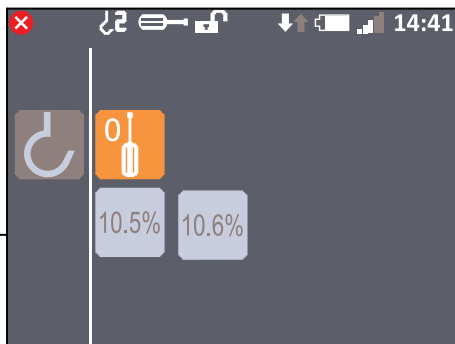
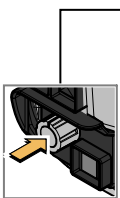


19. Press the **Jog Dial** on the radio control.

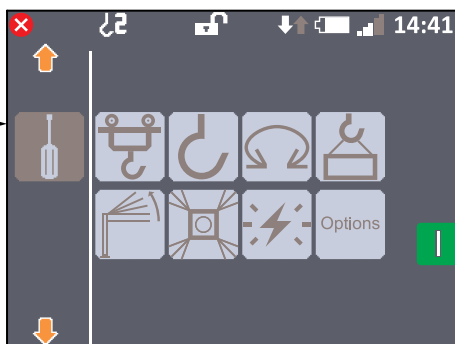
- < The **"Configuration and teach-in programming"** screen is displayed.
- < The **"Zero hoisting"** position is saved.

**Note**

If the **"Zero hoisting"** position is not saved correctly, the symbol **✗** appears on the **"Zero hoisting"** pictogram.

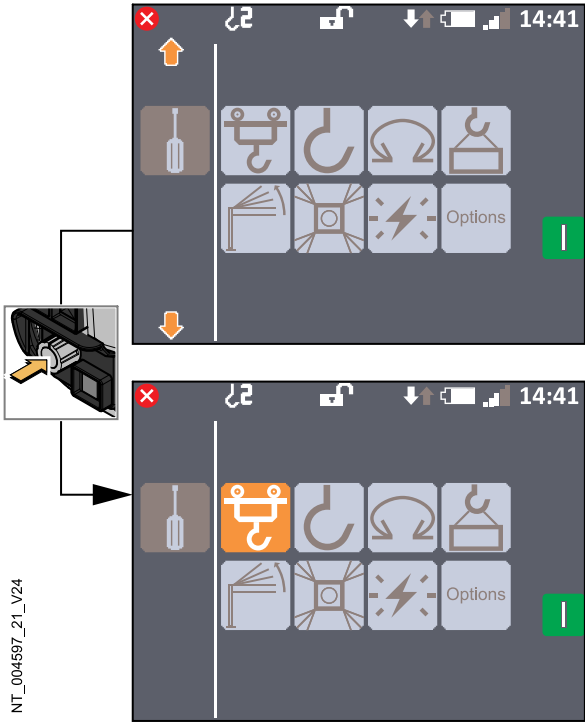


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**Saving the "Zero slewing" position****Note**

Perform the teach-in programming of the **"Zero slewing"** parameter only if the **"Encoder"** option is present on the crane and it is activated. Pairing of the encoders must have been carried out first.

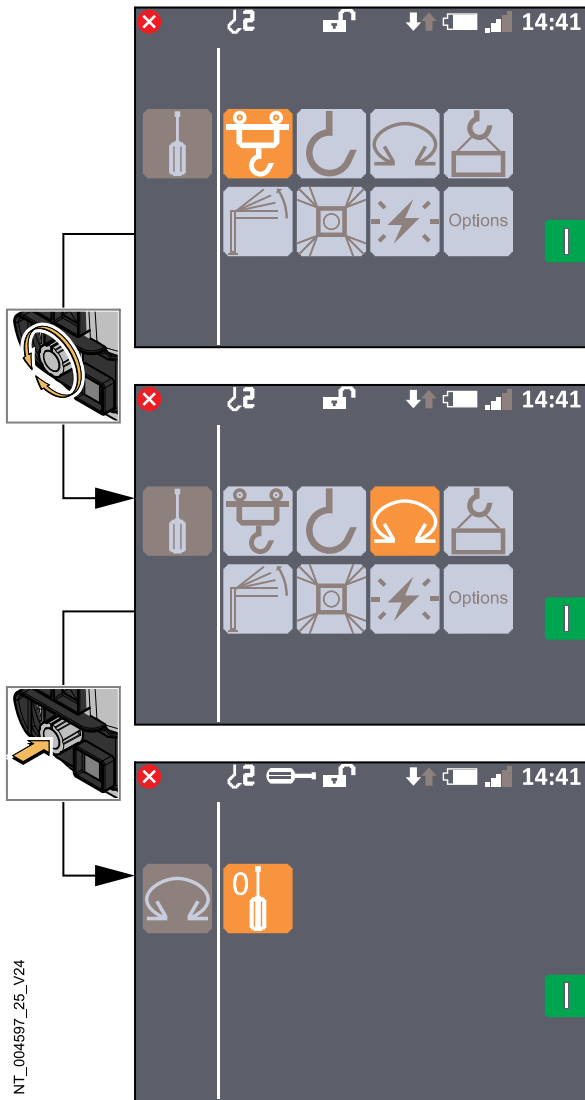
Selecting the "Trolleying" menu



20. Press the **Jog Dial** on the radio control.
 < The **"Trolleying"** menu is selected.

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Accessing the "Zero slewing" submenu



21. Use the **Jog Dial** on the radio control to select the **"Zero slewing"** menu, then confirm by pressing the **Jog Dial** on the radio control.

◀ The **"Zero slewing"** menu is displayed.

Saving the "Zero slewing" position

**Note**

Perform the teach-in programming of the **"Zero slewing"** parameter only if the **"Encoder"** option is present on the crane and it is activated. Pairing of the encoders must have been carried out first.

**Note**

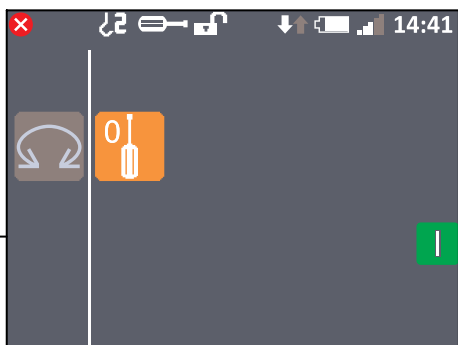
Saving the **"Zero trolleying"**, **"Zero hoisting"**, and **"Zero slewing"** parameters can shift the position of the zones defined in the **"Top Site"** option and offset the calibration of the interference system. After saving the **"Zero trolleying"**, **"Zero hoisting"**, and **"Zero slewing"** parameters, the zones must therefore be redefined in the **"Top Site"** option and the interference system must be recalibrated.

**Note**

Before saving the **"Zero slewing"** parameter, ensure that the ropes located between the chassis and the slewing platform are not twisted.

22. Carry out a slewing movement to position the jib at a chosen reference point.

- ◁ The jib is in **"Zero slewing"** position.



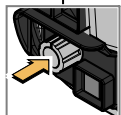
23. Press the **Jog Dial** on the radio control.

- ◁ The **"Configuration and teach-in programming"** screen is displayed.
- ◁ The **"Zero slewing"** position has been saved.

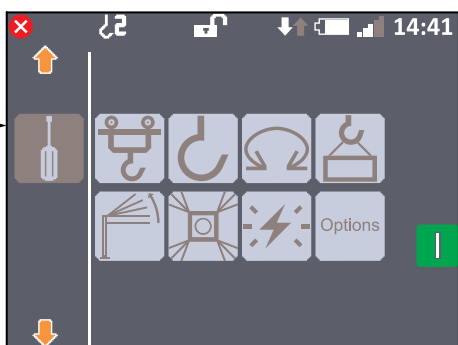


Note

If the **"Zero slewing"** position is not saved correctly, the symbol **✗** appears on the **"Zero hoisting"** icon.

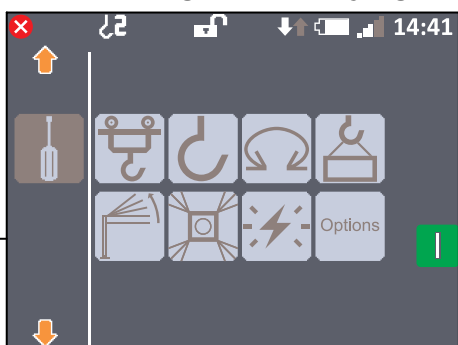


NT_004597_26_V24



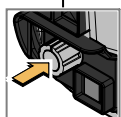
Saving the "Zero load"

Selecting the "Trolleying" menu

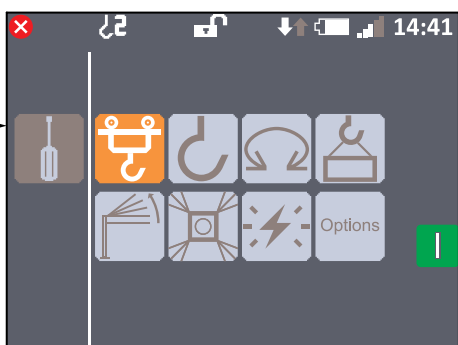


24. Press the **Jog Dial** on the radio control.

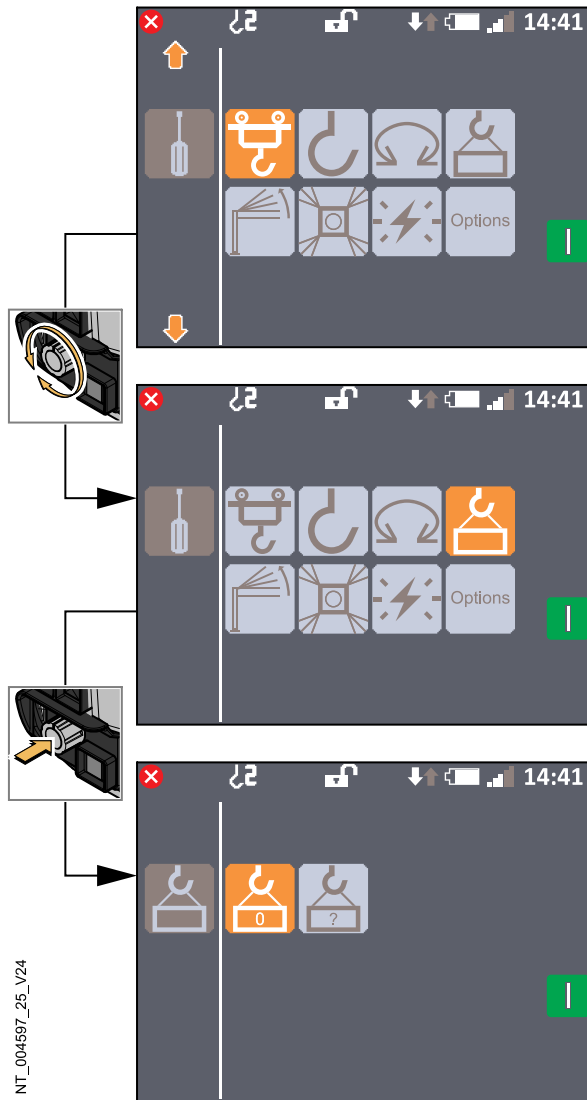
- ◁ The **"Trolleying"** menu is selected.



NT_004597_21_V24

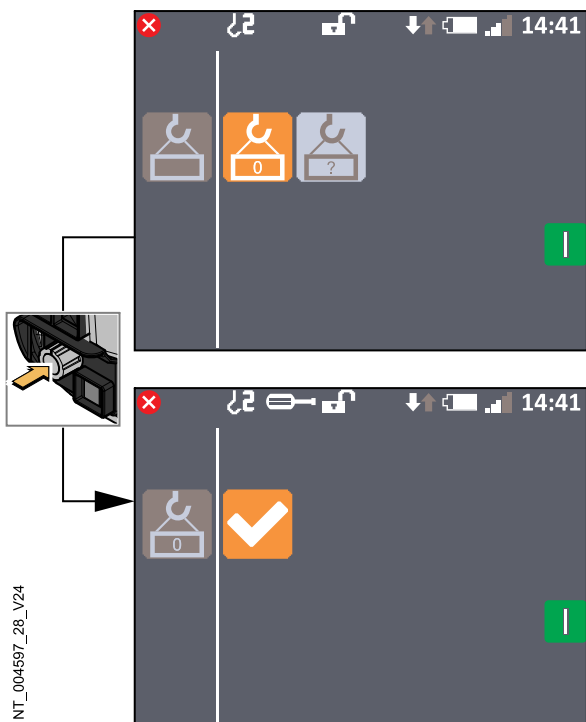


Accessing the "Zero load" submenu



25. Use the **Jog Dial** on the radio control to select the **"Load"** menu, then confirm by pressing the **Jog Dial** on the radio control.

◀ The **"Load"** menu is displayed.



26. Press the **Jog Dial** on the radio control.
 ◀ The **"Zero load"** submenu is displayed.

Saving the "Zero load"



Note

Saving the **"Zero load"** is done without a load hanging from the hook.

27. Perform a trolley in movement to position the trolley at the jib foot without reaching the stops.
 28. Perform a hoisting movement until the hoist rope is wound up to the middle of the second layer on the hoisting mechanism drum.



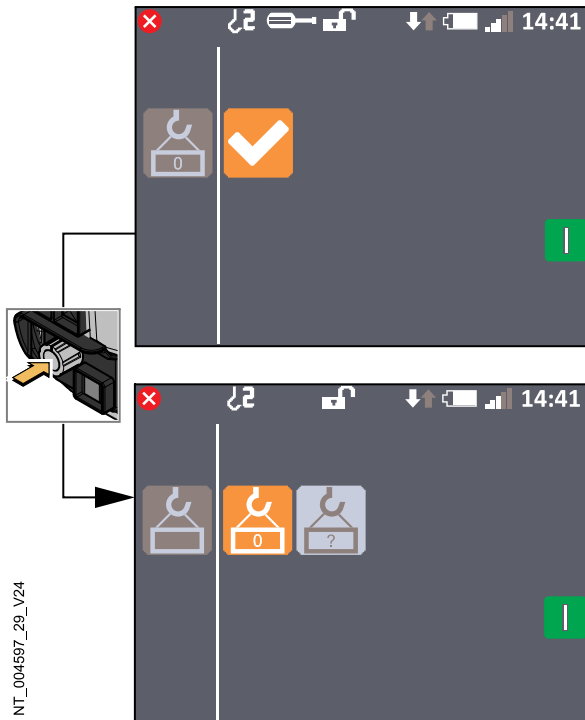
Note

To save the **"Zero load"** and the **"Known load"**, always finish with a hoisting movement.



Note

Wait 30 seconds to one minute for the crane to stabilize.



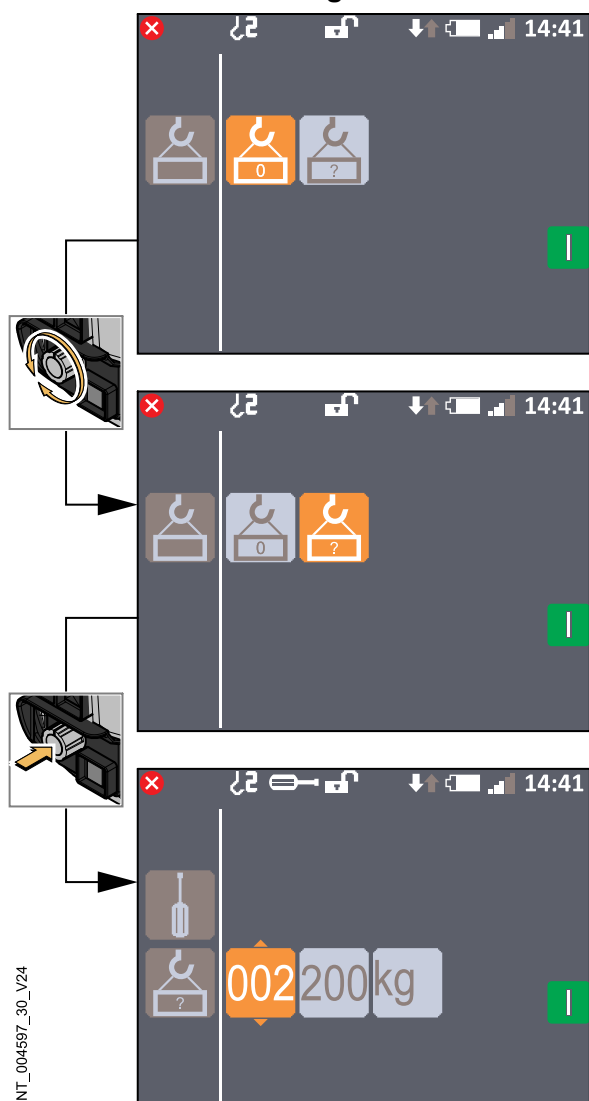
29. Press the **Jog Dial** on the radio control.

- < The "**Load**" menu is displayed.
- < The "**Zero load**" is saved.



Note

If the "**Zero load**" is not saved correctly, the symbol **X** appears on the pictogram

Saving the "Known load"**Accessing the "Known load" submenu**

30. Use the **Jog Dial** on the radio control to select the **"Known load"** submenu, then confirm by pressing the **Jog Dial** on the radio control.

◁ The **"Known load"** submenu is displayed.

Saving the "Known load"

31. Perform a trolley in movement to position the trolley at the jib foot without reaching the stops.
32. Lift a load of known weight, as close as possible to the maximum permissible load for the crane (80% to 100% of the maximum load). This maximum permissible load must be determined according to the jib configuration and by referring to the corresponding load curves. The hoist rope must be wound up to the middle of the second layer on the hoisting mechanism drum.
 - ◁ The load is in position for saving the **"Known load"**.

**Note**

To save the **"Zero load"** and the **"Known load"**, always finish with a hoisting movement.

**Note**

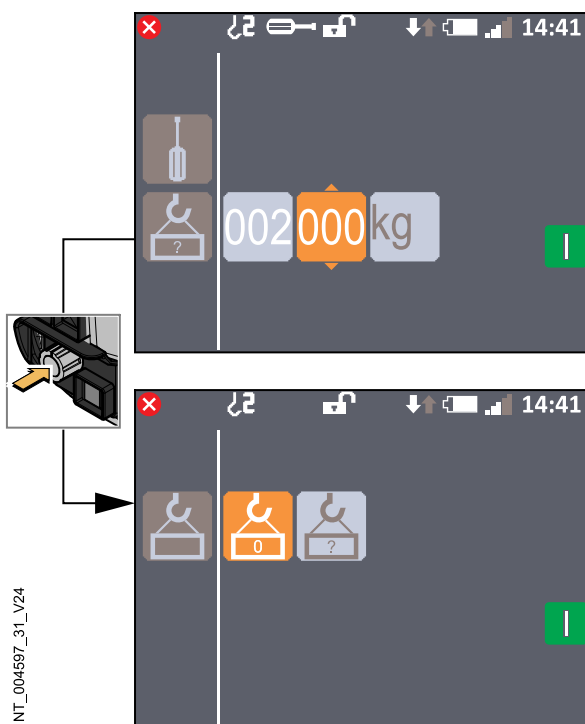
Wait 30 seconds to one minute for the crane to stabilize.

33. Enter the value of the **"Known load"** ➡ page 1-28.

Technical data

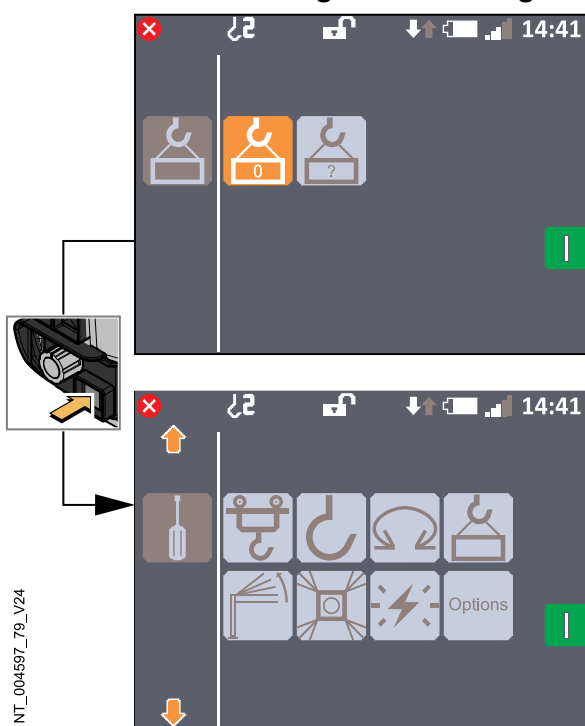
Sling weight to be taken into account

Min. 50 kg

34. Press the **Jog Dial** on the radio control.

- ◁ The **"Load"** menu is displayed.
- ◁ The **"Known load"** is saved.

Returning to the "Configuration and teach-in programming" screen

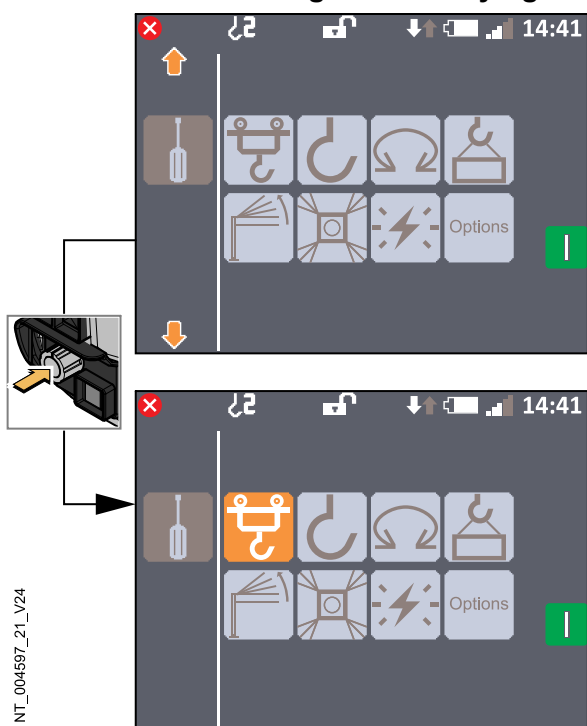
35. Press the **"ESC"** key on the radio control.

- ◁ The **"Configuration and teach-in programming"** screen is displayed.

Activating and deactivating options

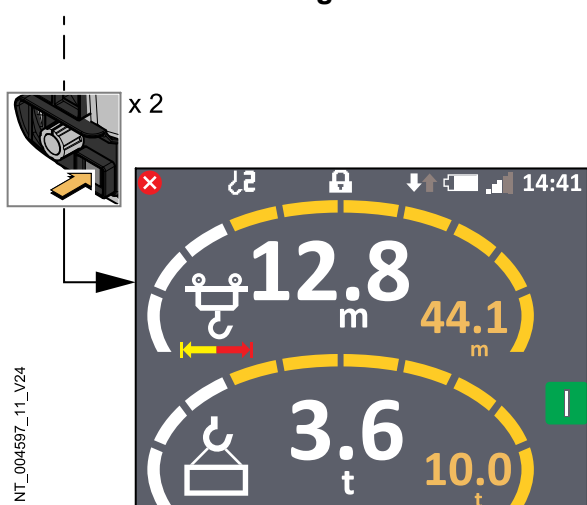
Selecting the "Trolleying" menu

36. Press the **Jog Dial** on the radio control.
 < The **"Trolleying"** menu is selected.



Returning to the "Indicators" screen

37. Press the **"ESC"** key on the **Jog Dial** of the radio control twice.
 < The **"Indicators"** screen is displayed.



Post-tasks

Checking the configuration and the teach-in programming

1. Check that every limit switch, load limiter, and moment cutout is working effectively.
2. Check that the data is being displayed correctly on the **"Indicators"** screen on the radio control.

1.3.17 "Jib configuration" menu

Foreword - "Jib configuration" menu



Note

The values, options, and equipment mentioned in this procedure are given as examples only.

Perform the configuration of the crane using only the values, options, and equipment corresponding to the crane.

In the event of an error when erecting the crane or changing the configuration of the jib (angle), the **"Jib configuration"** menu allows you to tell the **CCS** system the angle of the jib on the crane.



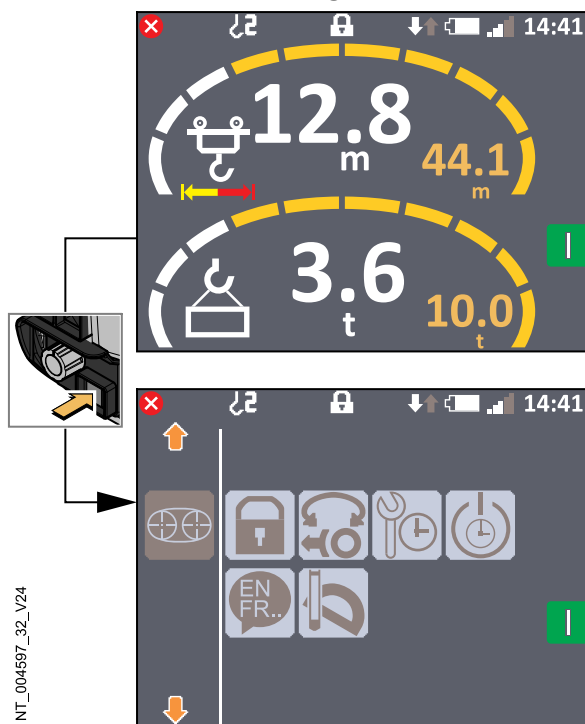
Note

The following procedure contains illustrations that may not exactly reflect the actual physical reality; they may vary according to the crane models but do not interfere with the proper understanding of the procedure.

Entering an access code

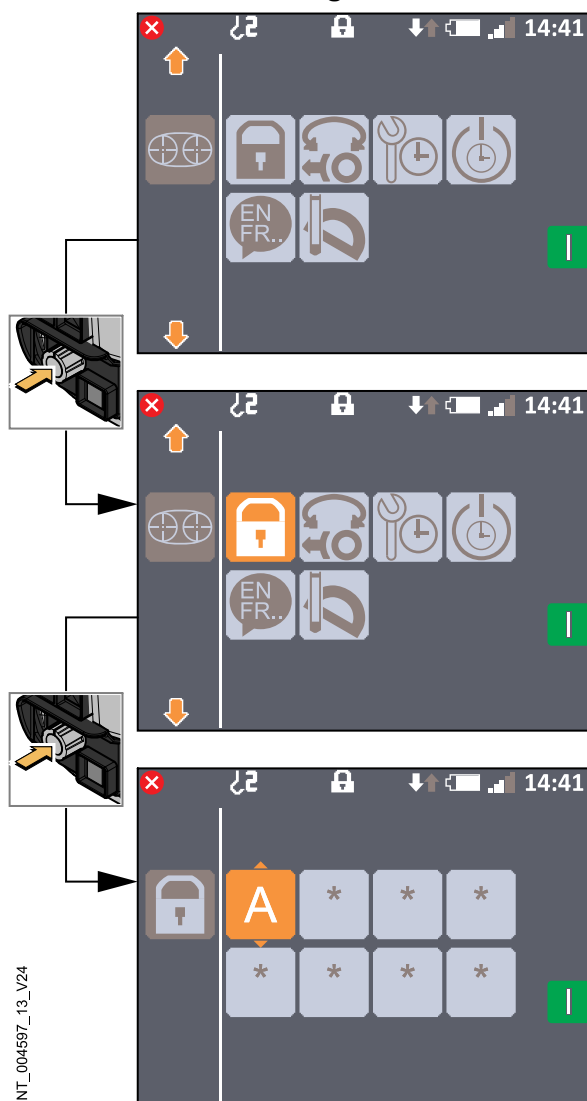
Procedure

Accessing the "General/User" screen



1. Press the **"ESC"** key on the radio control.
 - < The **"General/User"** screen is displayed.

Accessing the "Access code" menu



2. Press the **Jog Dial** on the radio control twice.
 - ◀ The screen for entering an **"Access code"** is displayed.

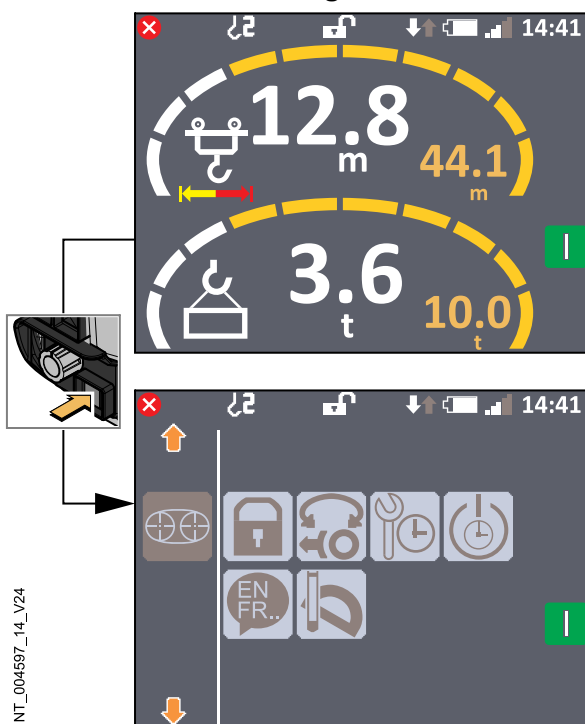
Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

Saving the "Jib configuration"

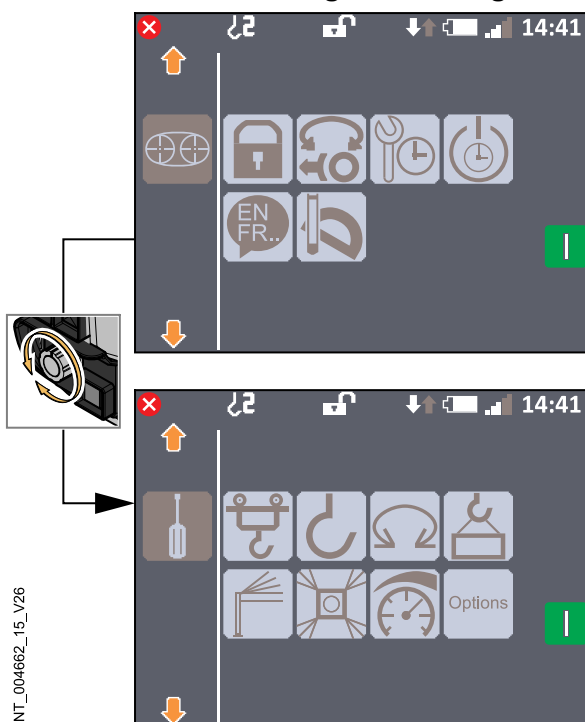
Procedure

Accessing the "General/User" screen



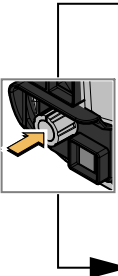
1. Press the **"ESC"** key on the radio control.
 ◀ The **"General/User"** screen is displayed.

Accessing the "Configuration and teach-in programming" screen

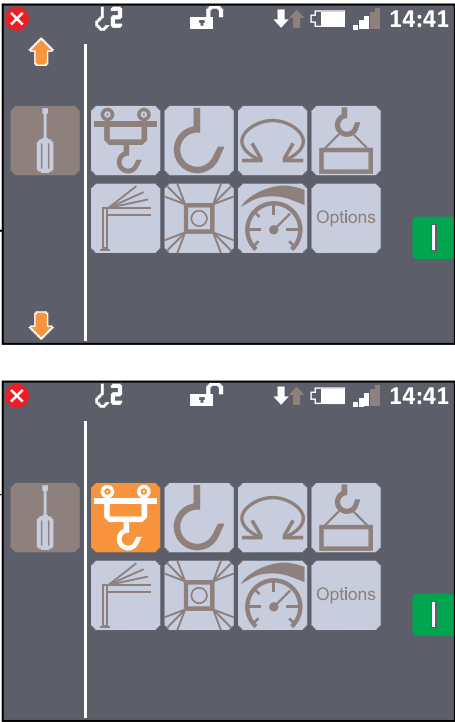


2. Use the **Jog Dial** on the radio control to display the **"Configuration and teach-in programming"** screen.

Selecting the "Trolleying" menu

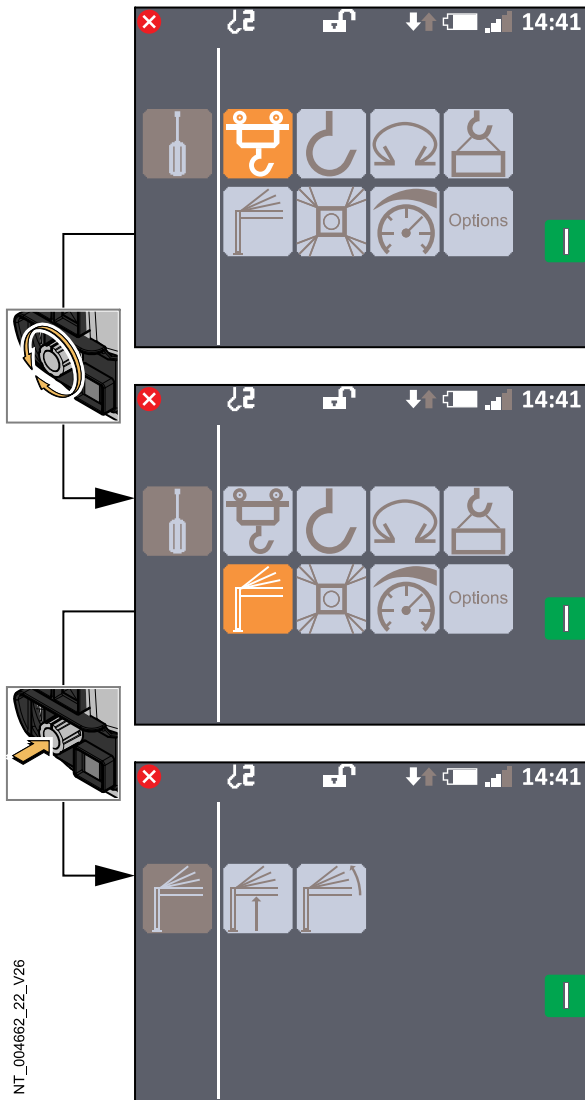


NT_004662_16_V26



3. Press the **Jog Dial** on the radio control.
 < The "**Trolleying**" menu is selected.

Accessing the "Jib configuration" menu

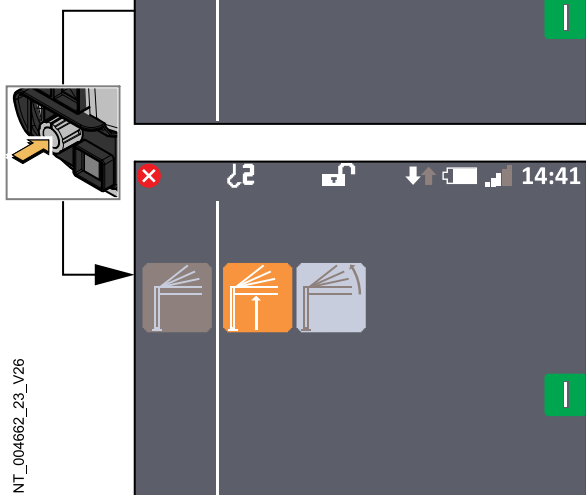


4. Use the **Jog Dial** on the radio control to select the **"Jib configuration"** menu, then confirm by pressing the **Jog Dial** on the radio control.
 - ◀ The **"Jib configuration"** menu is displayed.

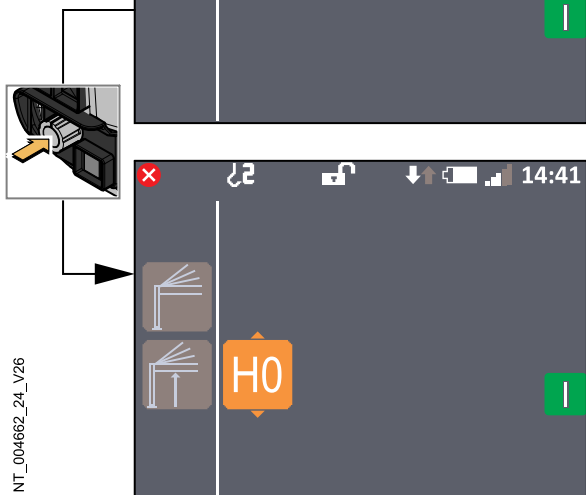
NT_004662_22_V26

Accessing the "Jib height" menu

5. Press the **Jog Dial** on the radio control.
 < The "Jib height" menu is selected.

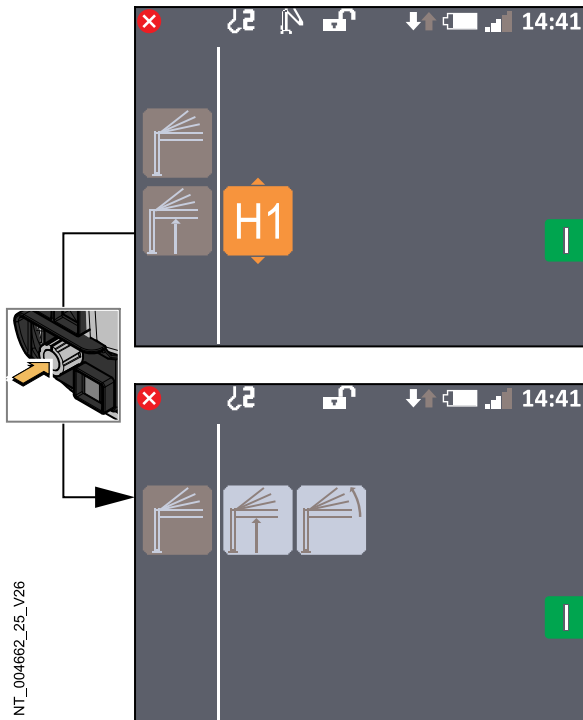


6. Press the **Jog Dial** on the radio control.
 < The "Jib height" menu is displayed.



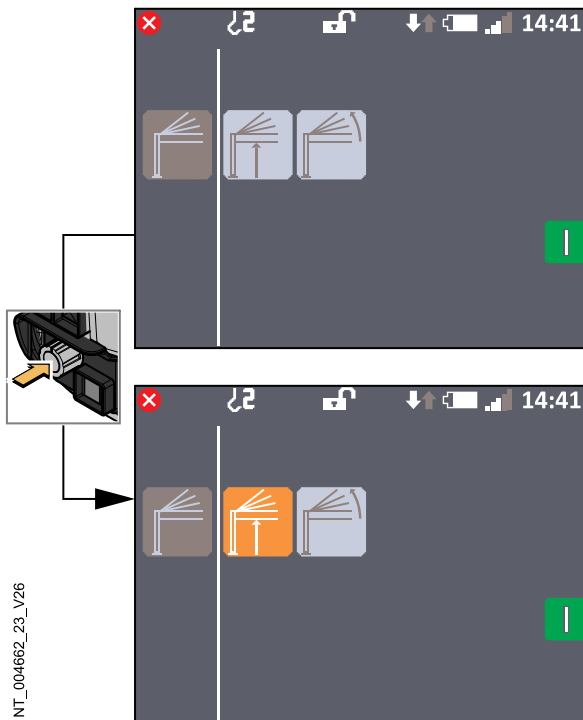
Selecting the "Jib height"

7. Enter the value of the desired jib angle ➡ page 1-28.



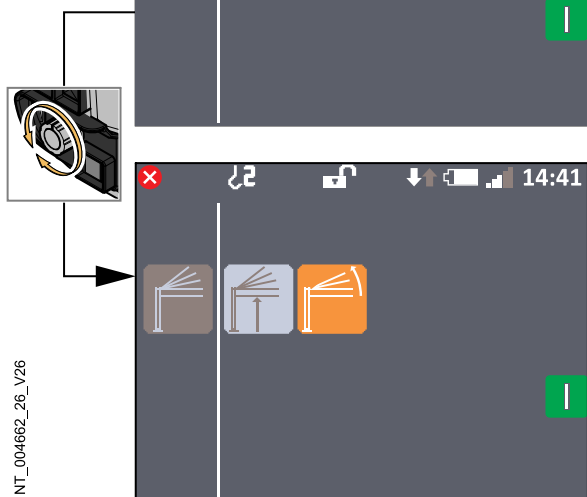
8. Press the **Jog Dial** on the radio control.
 - < The "**Jib configuration**" menu is displayed.
 - < The "**Jib height**" has been saved.

Accessing the "Jib angle" menu

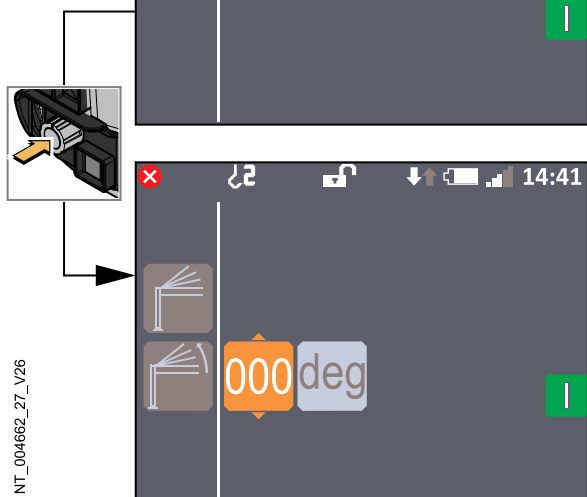


9. Press the **Jog Dial** on the radio control.
 - < The "**Jib height**" menu is selected.

10. Use the **Jog Dial** on the radio control to select the **"Jib angle"** menu.

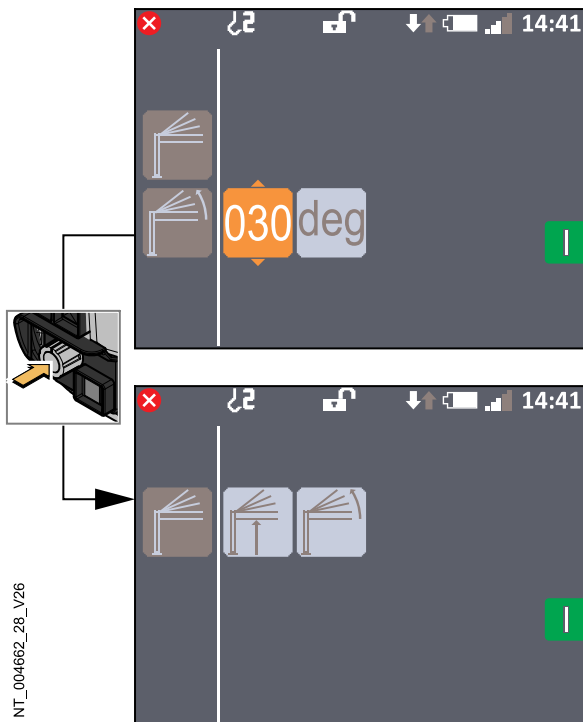


11. Press the **Jog Dial** on the radio control.
 - ◁ The **"Jib angle"** menu is displayed.



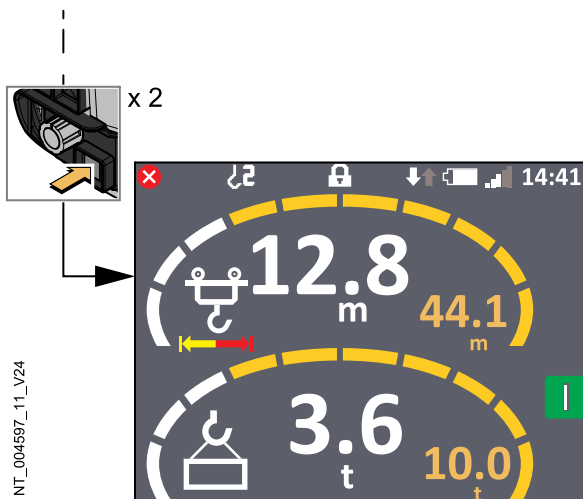
Selecting the "Jib angle"

12. Enter the value of the desired jib angle ➡ page 1-28.



13. Press the **Jog Dial** on the radio control.
- ◀ The "**Jib configuration**" menu is displayed.
 - ◀ The "**Jib angle**" is saved.

Returning to the "Indicators" screen



14. Press the "**ESC**" key on the radio control twice.
- ◀ The "**Indicators**" screen is displayed.

1.3.18 "Power control" menu

Foreword - "Power control" menu



Note

The values, options, and equipment mentioned in this procedure are given as examples only.

Perform the configuration of the crane using only the values, options, and equipment corresponding to the crane.

The "**Power control**" menu makes it possible to adapt the power required for the crane to the line power available.

**Note**

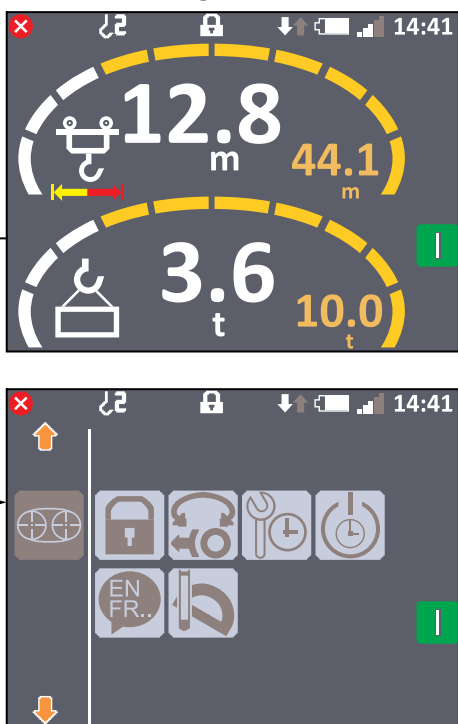
The limitation in power has the result of decreasing the movement speed when hoisting a load. There is neither degradation in the load curves nor decrease in the speed for the slewing or trolleying movements.

Entering an access code

Procedure

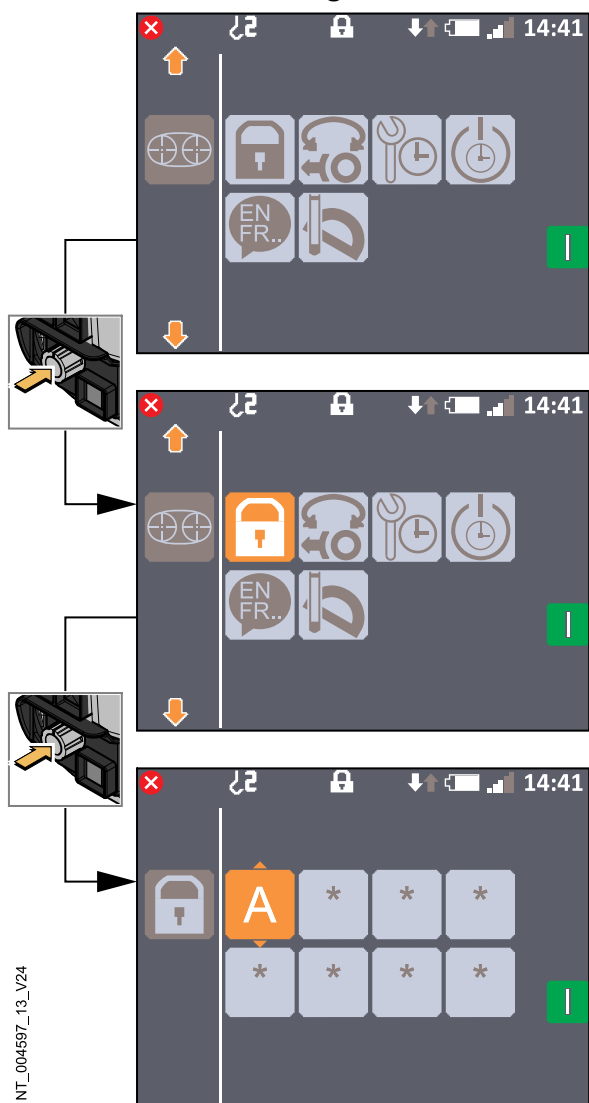
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 - ◀ The **"General/User"** screen is displayed.



NT_004597_32_V24

Accessing the "Access code" menu



2. Press the **Jog Dial** on the radio control twice.
 - ◀ The screen for entering an **"Access code"** is displayed.

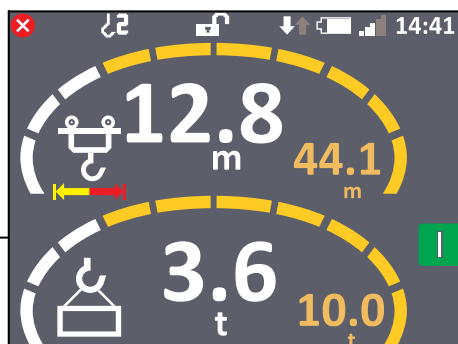
Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

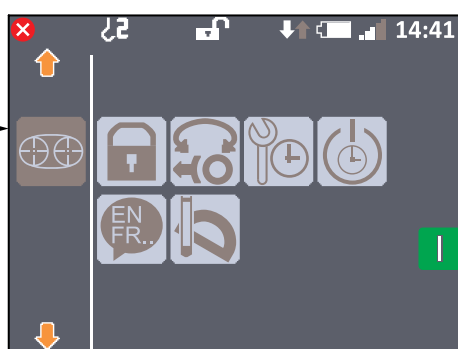
Inputting the limit value for power ("Power control" function)

Procedure

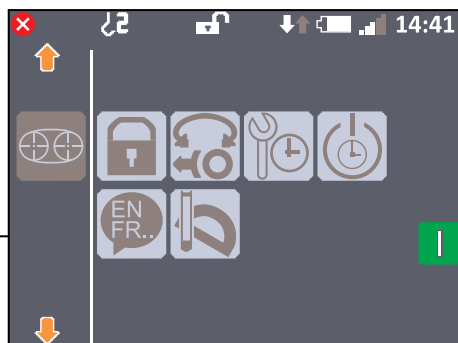
Accessing the "General/User" screen



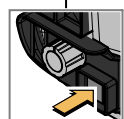
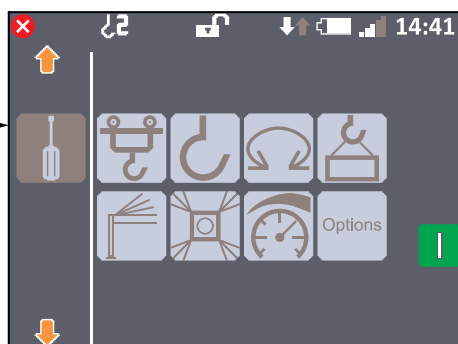
1. Press the **"ESC"** key on the radio control.
 < The **"General/User"** screen is displayed.



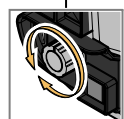
Accessing the "Configuration and teach-in programming" screen



2. Use the **Jog Dial** on the radio control to display the **"Configuration and teach-in programming"** screen.

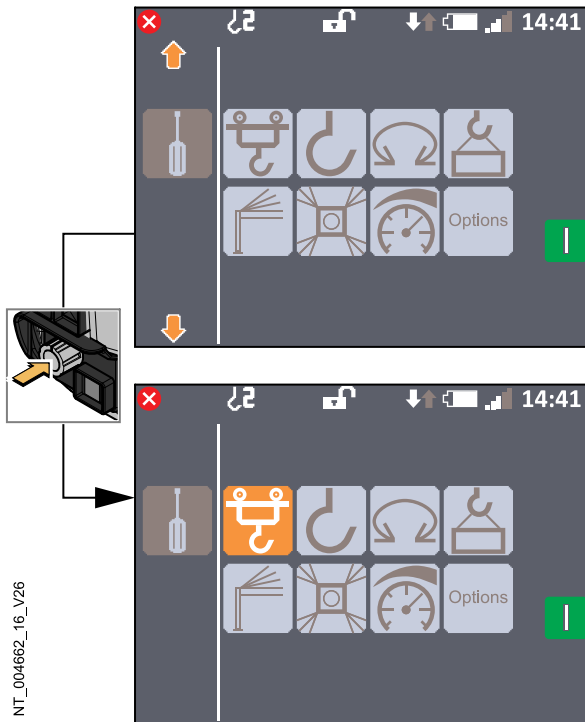


NT_004597_14_V24



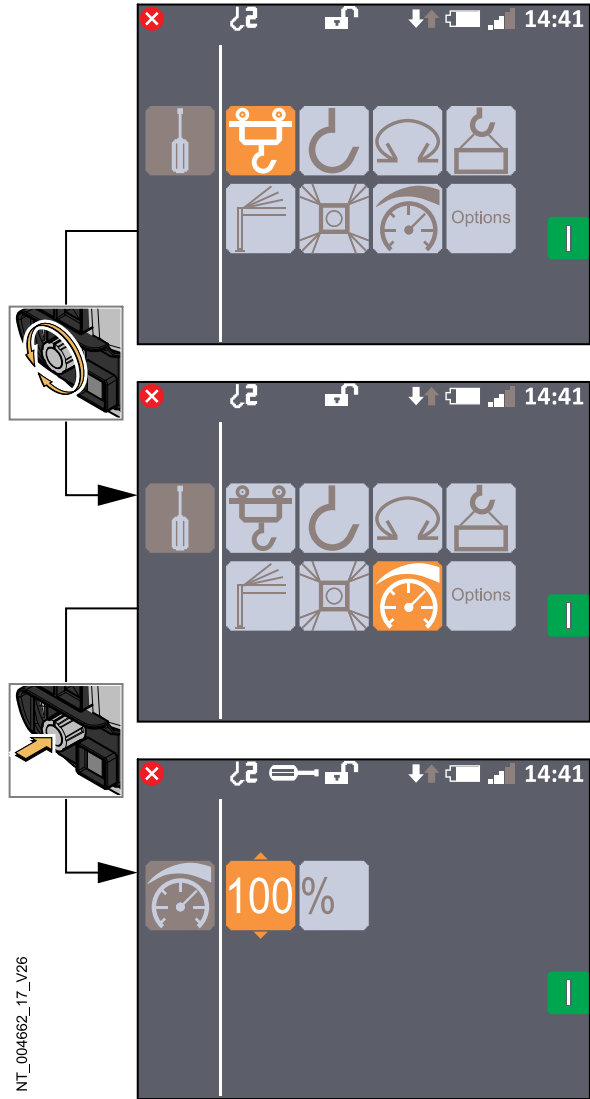
NT_004662_15_V26

Selecting the "Trolleying" menu



3. Press the **Jog Dial** on the radio control.
 - ◀ The **"Trolleying"** menu is selected.

Accessing the "Power control" submenu



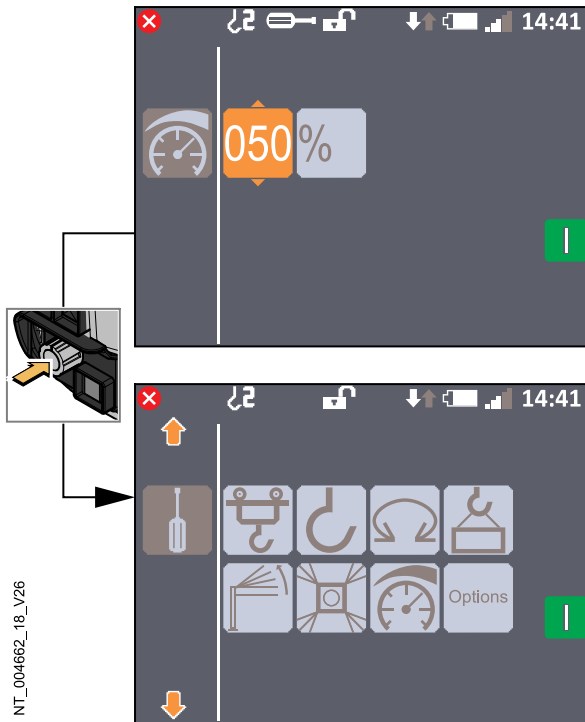
4. Use the **Jog Dial** on the radio control to select the **"Power control"** menu, then confirm by pressing the **Jog Dial** on the radio control.
- ◀ The **"Power control"** menu is displayed.

Inputting the limit value for power ("Power control" function)

5. Input the limit value for power ➡ page 1-28.

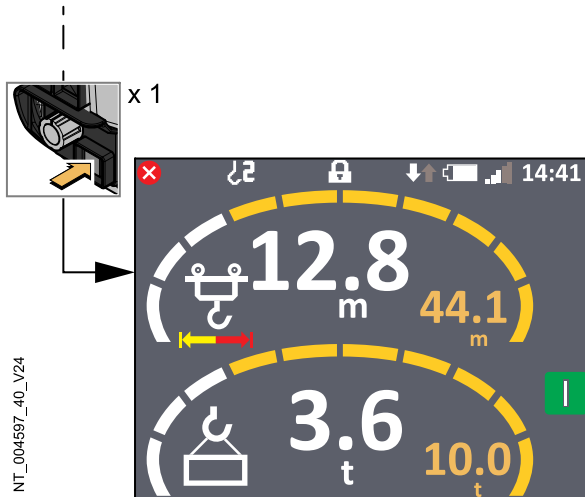
Technical data	
Adjustment range	50 % to 100 %

- Note**
The power limit enables adjusting the power required for the crane to the power available on the power grid.
- Note**
The limitation in power has the result of decreasing the movement speed when hoisting a load. There is neither degradation in the load curves nor decrease in the speed for the slewing or trolleying movements.
- Note**
If the value entered is outside the adjustment range, it will not be taken into consideration by the system.



6. Press the **Jog Dial** on the radio control.
 - ◁ The **"Configuration and teach-in programming"** screen is displayed.
 - ◁ The limit value for power is saved.

Returning to the "Indicators" screen



7. Press the **Jog Dial** on the radio control.
 - ◁ The **"Indicators"** screen is displayed.

1.3.19 "Messages" menu

Foreword - "CCS message"

The messages allow the crane driver or maintenance technician to view a range of information about the status of certain crane components. There are two types of messages:

- Fault messages
- Notification messages

A **"CCS"** message is identified by a code. ➡ page 1-96



For cranes equipped with a **CCS Display**, the remedying of a fault will not be registered instantly by the display. For the message code display to be updated, the **CCS** system must be restarted.

Structure of a CCS message code

The **CCS** message codes are made up of two parts:

$$\begin{array}{c} \text{00011.20481} \\ \hline \text{1} \quad \text{2} \end{array}$$

Example:

1. The first part of the code **00011** identifies a component of the crane: **00011 = Slew-ing frequency converter.**
2. The second part of the code **20481** identifies a message: **20481 = Not detected.**

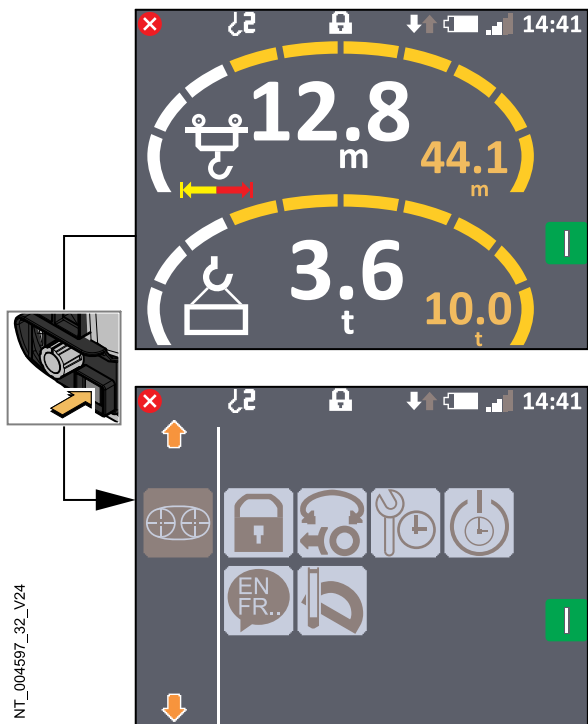
Together, these two codes provide a name and location for the message: **00011.20481 = The slewing mechanism frequency converter is not detected.**

Accessing the "CCS messages" menu

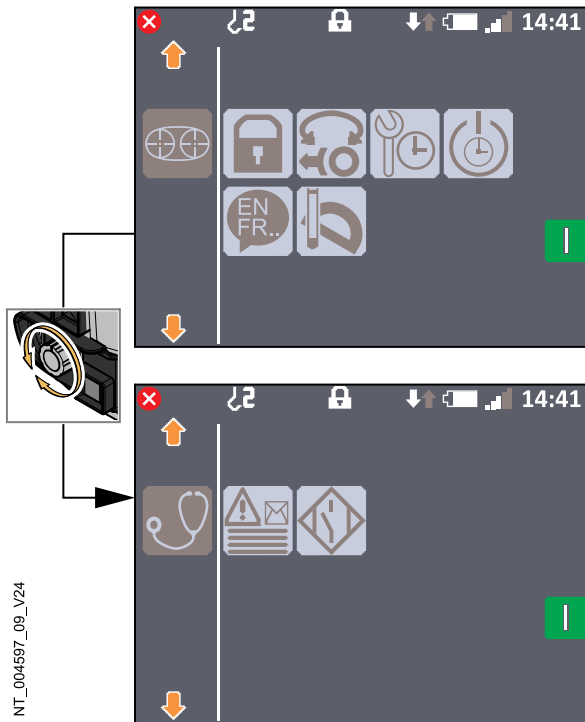
Procedure

Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 - ◁ The **"General/User"** screen is displayed.

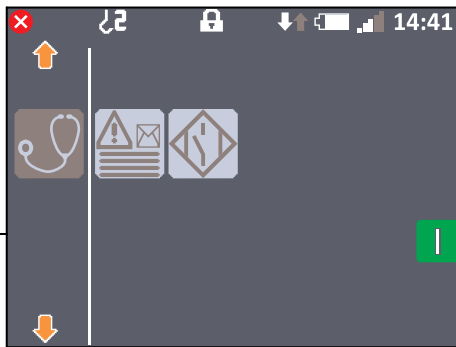


Accessing the "Messages and diagnostics" screen



2. Use the **Jog Dial** on the radio control to display the **"Messages and diagnostics"** screen.
 - < The **"Messages and diagnostics"** screen is displayed.

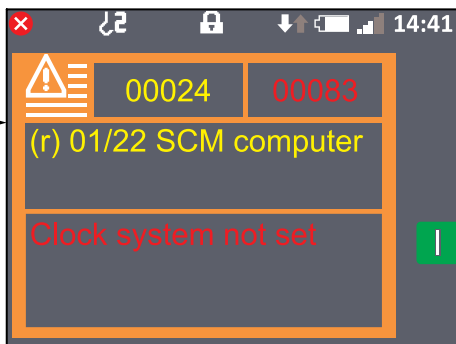
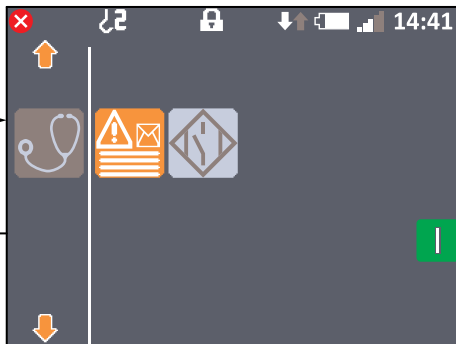
Accessing the "Messages" menu



3. Press the **Jog Dial** on the radio control.
 - ◁ The **"Messages"** menu is selected
4. Press the **Jog Dial** on the radio control.
 - ◁ The **"Messages"** menu is displayed.

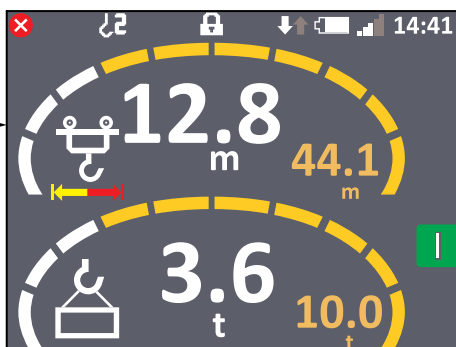
**Note**

If several messages are present in the log, it is possible to scroll through them using the **Jog Dial** on the radio control.



Returning to the "Indicators" screen

5. Press the **"ESC"** key on the **Jog Dial** of the radio control twice.
 - ◁ The **"Indicators"** screen is displayed.

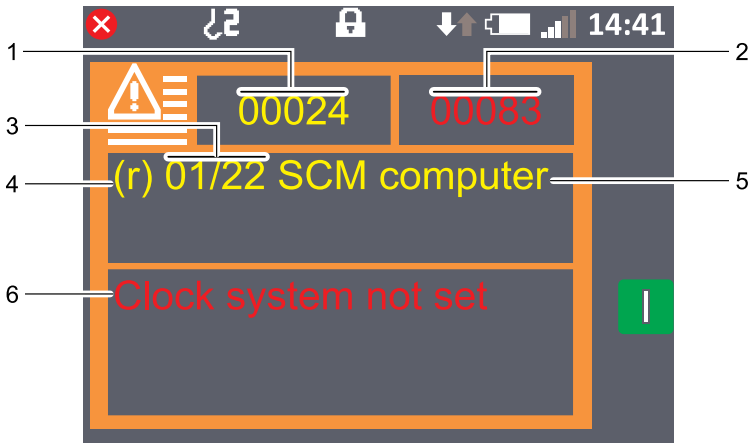


NT_004597_10_V24

NT_004597_11_V24

ENU / 2022-10-28

Details for the "Messages" menu



- | | | | |
|---|------------------------------------|---|------------------------------------|
| 1 | Component code | 4 | Indication of a resettable message |
| 2 | Message code | | (r) |
| 3 | Position of the message in the log | 5 | Component name |
| | | 6 | Detailed message |

Resettable message (r)

When no longer active, a message linked to a major fault is displayed with the indication **(r)**. It can be reset (deleted) in the message list.

The indication **(r)** allows the user to identify a message that can be deleted from the message log.

 **Note**

This function makes sure that the message has been seen.

1.3.20 "Fault code management" application

Foreword

The **"Fault code management"** application, accessible near the crane using a smart-phone, is used to manage fault codes to simplify analysis of the failures.

Instructions on how to use the application are provided in a tutorial available by clicking one of the following links:

- French version: https://rebrand.ly/FaultCodeManagement_FRA
- English version: https://rebrand.ly/FaultCodeManagement_ENU

 **Note**

For all new cranes delivered, the associated lists of fault codes and solutions can only be consulted using this application.

Accessing the "Fault code management" application

Procedure

- ▶ Choose one of the following alternatives.

Alternative 1 of 2 – For Android smartphones

NT_005083_01



- ▶ Flash the QR code.

Alternative 2 of 2 – For Apple smartphones

NT_005083_02



- ▶ Flash the QR code.

1.3.21 "Diagnostics" menu

Foreword - "Diagnostics" menu

The **"Diagnostics"** menu makes it possible to view the status of the various sensors involved in the crane fitting and dismantling steps.



Note

The following procedure contains illustrations that may not exactly reflect the actual physical reality; they may vary according to the crane models but do not interfere with the proper understanding of the procedure.

Details for the "Diagnostics" menu

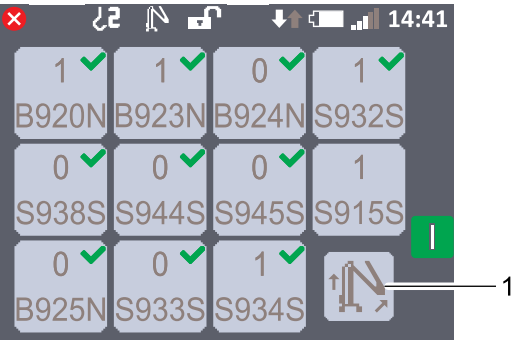


Note

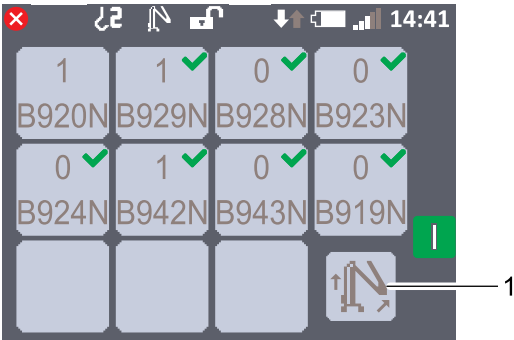
The "Diagnostics" menu has two screens

Screen 1: Fitting

Hup 32-27
Hup 40-30
Hup C 40-30



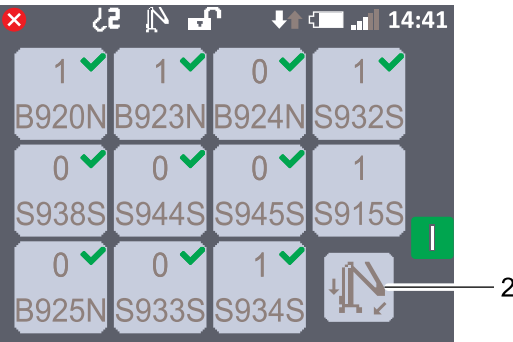
Hup M 28-22



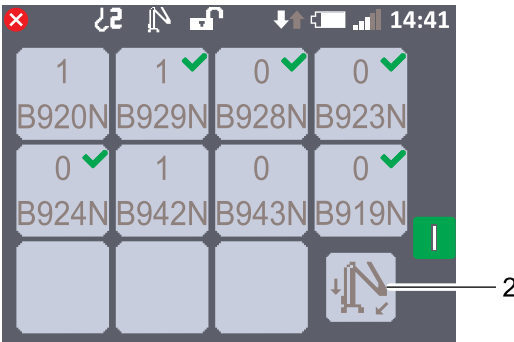
The fitting diagnostics screen can be identified by means of pictogram (1) at the bottom right of the radio control screen

Screen 2: Dismantling

Hup 32-27
Hup 40-30
Hup C 40-30



Hup M 28-22



The dismantling diagnostics screen can be identified by means of pictogram (2) at the bottom right of the radio control screen

Details

The two screens display the icons identifying the sensors involved in the erecting and dismantling of the crane and their logic state (0 or 1).

The symbol is present on the pictogram of a sensor when its logic state is correct in relation to the current fitting or dismantling phase.

The symbol is not present on the pictogram of a sensor when it is not in the expected logic state in relation to the current phase.

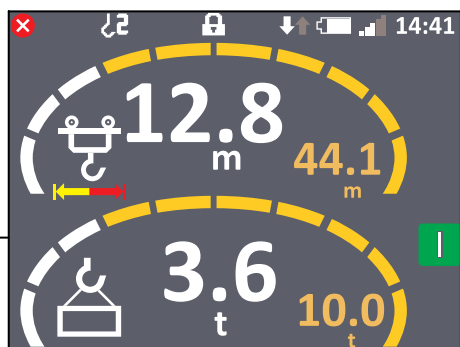
NT_004662_19_V24_V26

NT_004662_20_V24_V26

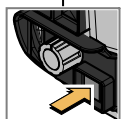
Accessing the "Diagnostics" menu

Procedure

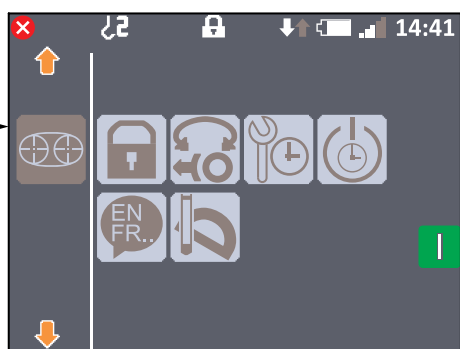
Accessing the "General/User" screen



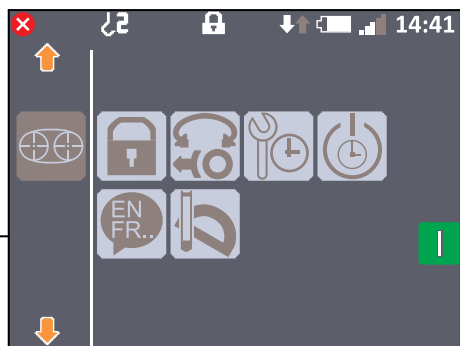
1. Press the **"ESC"** key on the radio control.
 - ◁ The **"General/User"** screen is displayed.



NT_004597_32_V24



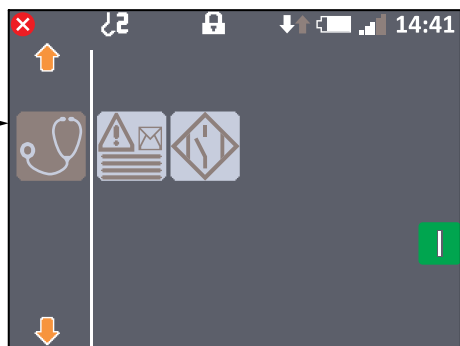
Accessing the "Messages and diagnostics" screen



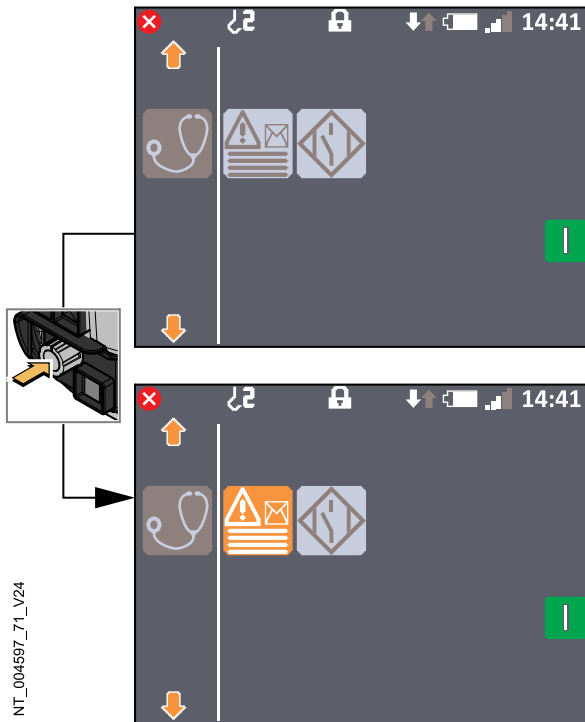
2. Use the **Jog Dial** on the radio control to display the **"Messages and diagnostics"** screen.
 - ◁ The **"Messages and diagnostics"** screen is displayed.



NT_004597_09_V24



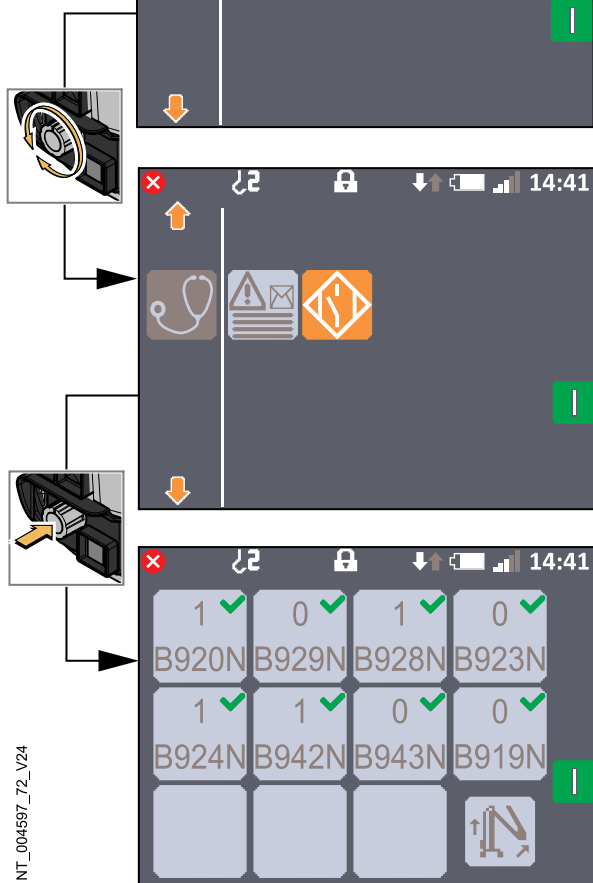
Accessing the "Diagnostics" menu



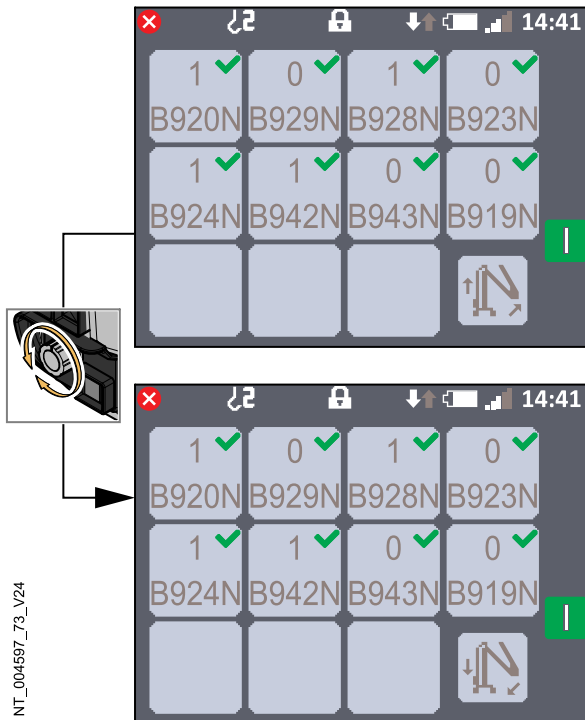
3. Press the **Jog Dial** on the radio control.
 - ◁ The **"Messages et notifications"** menu is selected

4. Use the **Jog Dial** on the radio control to select the **"Diagnostics"** menu, then confirm by pressing the **Jog Dial** on the radio control.

◁ The first screen of the **"Diagnostics"** menu is displayed.



Choosing a "Diagnostics" screen



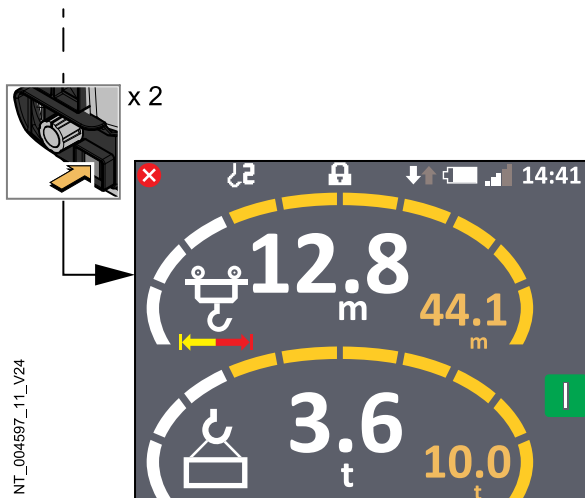
5. Use the **Jog Dial** on the radio control to select the second screen from the **"Diagnostics"** menu.

**Note**

Refreshing when switching between screens can take several seconds: from 5 to 10 seconds depending on the quality of the radio link.

6. Repeat the previous step to display the initial screen.

Returning to the "Indicators" screen



7. Press the **"ESC"** key on the **Jog Dial** of the radio control twice.
 ◀ The **"Indicators"** screen is displayed.

1.3.22 "Frequency" menu

**Note**

To find out how to use the **"Frequency"** menu, contact your usual **Potain** service network agent.

1.3.23 "Frequency group" menu

Foreword - "Frequency group" menu

The **"Frequency group"** menu makes it possible to change the frequency group when the radio link between the transmitter (radio control) and its receiver suffers disturbances.

Several frequency groups are available. For more details, contact your usual **Potain** service network agent.

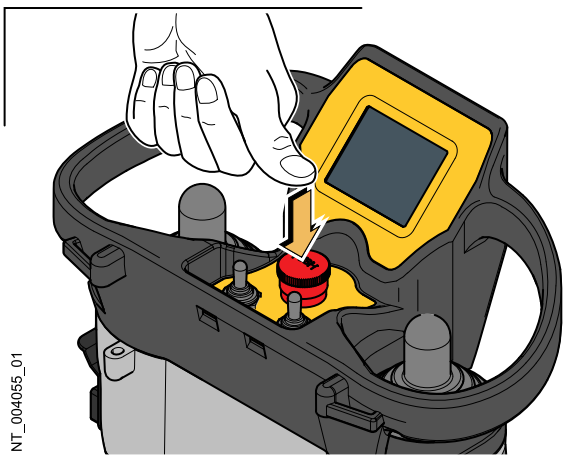
Changing the frequency group

Procedure

Switching off the radio control

Pressing the emergency stop button

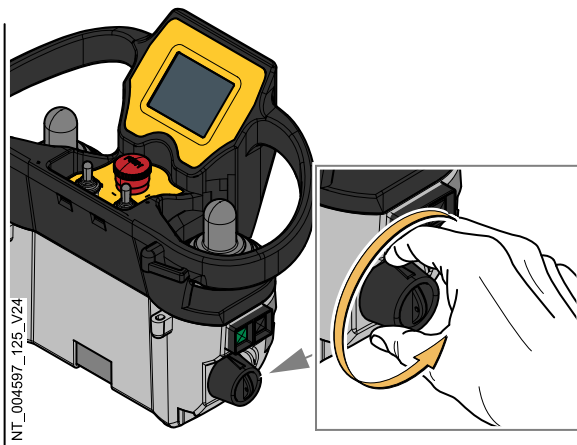
1. Press the emergency stop button on the radio control.



NT_004065_01

Switching off the radio control

2. Move the key switch to position **"0"** (**"OFF"** position).
 ◀ The radio control is de-energized.



NT_004597_125_V24

Accessing the "Radio control settings" screen



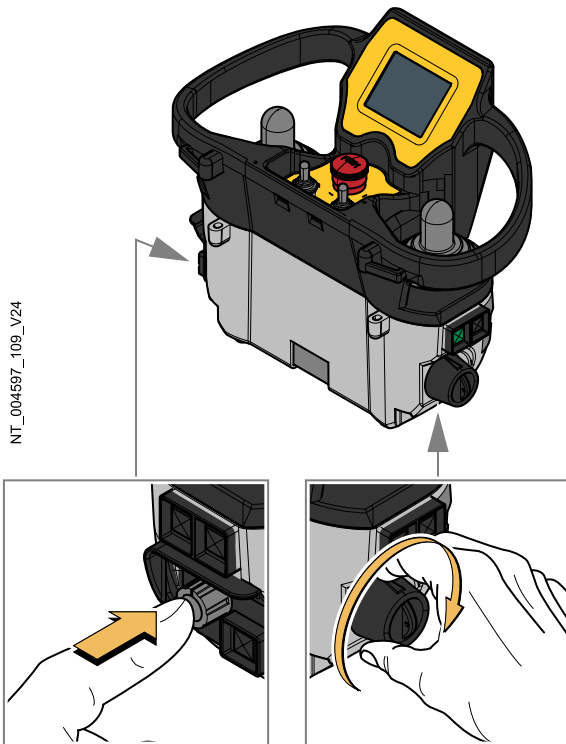
Note

To access the **"Radio control settings"** screen, the emergency stop button on the radio control must be pressed.

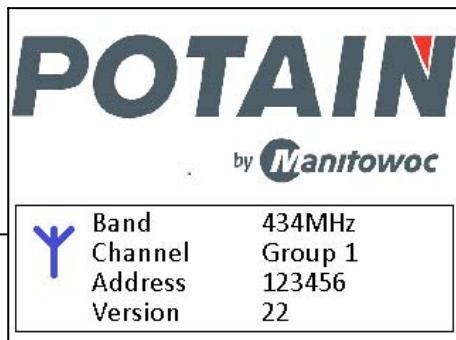
3. Perform this procedure when the condition below exists.

Conditions

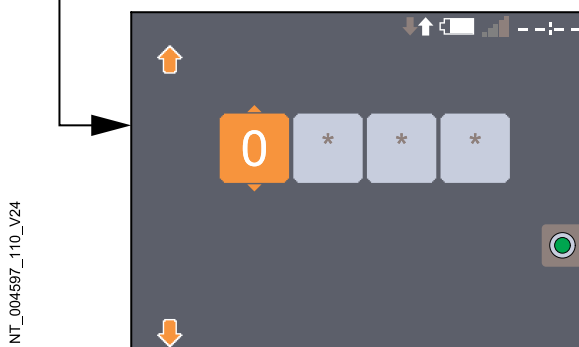
- The emergency stop button must be pressed.



- ▶ Press and hold down the **Jog Dial** on the radio control.
- ▶ Move the key switch to position "1" ("ON" position).
 - ◁ The horn of the radio control sounds two times.



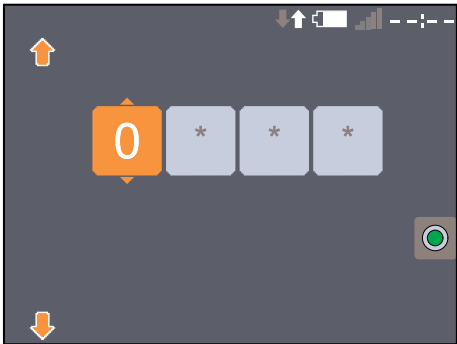
4. Hold down the **Jog Dial** on the radio control during the start-up phase of the radio control until the access code input screen is displayed.
 - ◁ The screen for entering an access code is displayed.



Entering an "Access code"

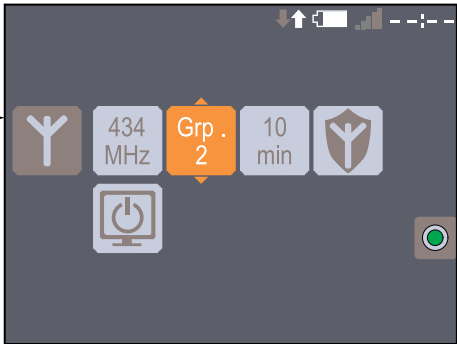
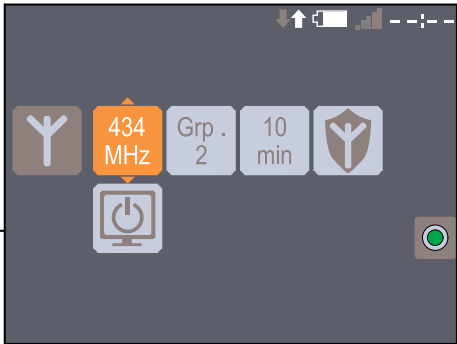
5. Enter an **"Access code"** ➡ page 1-28.

Technical data	
Access code	0071



Accessing the "Frequency group" menu

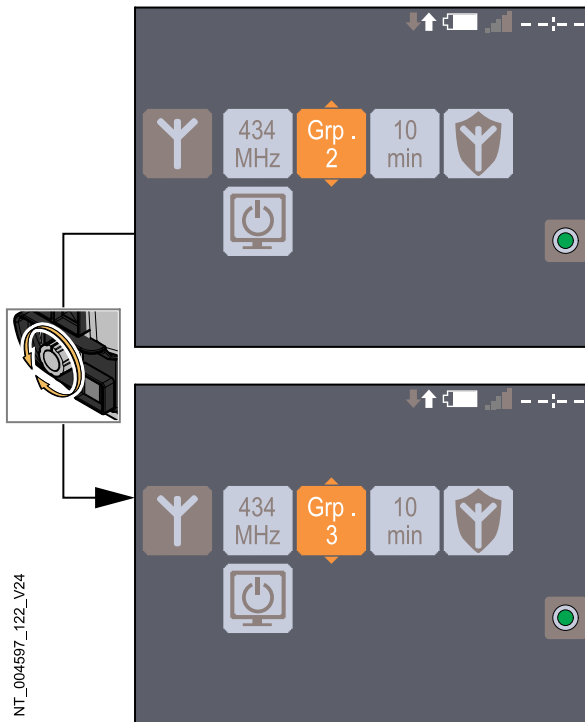
6. Press the **Jog Dial** on the radio control to select the **"Frequency group"** menu.
- ◀ The **"Frequency group"** menu is selected.



NT_004597_111_V24

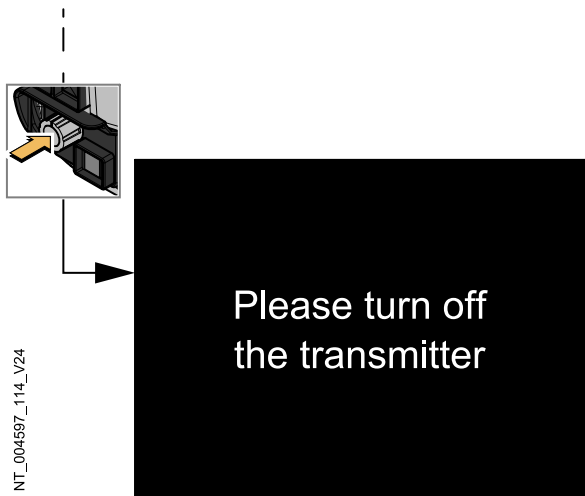
NT_004597_121_V24

Changing the "Frequency group"



7. Use the **Jog Dial** on the radio control to select the new chosen **"Frequency group"**.

Confirming and exiting the "Radio control settings" screen



8. Press the **Jog Dial** on the radio control as many times as necessary to display the screen on a black background **"Please turn off the transmitter"**.

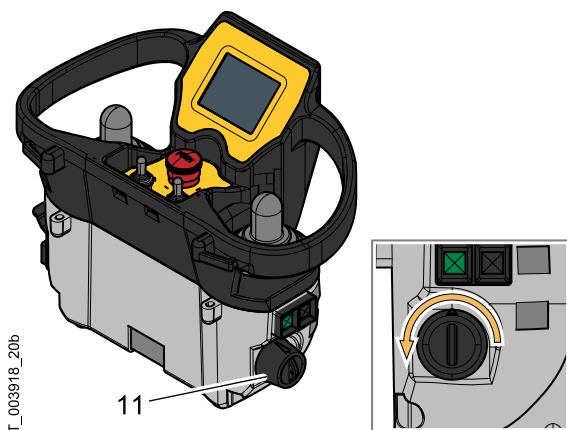
**Note**

To confirm a change of status in a menu on the **"Radio control settings"** screen, you must display the **"Please turn off the transmitter"** screen before switching off the radio control.

If the radio control is switched off without going through the **"Please turn off the transmitter"** screen, no status changes will be recorded.

Switching off the radio control

9. Turn off the radio control by moving the key switch (11) to "OFF", in position "O".



NT_003918_20b

Changing the frequency group on the 'CCT' computer



Note

After having carried out the modification on the 'CCS' system, it is also necessary to modify the **"Frequency group"** on the 'CCT' computer.

10. Change the **"Frequency group"** on the 'CCT' computer ➡ page 2-13 .

1.3.24 "Auto-OFF" menu

Foreword - "Auto-OFF" menu

The **"Auto-OFF"** menu makes it possible to set the period of radio control inactivity before the radio control switches off automatically.



Note

Period of inactivity: time period during which no action is taken on the radio control.

It is possible to activate or deactivate the **"Auto-OFF"** function and to specify the period of inactivity.

If the value is **"OFF"**, the **"Auto-OFF"** function is deactivated. The radio control does not switch off automatically.

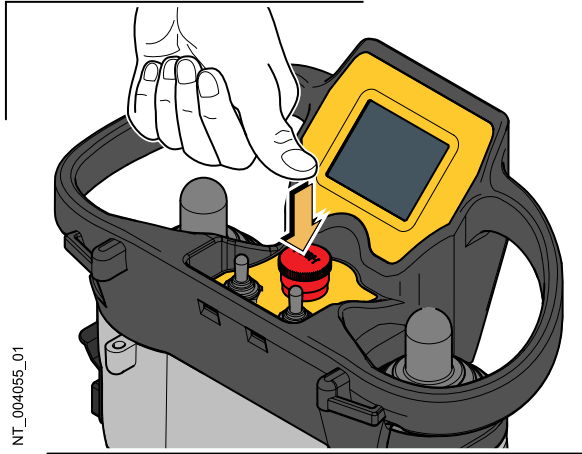
If the value is 10, 15, 20, 25, or 30 minutes, the radio control automatically switches off after the selected time.

Activating/deactivating the secured radio link

Procedure

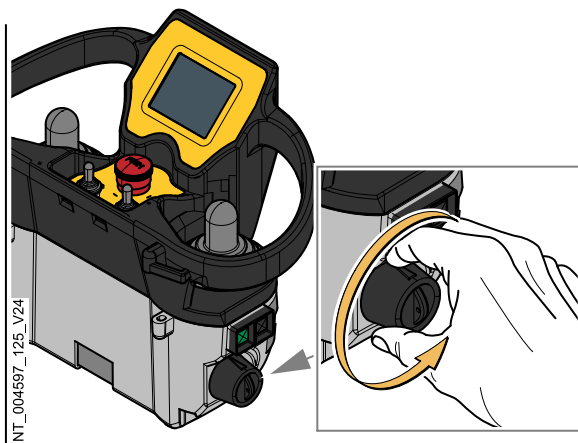
Switching off the radio control

Pressing the emergency stop button



1. Press the emergency stop button on the radio control.

Switching off the radio control



2. Move the key switch to position "0" ("OFF" position).
 - ◁ The radio control is de-energized.

Accessing the "Radio control settings" screen



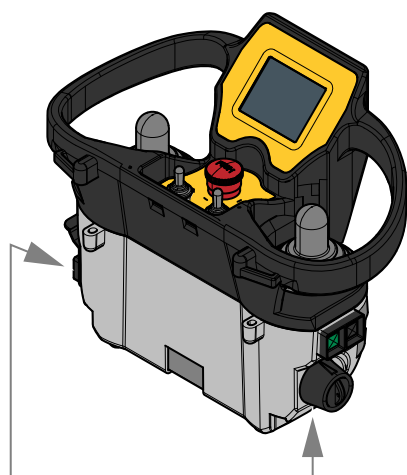
Note

To access the "Radio control settings" screen, the emergency stop button on the radio control must be pressed.

3. Perform this procedure when the condition below exists.

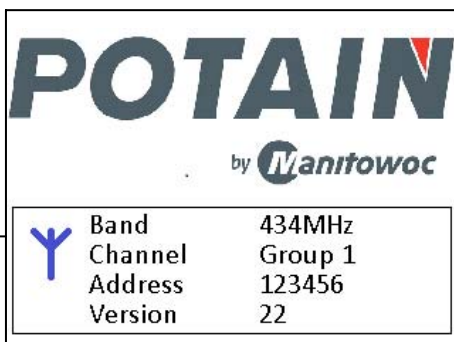
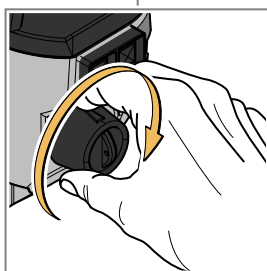
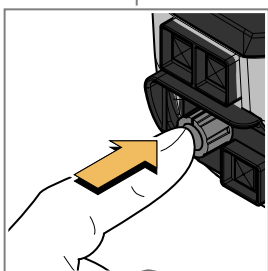
Conditions

- The emergency stop button must be pressed.

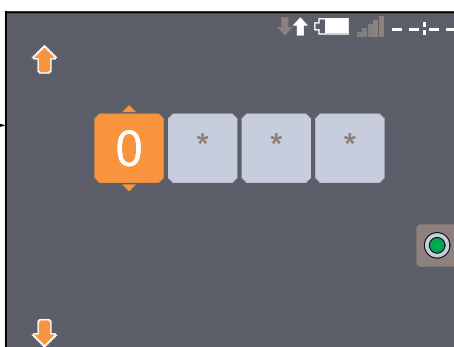


- ▶ Press and hold down the **Jog Dial** on the radio control.
- ▶ Move the key switch to position "1" ("ON" position).
 - ◁ The horn of the radio control sounds two times.

NT_004597_109_V24



4. Hold down the **Jog Dial** on the radio control during the start-up phase of the radio control until the access code input screen is displayed.
 - ◁ The screen for entering an access code is displayed.



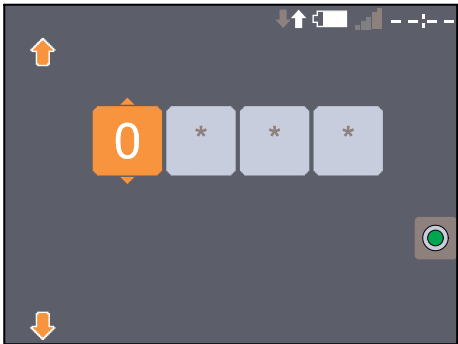
NT_004597_110_V24

Entering an "Access code"

5. Enter an "Access code" ➡ page 1-28.

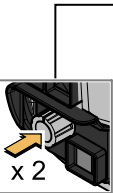
Technical data	
Access code	0071

NT_004597_111_V24

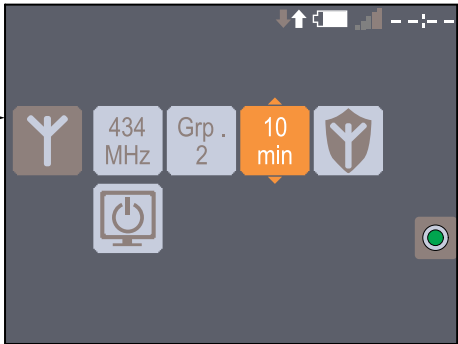
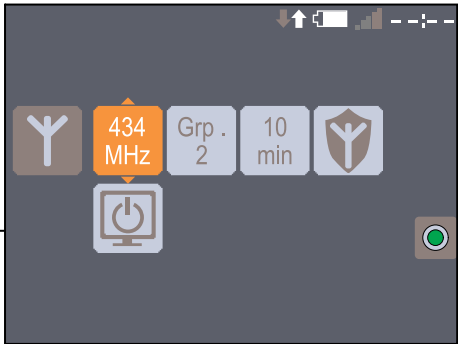


Accessing the "Auto-OFF menu"

6. Press the **Jog Dial** on the radio control to select the "Auto-OFF menu."
◀ The "Auto-OFF menu" is selected.



NT_004597_119_V24



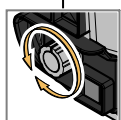
Selecting the "Auto-OFF" value

7. Use the **Jog Dial** on the radio control to select the value desired for **"Auto-OFF"**.

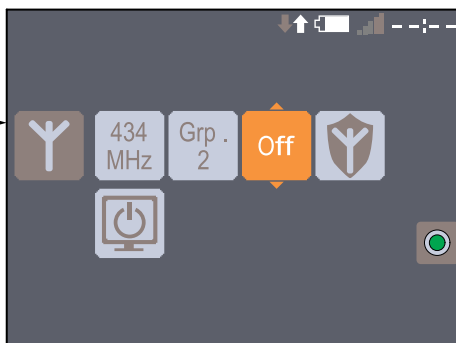
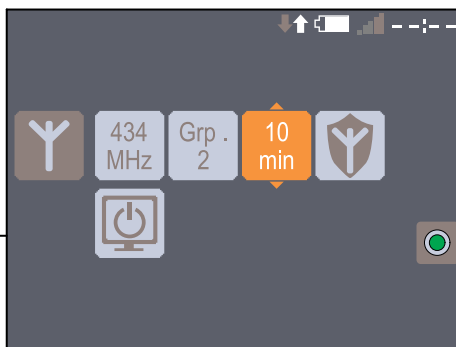


Note

Six possible options: **OFF**, **10 min**, **15 min**, **20 min**, **25 min**, and **30 min**.



NT_004597_120_V24



Confirming and exiting the "Radio control settings" screen

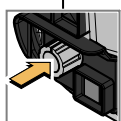
8. Press the **Jog Dial** on the radio control as many times as necessary to display the screen on a black background **"Please turn off the transmitter"**.



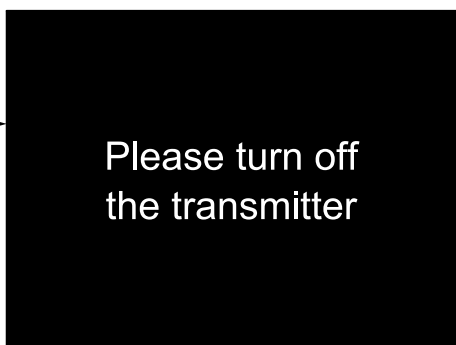
Note

To confirm a change of status in a menu on the **"Radio control settings"** screen, you must display the **"Please turn off the transmitter"** screen before switching off the radio control.

If the radio control is switched off without going through the **"Please turn off the transmitter"** screen, no status changes will be recorded.

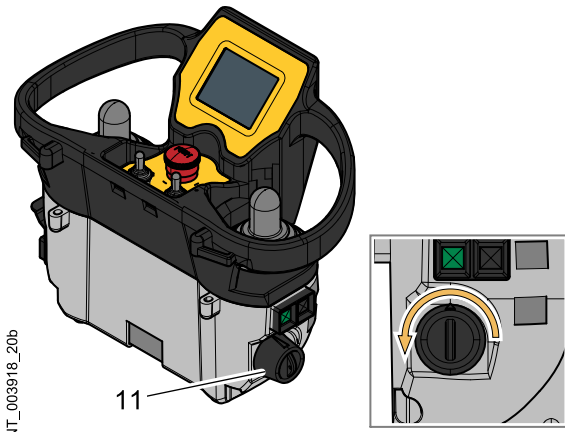


NT_004597_114_V24



Switching off the radio control

9. Turn off the radio control by moving the key switch (11) to "OFF", in position "O".

**1.3.25 "Secured radio link" menu****Foreword - "Secured radio link" menu****Note**

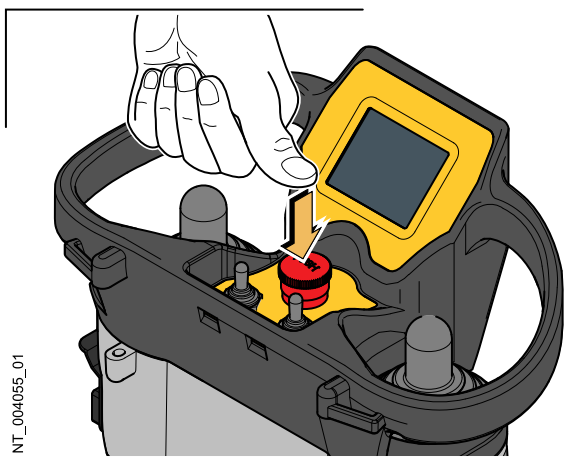
The secured radio link allows protection of communication between the transmitter (radio control) and its receiver against piracy.

It is possible to activate or deactivate the secured radio link (or Safety Protocol) of the radio control:

- : Secured radio link activated.
- : Secured radio link deactivated.

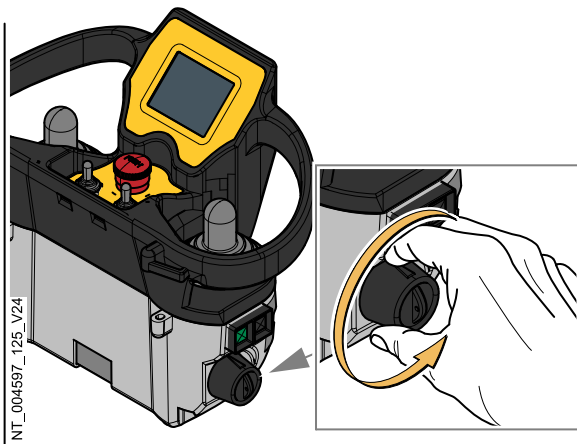
Activating/deactivating the secured radio link**Procedure****Switching off the radio control****Pressing the emergency stop button**

1. Press the emergency stop button on the radio control.



Switching off the radio control

2. Move the key switch to position "0" ("OFF" position).
 - ◁ The radio control is de-energized.



Accessing the "Radio control settings" screen



Note

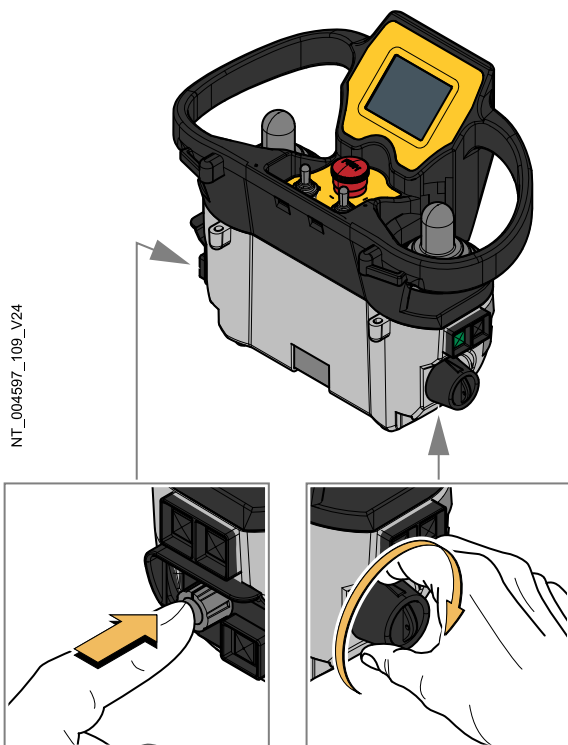
To access the "**Radio control settings**" screen, the emergency stop button on the radio control must be pressed.

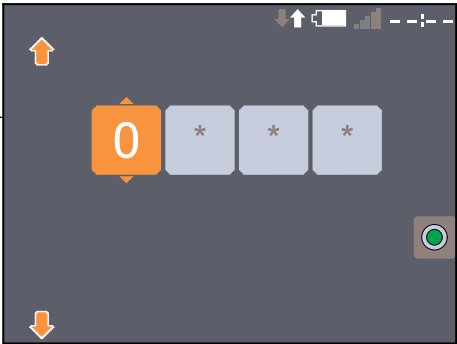
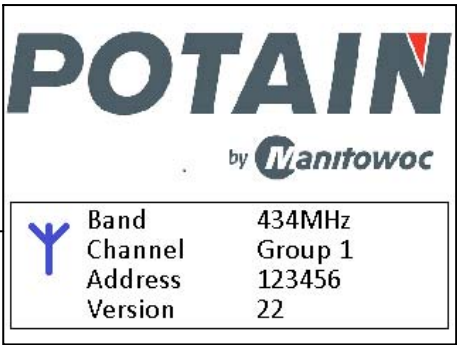
3. Perform this procedure when the condition below exists.

Conditions

- The emergency stop button must be pressed.

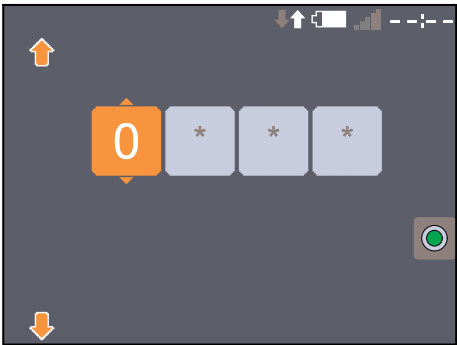
- ▶ Press and hold down the **Jog Dial** on the radio control.
- ▶ Move the key switch to position "1" ("ON" position).
 - ◁ The horn of the radio control sounds two times.





NT_004597_110_V24

Entering an "Access code"



NT_004597_111_V24

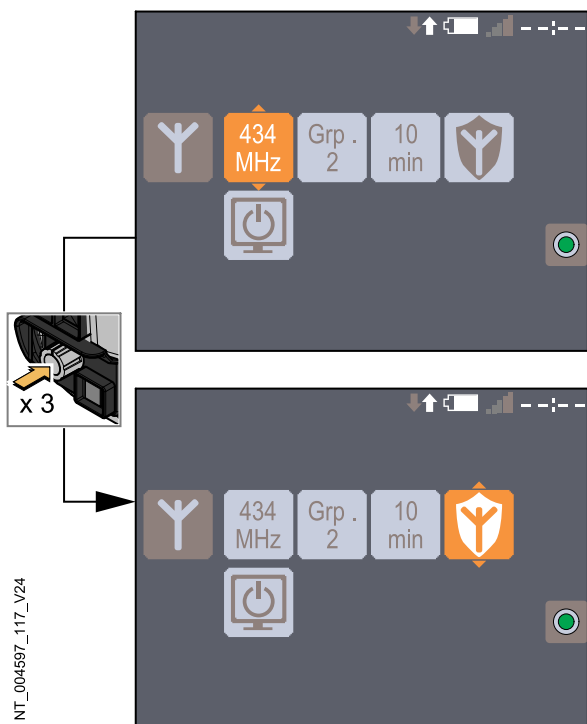
4. Hold down the **Jog Dial** on the radio control during the start-up phase of the radio control until the access code input screen is displayed.
- ◁ The screen for entering an access code is displayed.

5. Enter an **"Access code"** ➡ page 1-28.

Technical data	
Access code	0071

Accessing the "Secured radio link" menu

6. Press the **Jog Dial** on the radio control to select the **"Secured radio link"** menu.
 < The **"Secured radio link"** menu is selected.



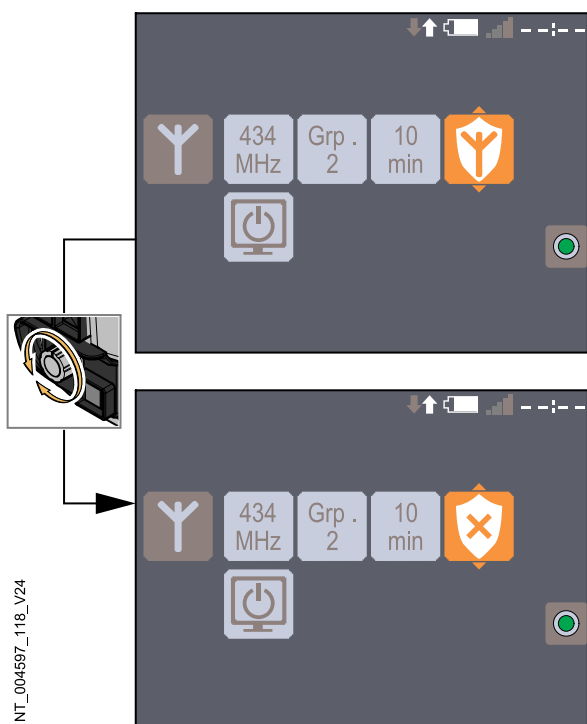
Activation/deactivation of the secured link

7. Use the **Jog Dial** on the radio control to select the desired status of the secured radio link.

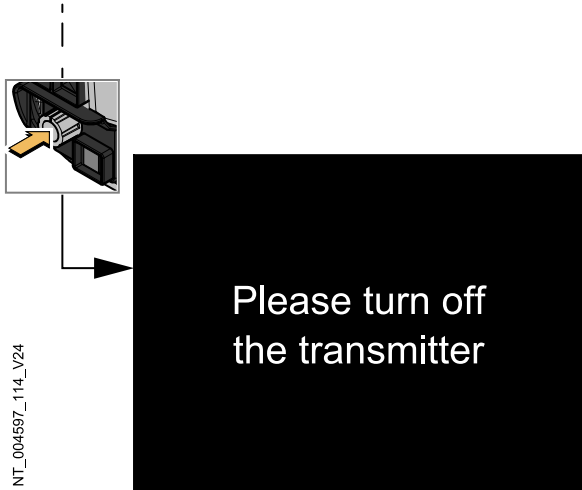


Note

Two possible options: secured radio link activated  or secured radio link deactivated .



Confirming and exiting the "Radio control settings" screen



8. Press the **Jog Dial** on the radio control as many times as necessary to display the screen on a black background **"Please turn off the transmitter"**.

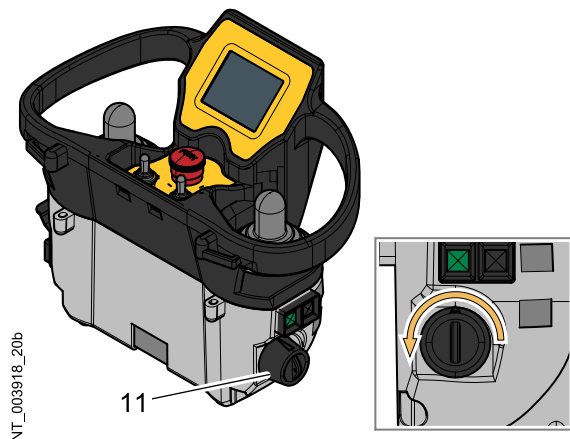


Note

To confirm a change of status in a menu on the **"Radio control settings"** screen, you must display the **"Please turn off the transmitter"** screen before switching off the radio control.

If the radio control is switched off without going through the **"Please turn off the transmitter"** screen, no status changes will be recorded.

Switching off the radio control



9. Turn off the radio control by moving the key switch (11) to "OFF", in position "O".

Activation/deactivation of the secured link on the 'CCT' computer



Note

After having completed the modification on the **'CCS'** system, it is also necessary to make the same modification on the **'CCT' computer**.

10. Activate/deactivate the secured link on the **'CCT'** computer ➡ page 2-17 .

1.3.26 "Backlighting" menu

Foreword - "Backlighting" menu

It is possible to activate or deactivate the backlighting of the radio control screen:

- : Backlighting activated, screen goes out if no action is taken for one minute.
- : Backlighting deactivated, screen does not go out if no action is taken for one minute.

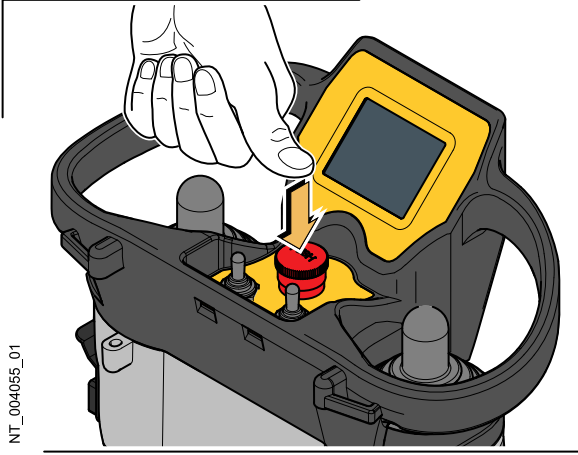
Activating/deactivating the backlighting

Procedure

Switching off the radio control

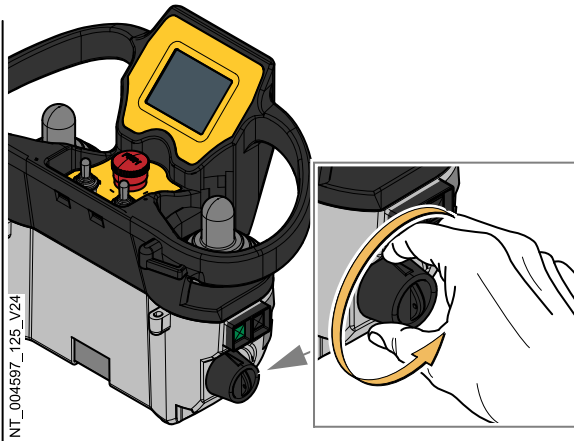
Pressing the emergency stop button

1. Press the emergency stop button on the radio control.



Switching off the radio control

2. Move the key switch to position "0" ("OFF" position).
◀ The radio control is de-energized.



Accessing the "Radio control settings" screen



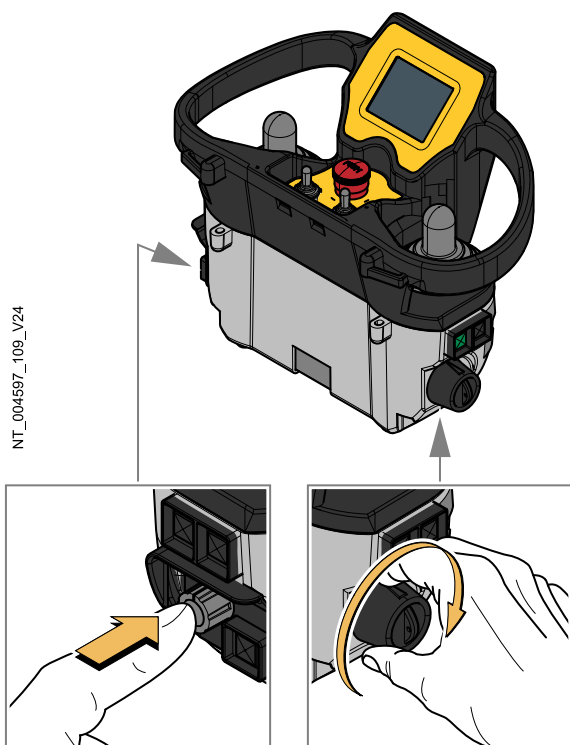
Note

To access the **"Radio control settings"** screen, the emergency stop button on the radio control must be pressed.

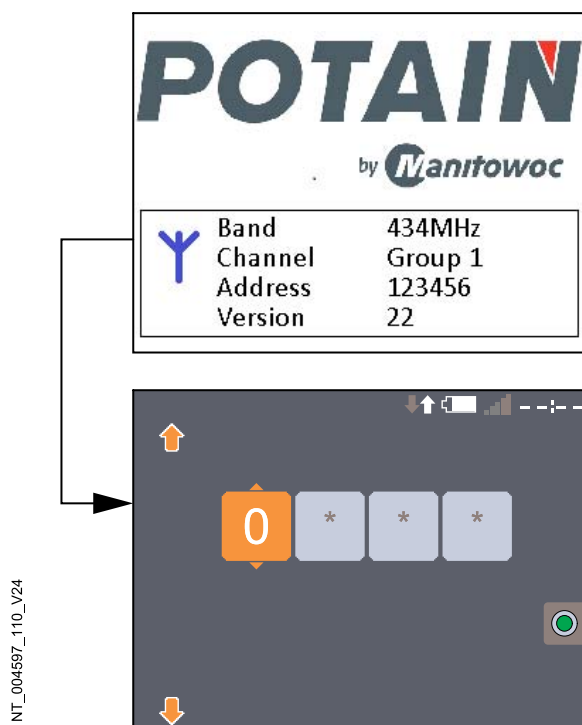
3. Perform this procedure when the condition below exists.

Conditions

- The emergency stop button must be pressed.



- ▶ Press and hold down the **Jog Dial** on the radio control.
- ▶ Move the key switch to position "1" ("ON" position).
 - ◁ The horn of the radio control sounds two times.

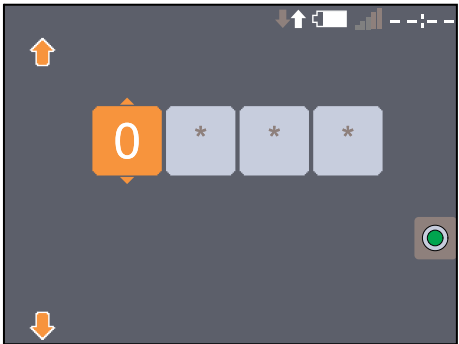


4. Hold down the **Jog Dial** on the radio control during the start-up phase of the radio control until the access code input screen is displayed.
 - ◁ The screen for entering an access code is displayed.

Entering an "Access code"

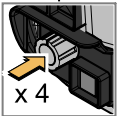
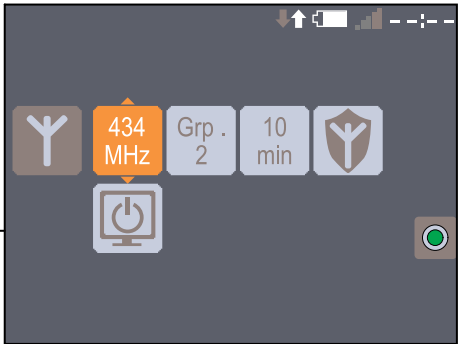
5. Enter an "Access code" ➡ page 1-28.

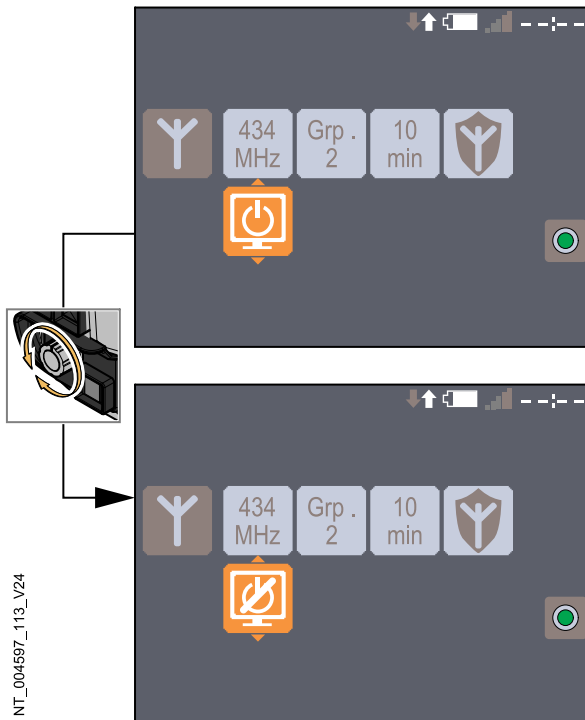
Technical data	
Access code	0071



Accessing the "Backlighting" menu

6. Press the **Jog Dial** on the radio control to select the "Backlighting" menu.
◀ The "Backlighting" menu is selected.

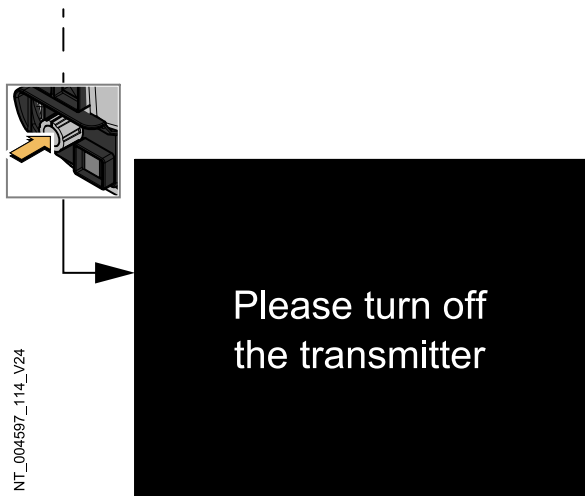


Activating/deactivating the backlighting

7. Use the **Jog Dial** on the radio control to select the desired status of the backlighting.

**Note**

Two possible options: backlighting activated  or backlighting deactivated .

Confirming and exiting the "Radio control settings" screen

8. Press the **Jog Dial** on the radio control as many times as necessary to display the screen on a black background **"Please turn off the transmitter"**.

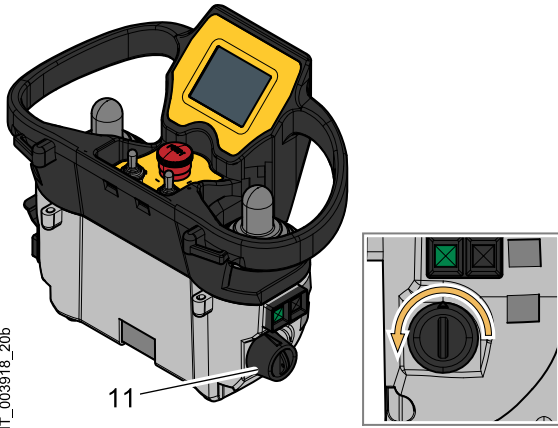
**Note**

To confirm a change of status in a menu on the **"Radio control settings"** screen, you must display the **"Please turn off the transmitter"** screen before switching off the radio control.

If the radio control is switched off without going through the **"Please turn off the transmitter"** screen, no status changes will be recorded.

Switching off the radio control

9. Turn off the radio control by moving the key switch (11) to "OFF", in position "O".



NT_003918_20b

1.3.27 "Radio control test" screen

Foreword - "Radio control test" screen

The "Radio control test" screen is under hidden access: access is gained by a combination of actions on the radio control.

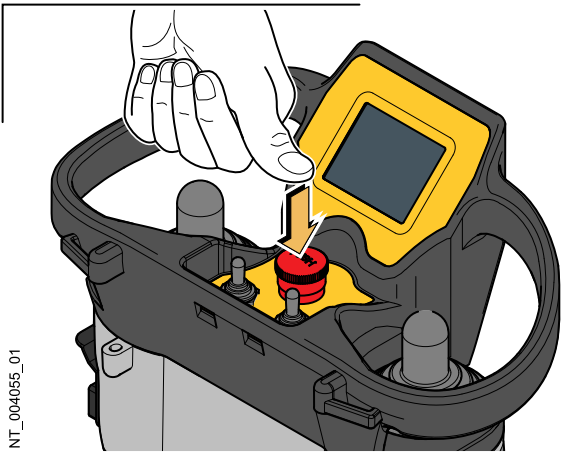
Radio control test

Procedure

Switching off the radio control

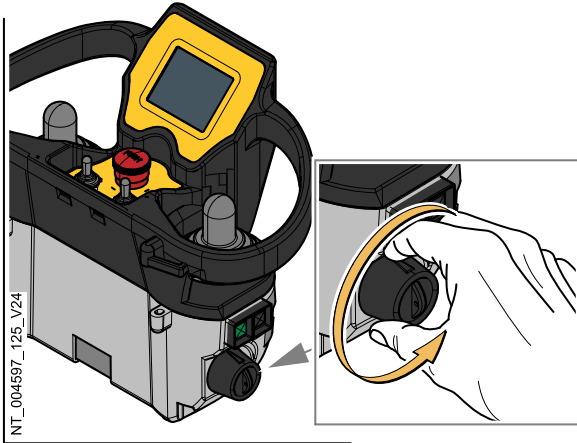
Pressing the emergency stop button

1. Press the emergency stop button on the radio control.



NT_004055_01

Switching off the radio control



2. Move the key switch to position **"0"** (**"OFF"** position).
 - ◁ The radio control is de-energized.

Accessing the "Radio control test" screen

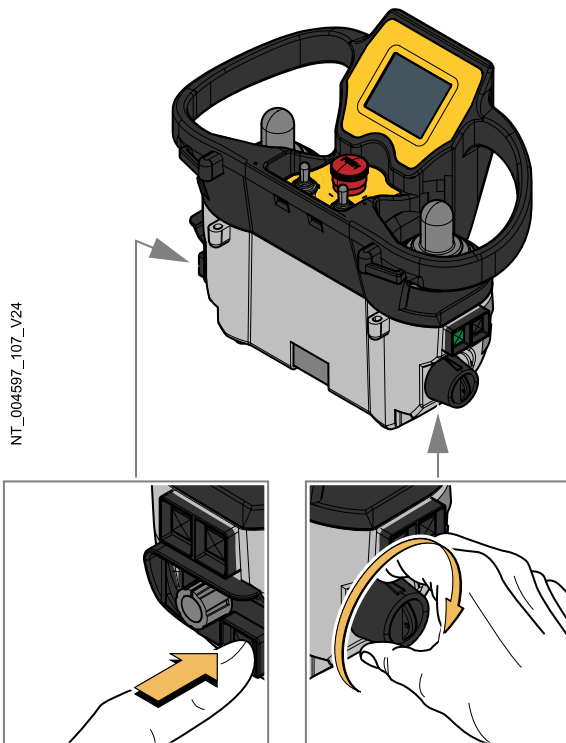
**Note**

To access the **"Radio control test"** screen, the emergency stop button on the radio control must be pressed.

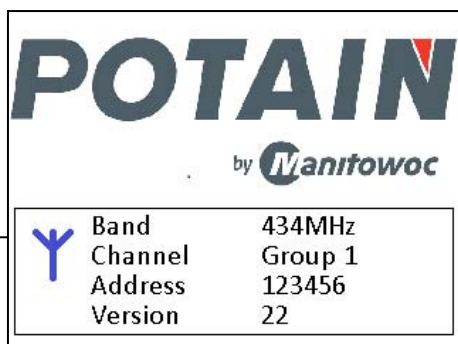
3. Perform this procedure when the condition below exists.

Conditions

- The emergency stop button must be pressed.



- ▶ Press and hold down the **ESC** button on the radio control.
- ▶ Move the key switch to position **"1"** (**"ON"** position).
 - ◁ The horn of the radio control sounds twice.



4. Hold down the **Jog Dial** on the radio control during the start-up phase of the radio control until the **"Radio control test"** screen is displayed.

◀ The **"Radio control test"** screen is displayed



Note

To exit the **"Radio control test"** screen, simply turn off the radio control, then switch it on again as you usually would.



Radio control test

5. Operate all the radio control components one by one.

Result 1

Each action is reproduced and visible on the radio control screen.

- ▶ The radio control works perfectly. The test procedure is finished.

Result 2

One or more actions are not reproduced and visible on the radio control.

- ▶ Contact your usual **Potain** service network agent.

1.3.28 Hoisting and trolleying limit switches

Overview - Potentiometer limit switches



Note

The following procedure contains illustrations that may not exactly reflect the actual physical reality; they may vary according to the crane models but do not interfere with the proper understanding of the procedure.

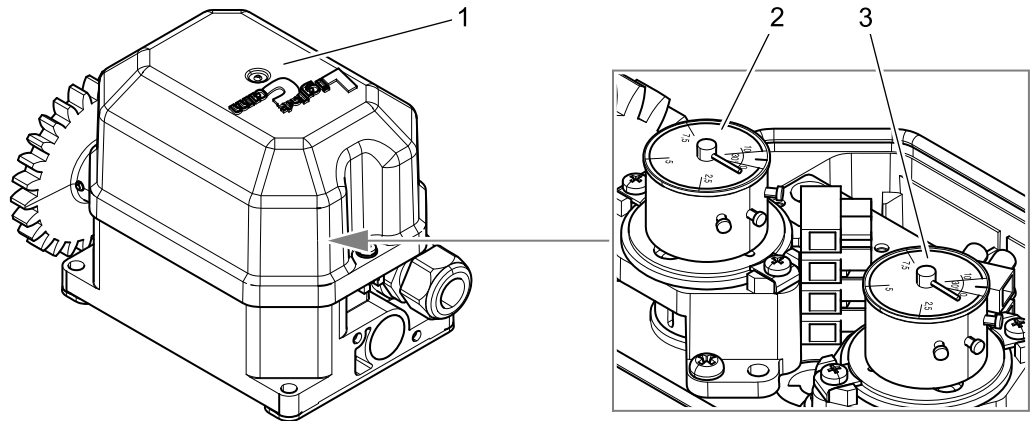
Working principle



Note

The following information applies to both the hoisting mechanism and the trolleying mechanism.

NT_004079_07



A sensor **(1)**, driven by a mechanism, "records" the number of turns made by the drum of this mechanism.

The sensor **(1)** drives two potentiometers: **(2)** and **(3)**. Each potentiometer independently transmits information to the computer **CCT**. This information is transmitted as voltage.

For the hoisting mechanism, the voltage varies according to the hook height.

For the trolleying mechanism, the voltage varies according to the position of the trolley on the jib.

There are two types of potentiometers: a main one and a redundant one. The information transmitted by the main potentiometer is verified by the computer **CCT** through the information transmitted by the redundant potentiometer.

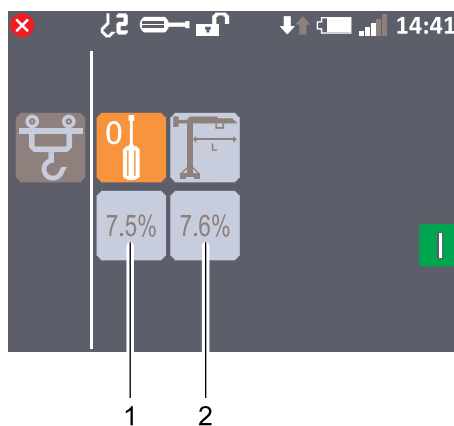
Screens



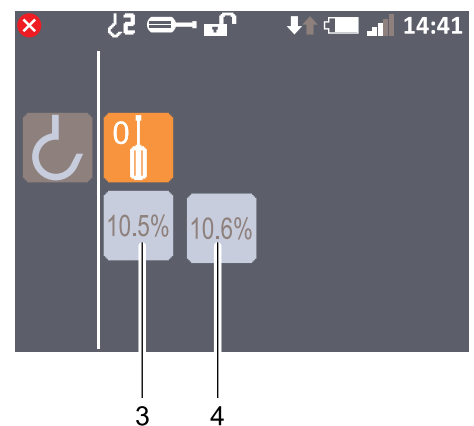
Note

The information from the two potentiometers is displayed on the radio control screen.

The information from the trolleying and hoisting sensors is displayed on the **"Configuration and teach-in programming"** screen, in the **"Trolleying"** menu and **"Zero trolleying"** submenu for the trolleying movement, and in the **"Zero hoisting"** menu for the hoisting movement.



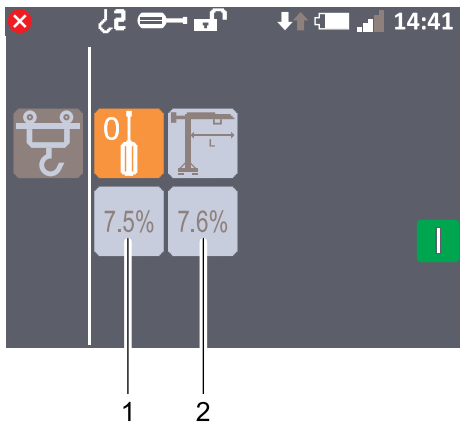
1 Value of the main trolleying potentiometer



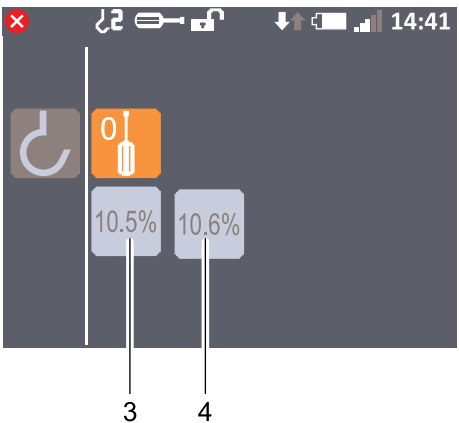
2 Value of the redundant trolleying potentiometer

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3 Value of the main hoisting potentiometer



4 Value of the redundant hoisting potentiometer

Checking the trolleying potentiometer values



Note

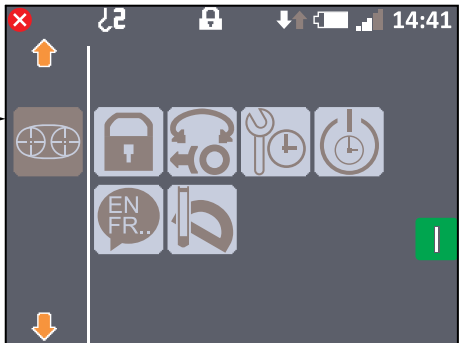
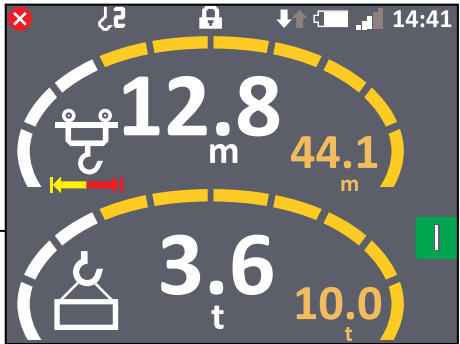
Before raising the mast, check that the two trolleying potentiometer values are within the range of recommended values.

Procedure

Entering an access code

Accessing the "General/User" screen

1. Press the "ESC" key on the radio control.
 ◀ The "General/User" screen is displayed.

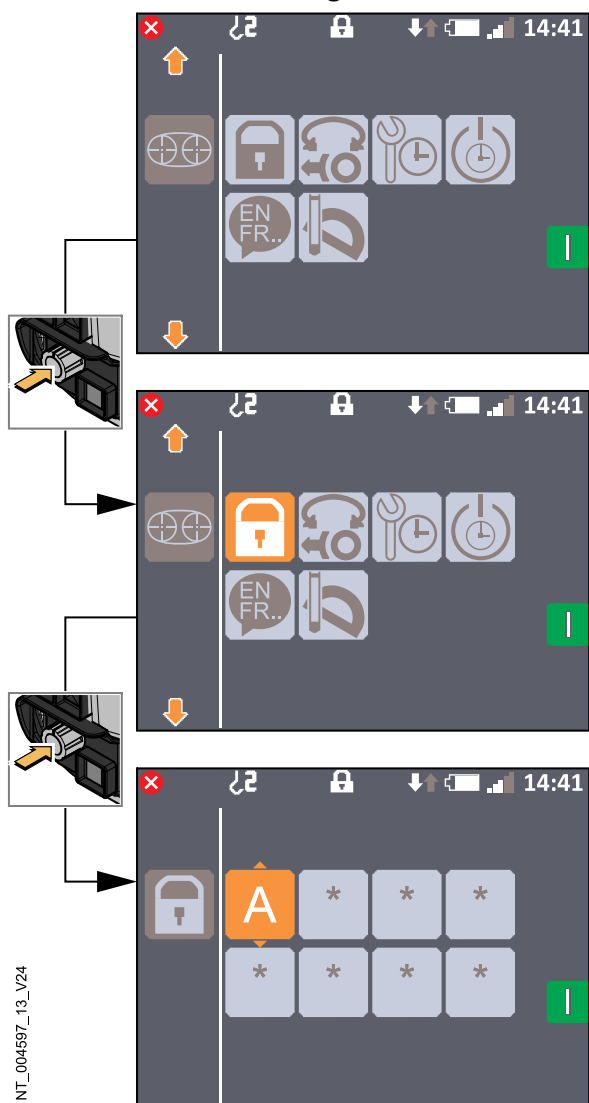


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Accessing the "Access code" menu



2. Press the **Jog Dial** on the radio control twice.
 - ◁ The screen for entering an **"Access code"** is displayed.

Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

Checking the trolleying potentiometer values

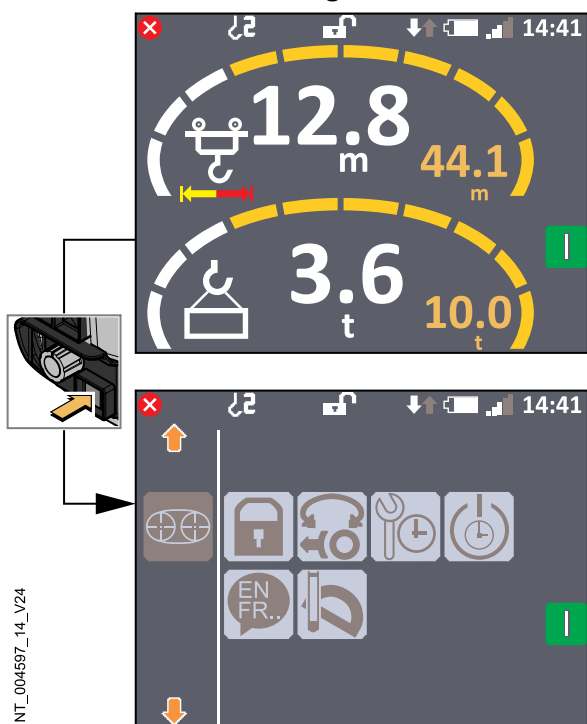


Note

Before raising the mast, check that the two trolleying potentiometer values are within the range of recommended values.

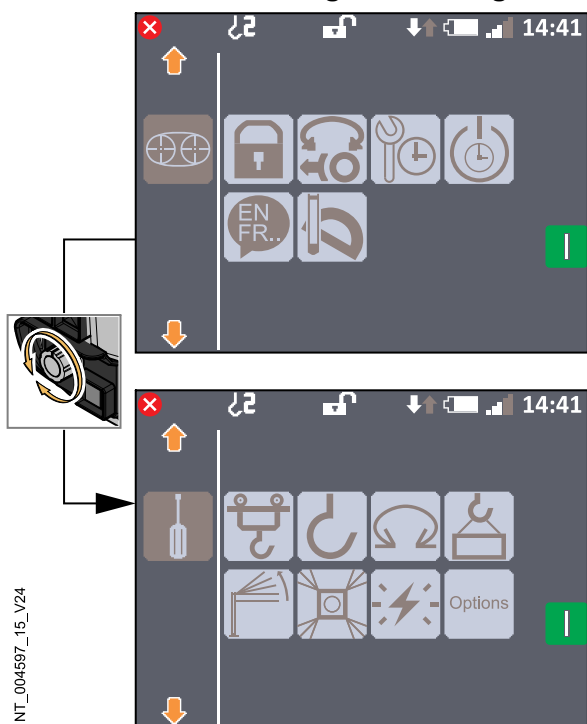
Accessing the "General/User" screen

4. Press the **"ESC"** key on the radio control.
 ◀ The **"General/User"** screen is displayed.

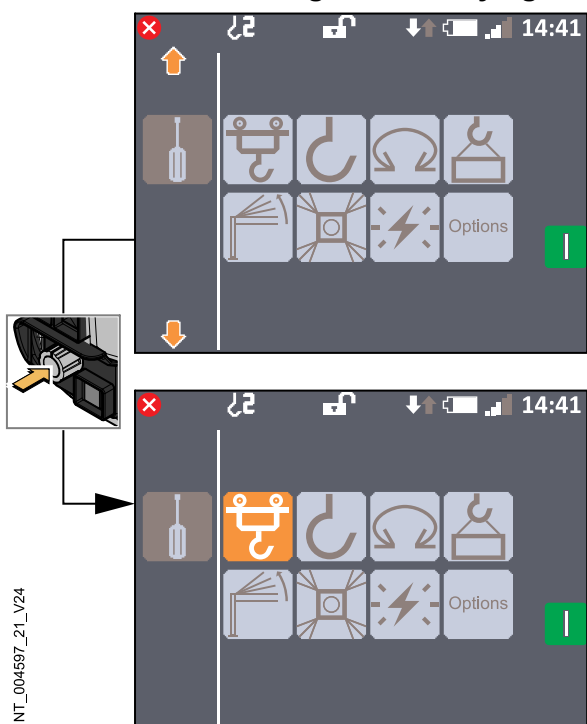


Accessing the "Configuration and teach-in programming" screen

5. Use the **Jog Dial** on the radio control to display the **"Configuration and teach-in programming"** screen.

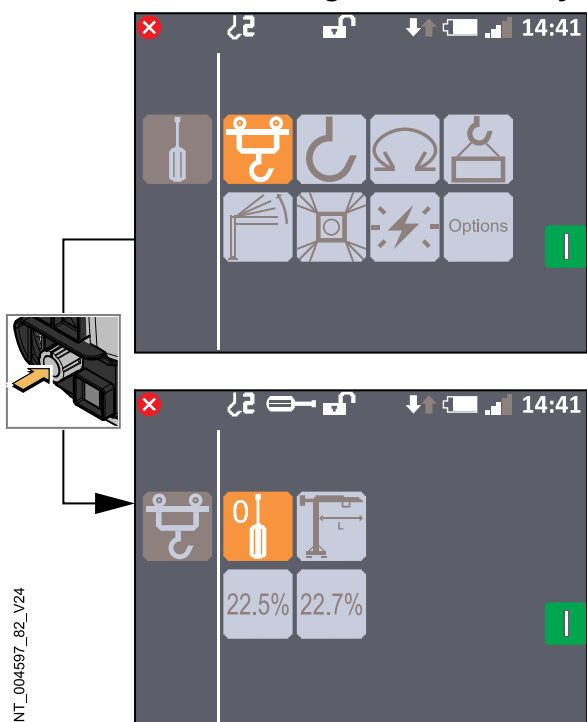


Selecting the "Trolleying" menu



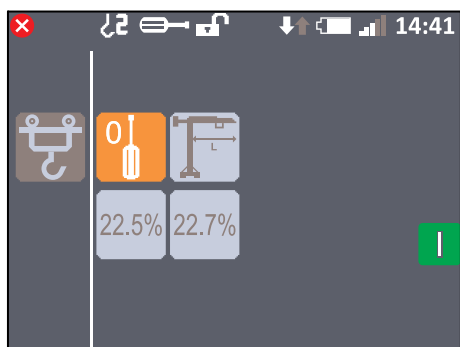
6. Press the **Jog Dial** on the radio control.
 ◀ The **"Trolleying"** menu is selected.

Accessing the "Zero trolleying" submenu



7. Press the **Jog Dial** on the radio control.
 ◀ The **"Zero trolleying"** submenu is displayed.

Checking the trolleying potentiometer values



8. Check the two percentage values written on the **"Zero trolleying"** screen.

Result 1

The two values are within the recommended range.

- Return to the **"Indicators"** screen.
 - page 1-134

Result 2

One or two value(s) are not within the recommended range.

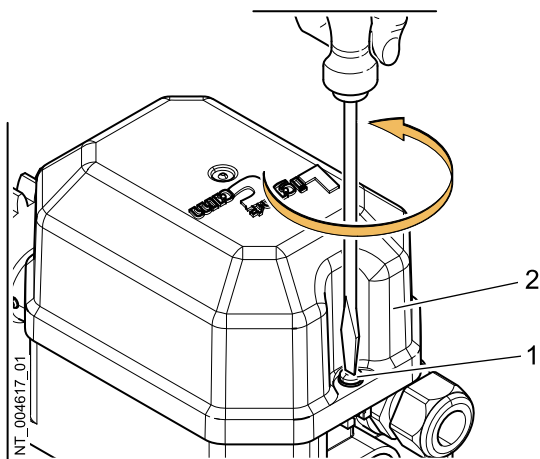
- Adjust the trolleying potentiometers.
 - page 1-132

Adjustment of the trolleying potentiometers

Procedure

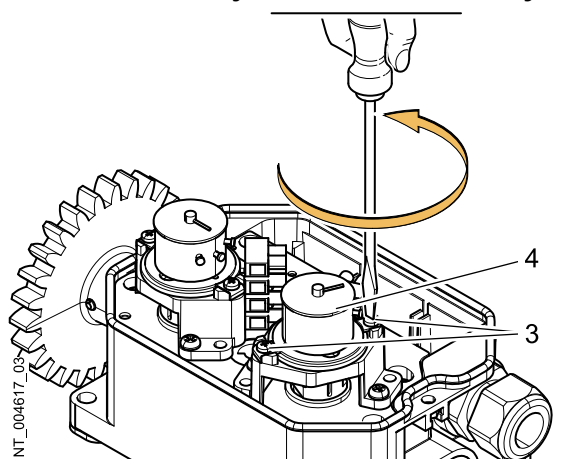
Removing the cover

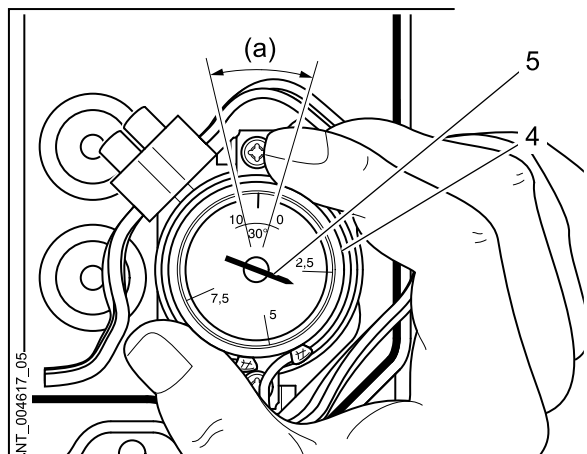
1. Unscrew the screws (1) and remove the cover (2).



Adjustment of the trolleying potentiometers

2. Loosen the screws (3) on the first potentiometer (4).

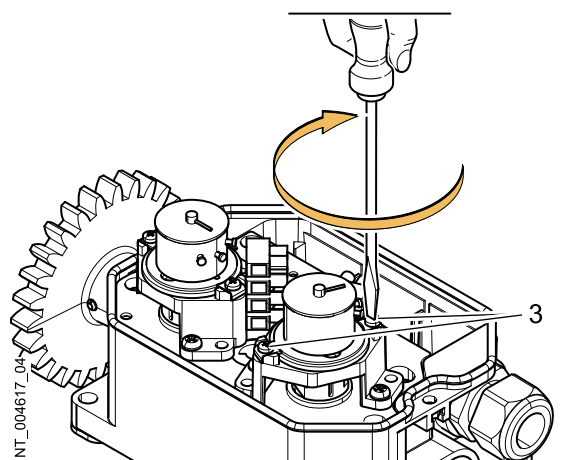




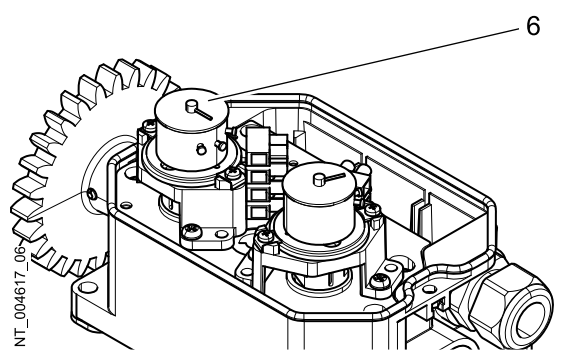
3. Position the body of the potentiometer (4) until there is a value within the range of recommended values.

**Note**

Ensure that the potentiometer marking point (5) is not located in the zone (a).



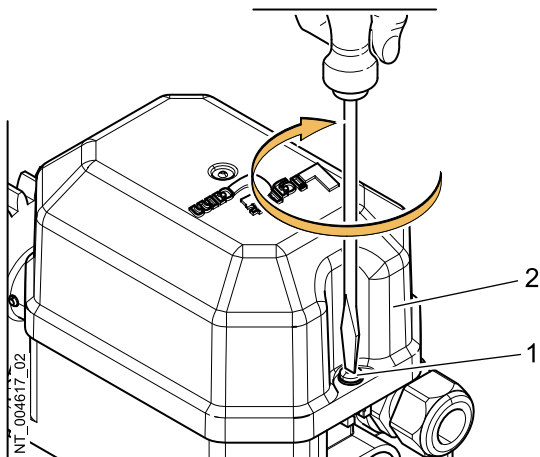
4. Lock in the screws (3).



5. Repeat the previous three steps for the second potentiometer (6).

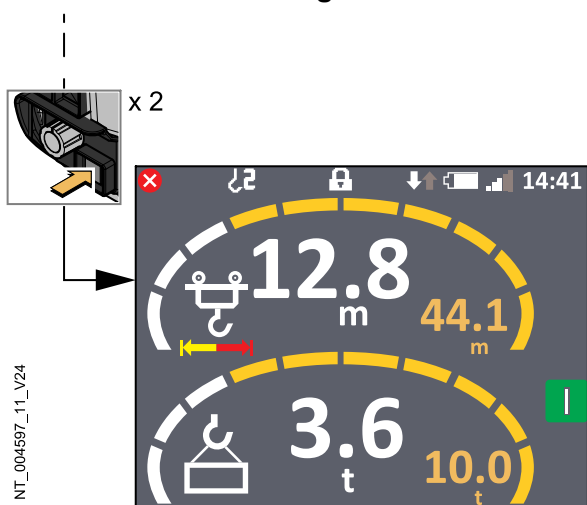
Refitting the cover

6. Refit the cover (2) and screw in the screws (1).



Returning to the "Indicators" screen

7. Press the **"ESC"** key on the radio control twice.
 ◀ The **"Indicators"** screen is displayed.

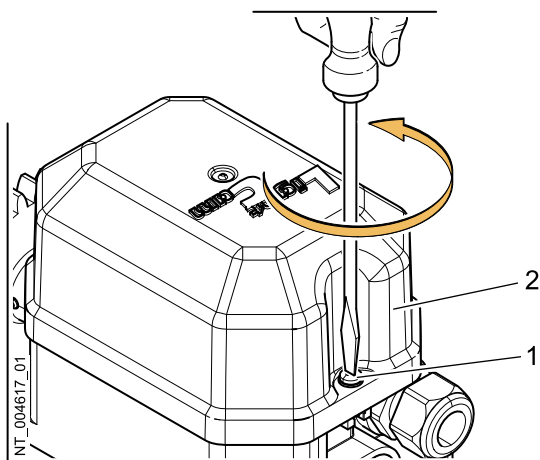


Adjusting the hoisting potentiometers

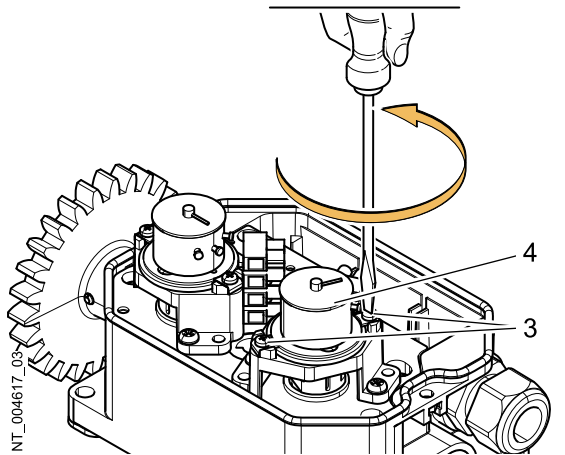
Procedure

Removing the cover

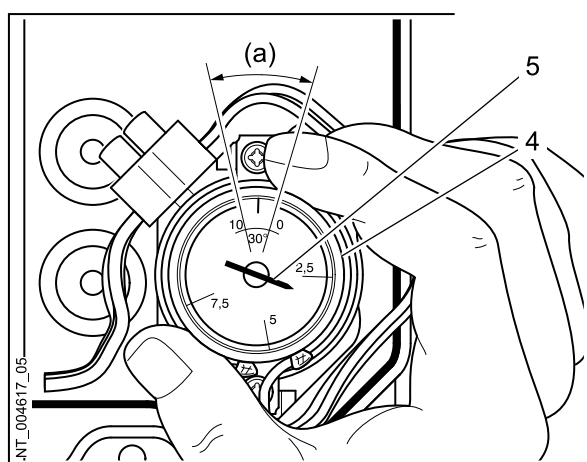
1. Unscrew the screws (1) and remove the cover (2).



Adjusting the hoisting potentiometers



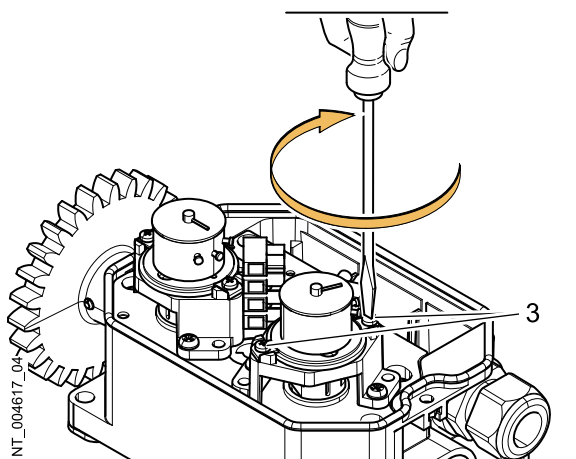
2. Loosen the screws (3) on the first potentiometer (4).



3. Position the body of the potentiometer (4) until there is a value within the range of recommended values.

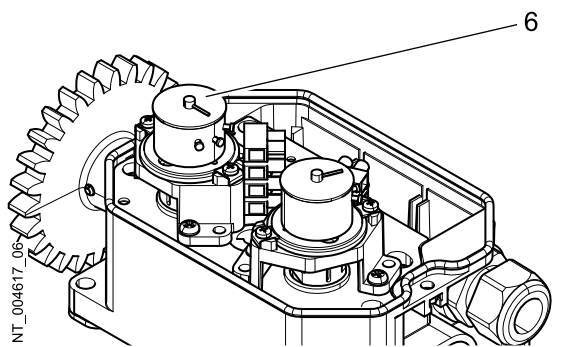
**Note**

Ensure that the potentiometer marking point (5) is not located in the zone (a).



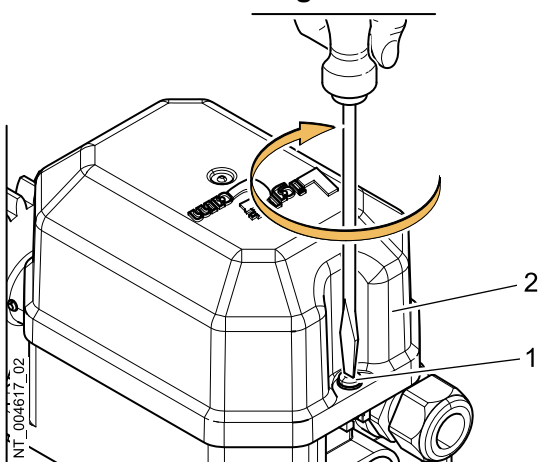
4. Lock in the screws (3).

5. Repeat the previous three steps for the second potentiometer (6).



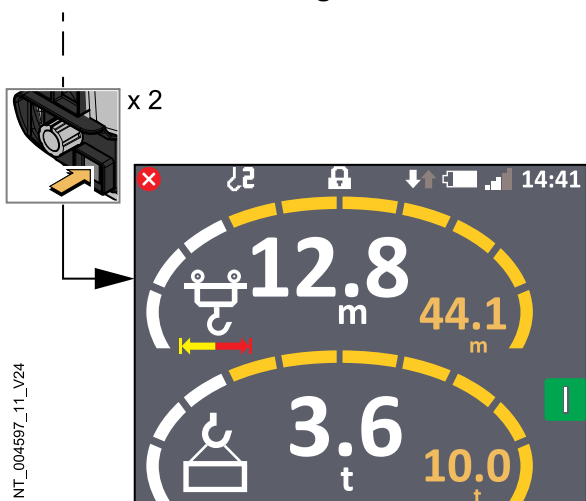
Refitting the cover

6. Refit the cover (2) and screw in the screws (1).



Returning to the "Indicators" screen

7. Press the **"ESC"** key on the radio control twice.
 - ◁ The **"Indicators"** screen is displayed.



1.3.29 "Top Site" option

Foreword - Option Top Site

The **Top Site** option is a system for managing prohibited zones.

Top Site is a payment option to be activated using a ten-digit code unique to each crane.



Note

To purchase the **Top Site** option, contact your **Manitowoc** agent.



Note

The number of prohibited zones (open or closed) may vary depending on the crane model and on the presence of the border zone.

Working principle - Top Site option

Zone limitation with load and height

Border zones and prohibited zones can include a limitation due to the lifted load and the height of the crane hook:

- If a zone is created with a load value entered and confirmed, the crane may not enter that zone if the lifted load is equal to or greater than the load indicated in "**Top Site**".
Otherwise, the crane may enter this zone if the lifted load is less than the load indicated in "**Top Site**" during the creation of the zone.
- If a zone is created with a height value entered and confirmed, the crane may not enter that zone if the hook is below the height value indicated in "**Top Site**".
Otherwise, the crane may enter this zone if the hook is above the height value indicated in "**Top Site**" during the creation of the zone.



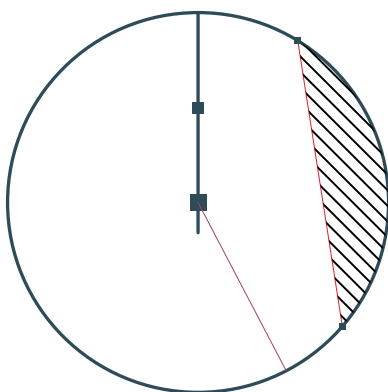
Note

The load and height parameters are optional when creating a prohibited zone or a border zone.



Note

It is not possible to set the height parameter if the crane is in raised jib configuration (for cranes from the GMA range).

Example of an open prohibited zone.

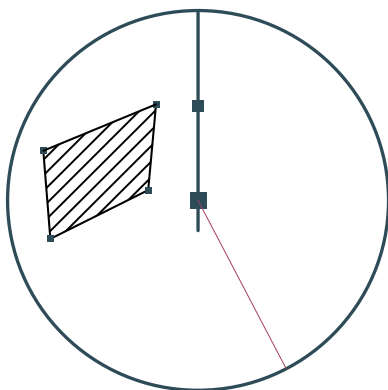
An open prohibited zone is one where the edges of the zone are located on the maximum slewing radius of the jib (trolley at jib nose).

**Note**

An open prohibited zone must comprise at least two points and no more than eight points.

**Note**

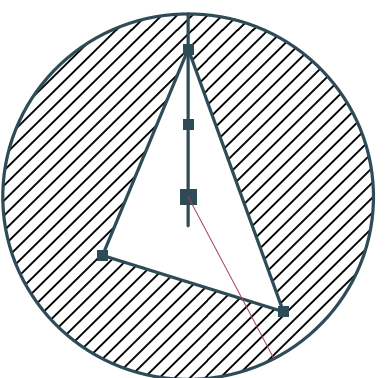
In order to optimally define an open prohibited zone, the trolley must be placed on the front limit switch when defining the first and last point of the zone.

Example of a closed prohibited zone.

A closed prohibited zone is a zone located inside the slewing radius of the jib.

**Note**

A closed prohibited zone must comprise at least three points and no more than eight points.

Example of border zone ⁽¹⁾

A border zone is a zone located inside the slewing radius of the jib.

**Note**

A border zone must comprise at least three points and no more than sixteen points.

⁽¹⁾ Depending on model

Applying the Top Site option

Conditions

- For the **Top Site** option to be operational, a number of conditions must be met:

Procedure

- Installation of slewing encoders.



Note

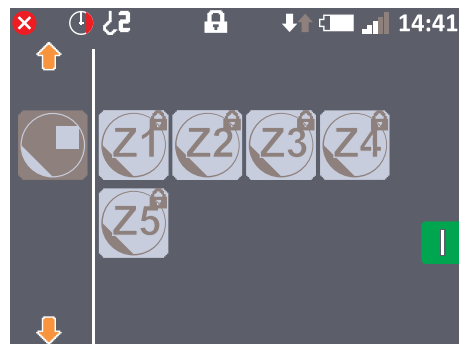
For more information, contact your usual **Potain** service network agent.

- Activation of the **"Slewing encoder"** ➡ page 1-80 option.
- Pair the **"slewing encoders"**.
- Pair the **"slewing encoders"**. ➡ page 2-10
- Enter the activation code for an **"Option ability"**.
- Enter the activation code for an **"Option ability"**. ➡ page 2-11
- Activation of the **"Top Site"** ➡ page 1-80 option.
- Save the **"Zero slewing"** position. ➡ page 1-71

Overview of screens - Top Site option

The **Top Site** menu consists of two screens:

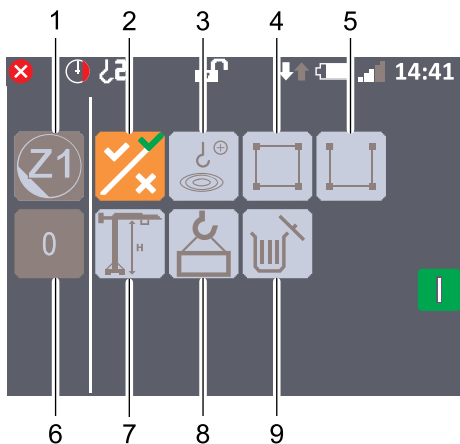
"Zone selection" screen



This screen allows you to select the zones to define. You can create up to four prohibited zones (Z1 to Z4) ⁽¹⁾ and one border zone (Z5) ⁽¹⁾.

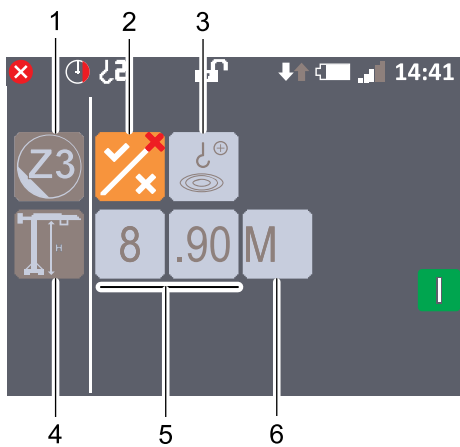
⁽¹⁾ Depending on model

"Zone editing" screen



- | | | | |
|---|--|---|--|
| 1 | Identification of the zone (Z1 to Z5) ⁽¹⁾ | 5 | Add the last point of an open prohibited zone |
| | ⁽¹⁾ Depending on model | 6 | Number of points already set for the zone being edited |
| 2 | Activating/deactivating the zone | 7 | "Zone height" submenu |
| 3 | Add a point to a zone | 8 | "Load limit" submenu |
| 4 | Add the last point of a closed prohibited zone | 9 | Deleting the zone |

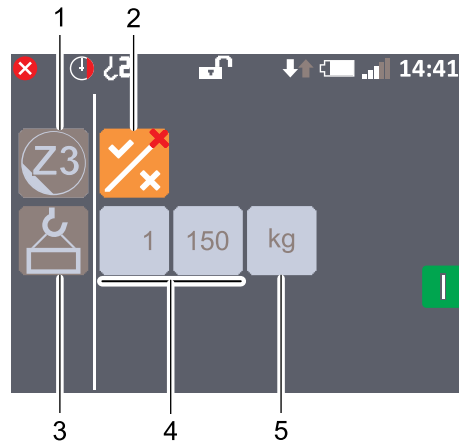
"Zone height" submenu



- | | | | |
|---|--|---|--|
| 1 | Identification of the zone (Z1 to Z5) ⁽¹⁾ | 3 | Definition of "Zone height" |
| | ⁽¹⁾ Depending on model | 4 | Icon representing the "Zone height" submenu |
| 2 | Activating/deactivating the "Zone height" | 5 | "Zone height" value |
| | | 6 | "Zone height" unit |

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"Load limit" submenu

- | | | | |
|---|---|---|---|
| 1 | Identification of the zone (Z1 to Z5) ⁽¹⁾
⁽¹⁾ Depending on model | 3 | Icon representing the "Load limit" submenu |
| 2 | Activating/deactivating the "Load limit" | 4 | "Load limit" value |
| | | 5 | "Load limit" unit |

Pictograms on the "Top Site option" screen

	"Top Site option" screen	  	Zone being edited Note "Z1" is an example. Other zones can be displayed (from Z1 to Z5) ⁽¹⁾ ⁽¹⁾ Depending on model
 	Activate/deactivate a zone, the "Zone height", or the "Load limit"	 	Add a point in a zone or set the "Zone height"
 	Add the last point of a closed zone	 	Add the last point of an open zone
	Number of points already set for the zone being edited Note "0" is an example. Other values can be displayed.	 	"Zone height" submenu
 	"Load limit" submenu	 	Deleting a zone

NT_004597_148_V24

Configuration and settings for the Top Site option



Technical data

Minimum safety distance	2 m
-------------------------	-----



Note

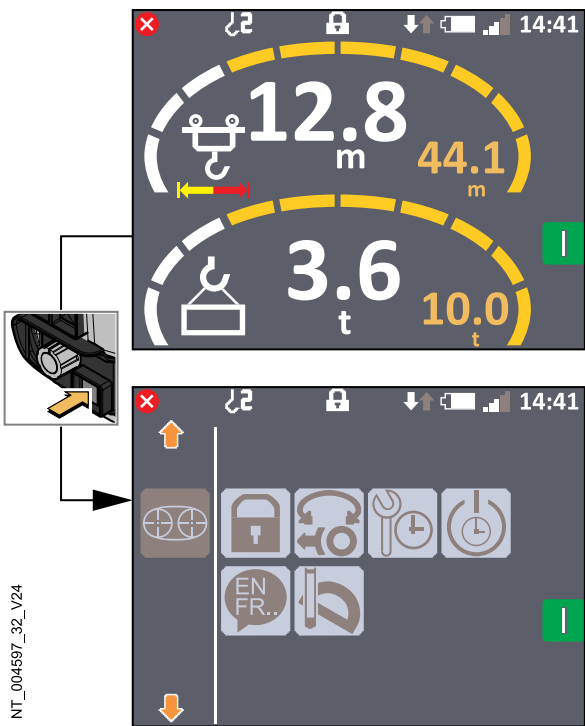
The zones should be defined with no load suspended from the hook.

Procedure

Entering an access code

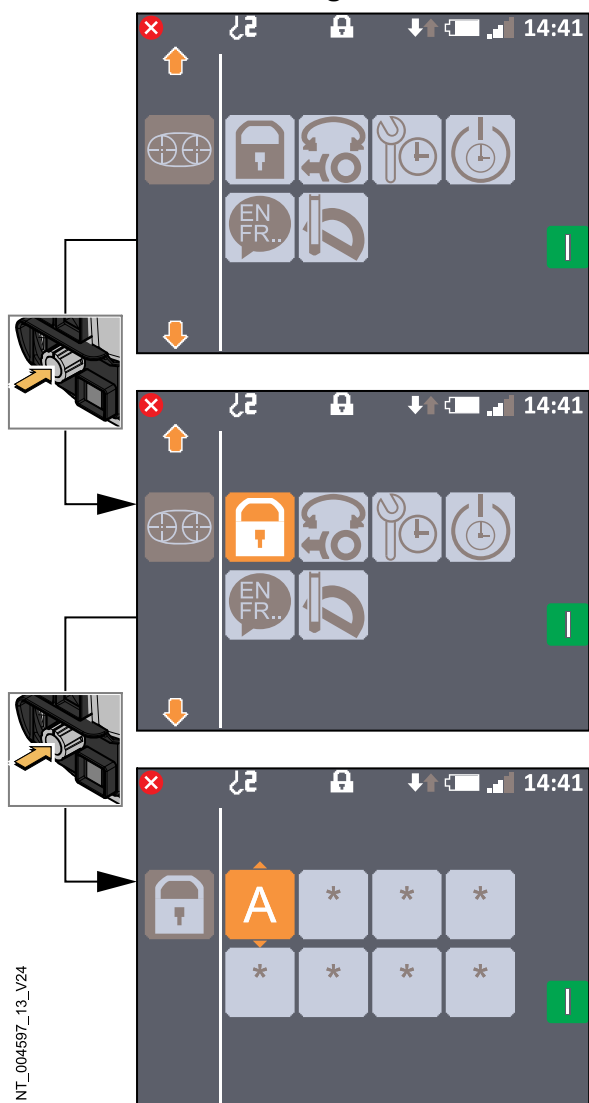
Accessing the "General/User" screen

1. Press the "ESC" key on the radio control.
 ◁ The "General/User" screen is displayed.



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Accessing the "Access code" menu



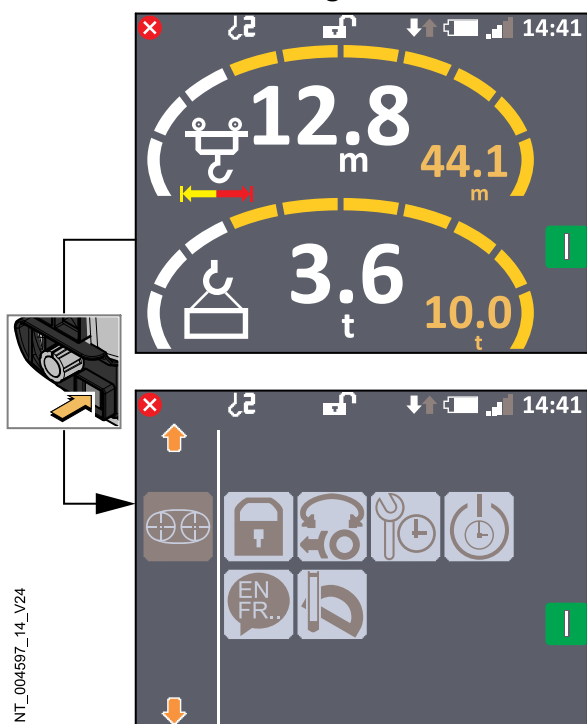
2. Press the **Jog Dial** on the radio control twice.
 - ◀ The screen for entering an **"Access code"** is displayed.

Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

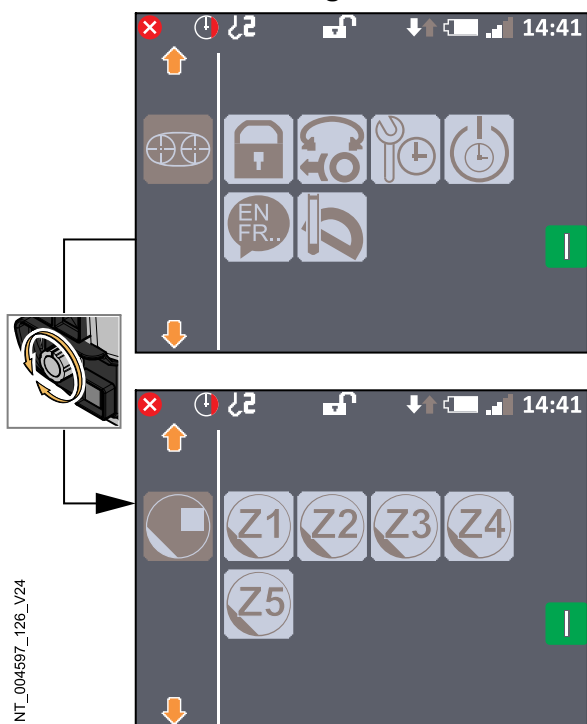
Accessing the "General/User" screen

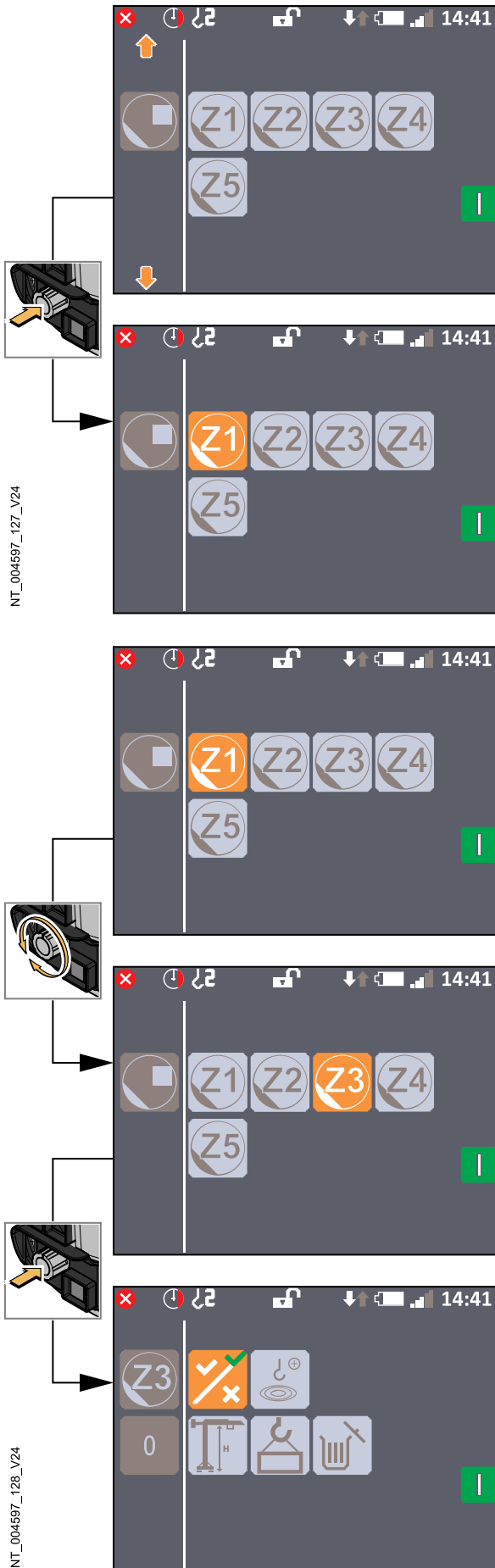
4. Press the **"ESC"** key on the radio control.
 < The **"General/User"** screen is displayed.



Accessing the "Zone selection" screen

5. Use the **Jog Dial** on the radio control to display the **"Zone selection"** screen.





6. Press the **Jog Dial** on the radio control.
 - ◀ The icon "**Z1**" is selected.

7. Use the **Jog Dial** on the radio control to select a zone to be created, activated, deactivated, or deleted, then confirm by pressing the **Jog Dial** on the radio control.
 - ◀ The "**Zone editing**" screen is displayed.



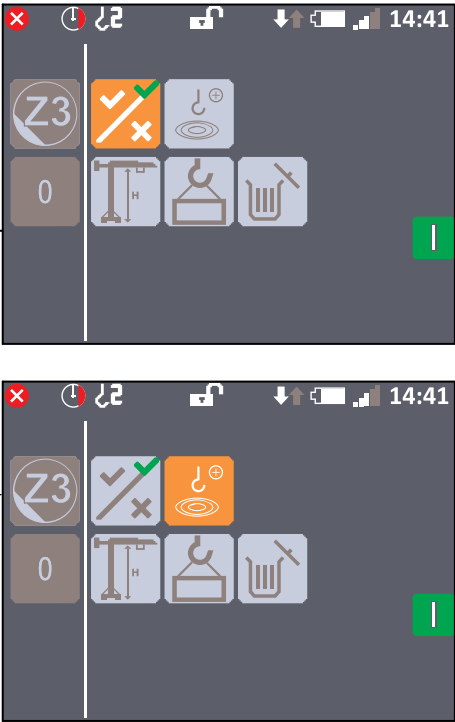
Note

By default, an edited zone is activated automatically. A green check mark ✓ is displayed on the icon for activation and deactivation.

Creating a zone - "Top Site" option



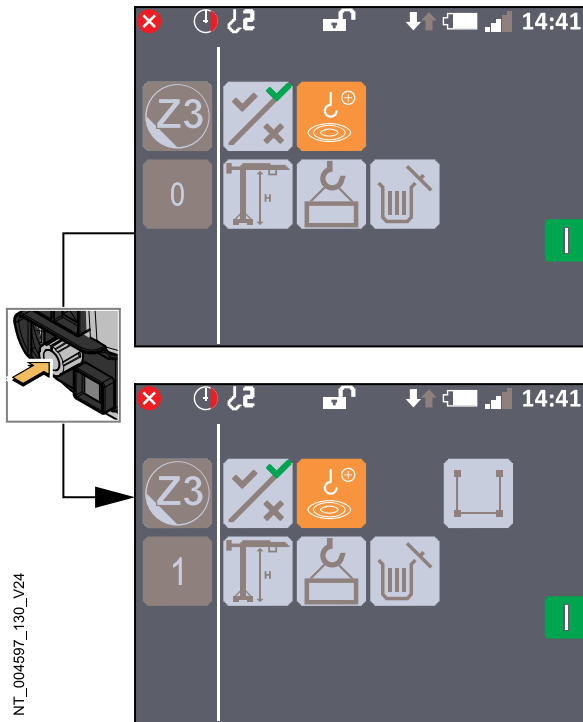
NT_004597_129_V24



8. Use the **Jog Dial** on the radio control to select the **"Add a point"** icon.

9. Move the crane's hook into the position of the first point to be saved.

Technical data	
Minimum safety distance	2 m Note Provide a minimum safety distance between the point currently being defined and the physical limit of the zone, to take into account the deformations of the crane and the accuracy of the system. In any event, this minimum safety distance must be determined by the user (machine installation manager) based on the results of the risk analysis carried out. For example, this safety distance can be increased depending on the particular site conditions, the volume of the loads handled and the proximity of sensitive zones.



10. Press the **Jog Dial** on the radio control.

- ◁ The point is saved.
- ◁ The number of points in the zone increases by one.
- ◁ The icon for adding the last point of an open zone appears.

11. Repeat the two preceding steps to save the following points, up to the next-to-last point.

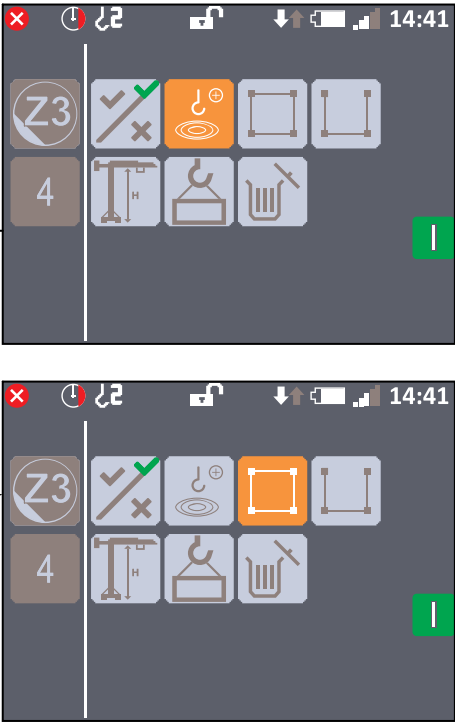
Technical data	
Minimum safety distance	2 m Note Provide a minimum safety distance between the point currently being defined and the physical limit of the zone, to take into account the deformations of the crane and the accuracy of the system. In any event, this minimum safety distance must be determined by the user (machine installation manager) based on the results of the risk analysis carried out. For example, this safety distance can be increased depending on the particular site conditions, the volume of the loads handled and the proximity of sensitive zones.

12. Choose one of the following alternatives.

Alternative 1 of 2 – Saving the last point of a closed prohibited zone



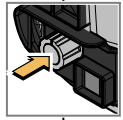
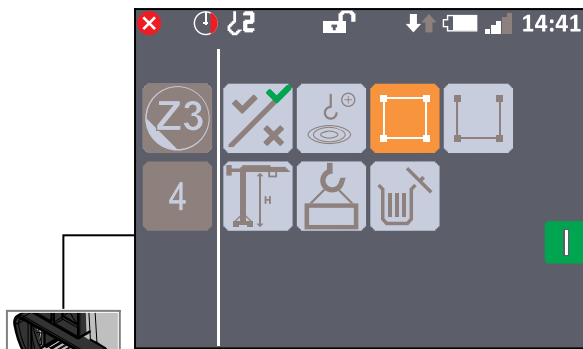
NT_004597_131_V24



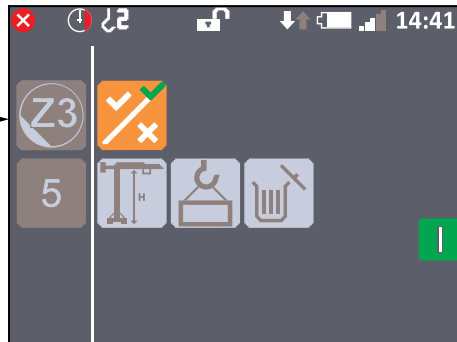
- Use the **Jog Dial** on the radio control to select the icon for the "**Last point of a closed zone**".

- Move the crane's hook into the position of the last point to be saved.
 - ◁ The crane's hook is in the position to be saved.

Technical data	
Minimum safety distance	2 m Note Provide a minimum safety distance between the point currently being defined and the physical limit of the zone, to take into account the deformations of the crane and the accuracy of the system. In any event, this minimum safety distance must be determined by the user (machine installation manager) based on the results of the risk analysis carried out. For example, this safety distance can be increased depending on the particular site conditions, the volume of the loads handled and the proximity of sensitive zones.

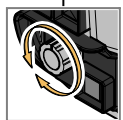
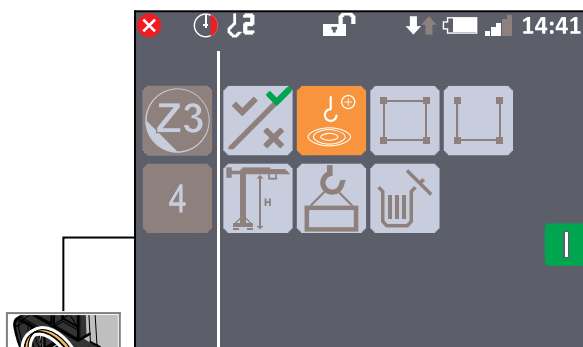


NT_004597_132_V24

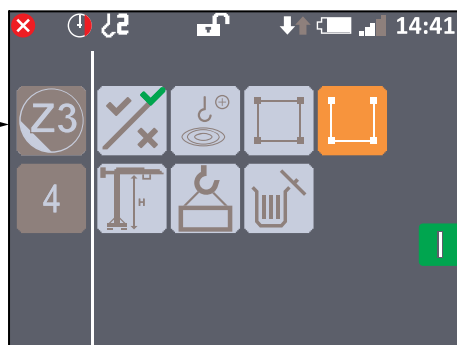


- Press the **Jog Dial** on the radio control.
 - ◁ The point is saved.
 - ◁ The number of points in the zone increases by one.
 - ◁ The icon for activating or deactivating the zone is selected.
 - ◁ The zone is created.

Alternative 2 of 2 – Saving the last point of an open prohibited zone



NT_004597_133_V24



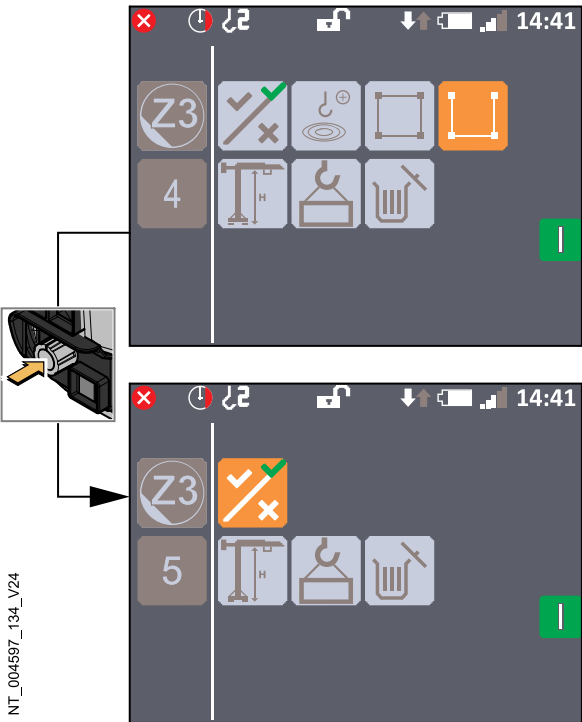
- Use the **Jog Dial** on the radio control to select the icon for the **"Last point of an open zone"**.

- Move the crane's hook into the position of the last point to be saved.
 - ◁ The crane's hook is in the position to be saved.

Technical data	
Minimum safety distance	2 m Note Provide a minimum safety distance between the point currently being defined and the physical limit of the zone, to take into account the deformations of the crane and the accuracy of the system. In any event, this minimum safety distance must be determined by the user (machine installation manager) based on the results of the risk analysis carried out. For example, this safety distance can be increased depending on the particular site conditions, the volume of the loads handled and the proximity of sensitive zones.



Note
The trolley must be positioned at the jib nose.

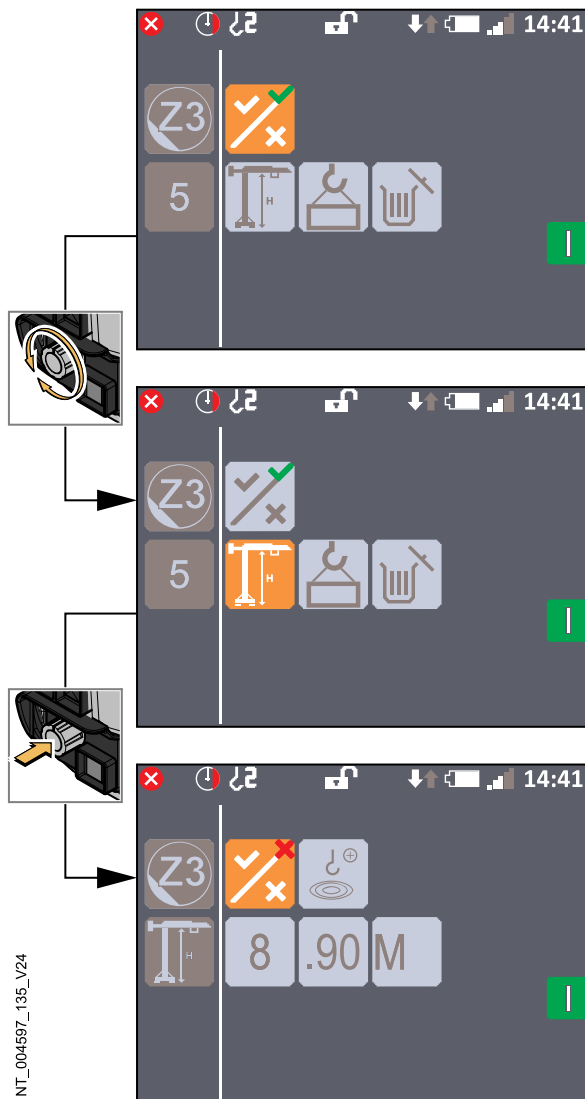


- ▶ Press the **Jog Dial** on the radio control.
 - ◁ The point is saved.
 - ◁ The number of points in the zone increases by one.
 - ◁ The icon for activating or deactivating the zone is selected.
 - ◁ The zone is created.

13. Perform this procedure when the condition below exists.

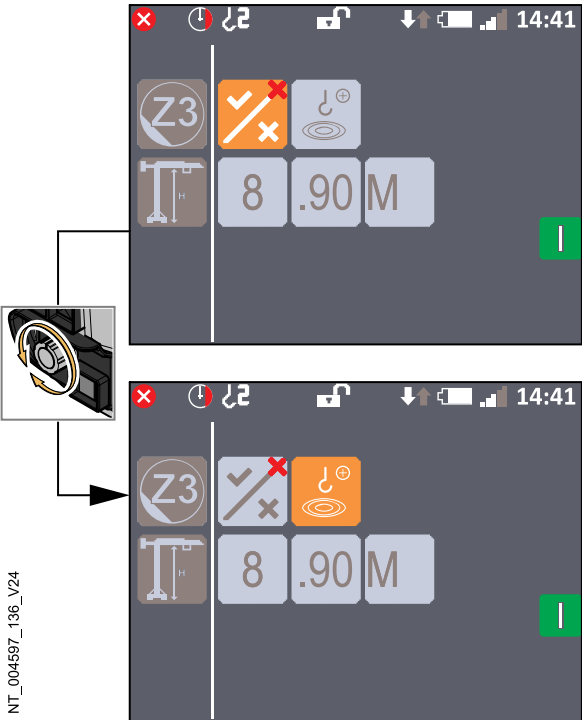
Conditions

- Definition of the "Zone height" (optional)



- Use the **Jog Dial** on the radio control to select the **"Zone height"** submenu, then confirm by pressing the **Jog Dial** on the radio control.

◀ The **"Zone height"** submenu is displayed.



NT_004597_136_V24

- Use the **Jog Dial** on the radio control to select the **"Add a point"** icon.

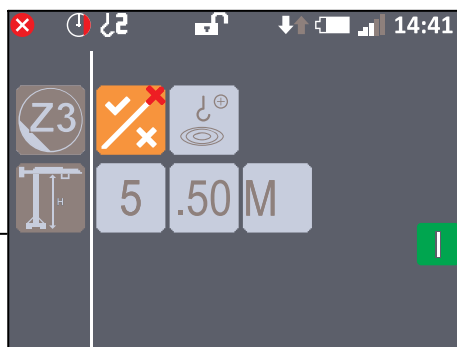
- Carry out a hoisting or lowering movement to position the hook at the limit of the zone.

Technical data	
Minimum safety distance	2 m Note Provide a minimum safety distance between the point currently being defined and the physical limit of the zone, to take into account the deformations of the crane and the accuracy of the system. In any event, this minimum safety distance must be determined by the user (machine installation manager) based on the results of the risk analysis carried out. For example, this safety distance can be increased depending on the particular site conditions, the volume of the loads handled and the proximity of sensitive zones.

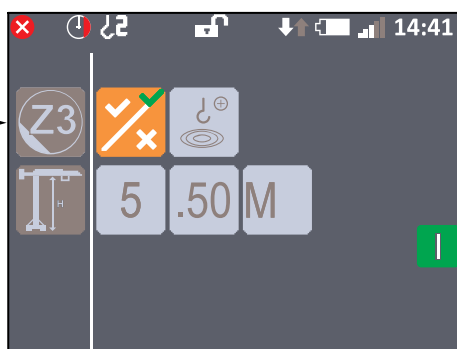
-  **Note**
In addition to the safety distance, consider the length of the slings.



NT_004597_137_V24



NT_004597_138_V24

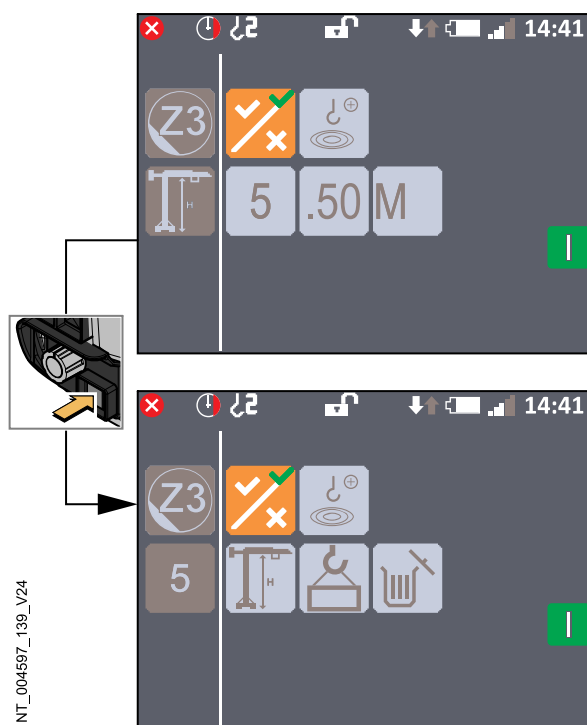


- Press the **Jog Dial** on the radio control.
 - ◁ The height is saved.
 - ◁ The icon for activating or deactivating the zone height is selected.

- Press the **Jog Dial** on the radio control.
 - ◁ A green check mark ✓ is displayed on the icon for activating or deactivating the zone height.
 - ◁ The height of the zone is registered.

**Note**

The height limit can be deactivated by repeating the previous step.
The icon for activation or deactivation is then displayed with a red cross ✗.

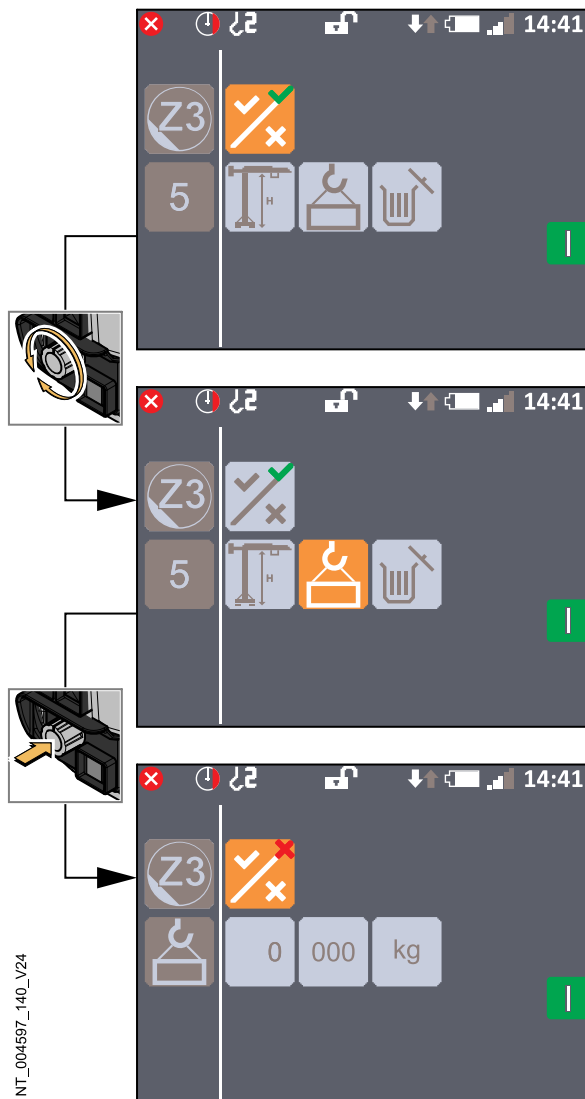


- Press the key "**ESC**" de la radiocommande.
- ◁ The "**Zone editing**" screen is displayed.

14. Perform this procedure when the condition below exists.

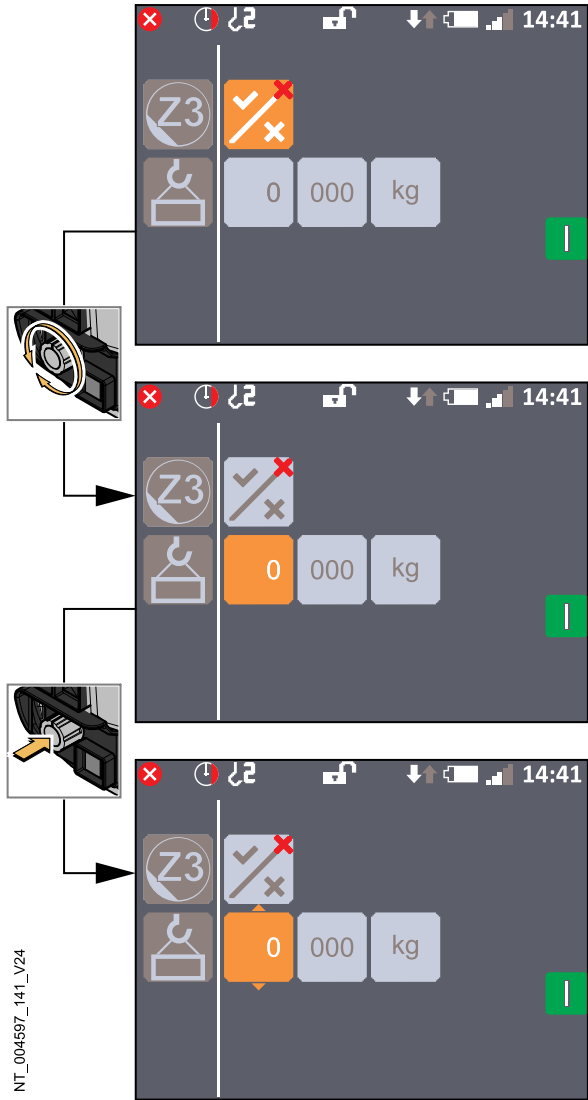
Conditions

- Definition of the "Load limit" (optional)



- Use the **Jog Dial** on the radio control to select the **"Zone height"** icon, then confirm by pressing the **Jog Dial** on the radio control.

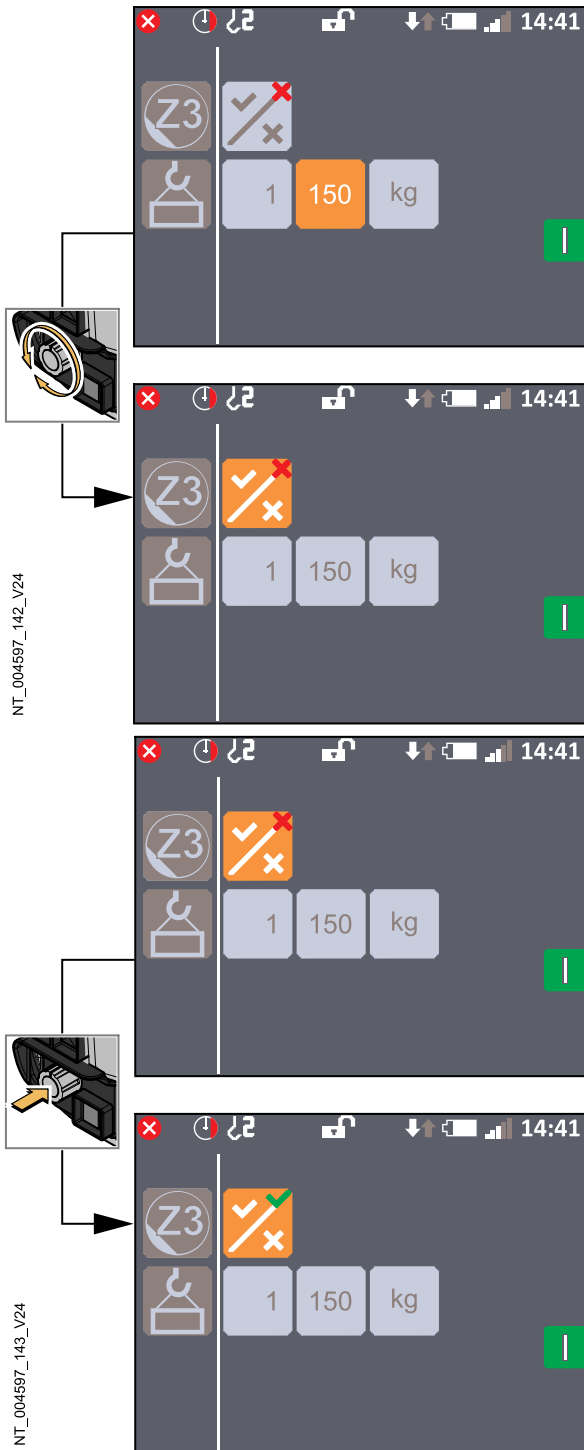
◀ The **"Load limit"** screen is displayed.



► Use the **Jog Dial** to select the first icon in the **"Load limit"** input area.

► Enter the value of the **"Load limit"** ➡ page 1-28 and add an additional load.

Technical data	
Additional load value	200 kg



- Use the **Jog Dial** on the radio control to select the icon for activating and deactivating the **"Load limit"**.

- ◁ The icon for activating and deactivating the **"Load limit"** is selected.

- Press the **Jog Dial** on the radio control.
 - ◁ A green check mark ✓ is displayed on the icon for activating or deactivating the zone height.
 - ◁ The **"Load limit"** is applied (activated).



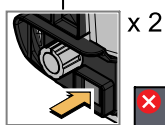
Note

The **"Load limit"** can be deactivated by repeating the previous step. The icon for activation or deactivation is then displayed with a red cross ✗.

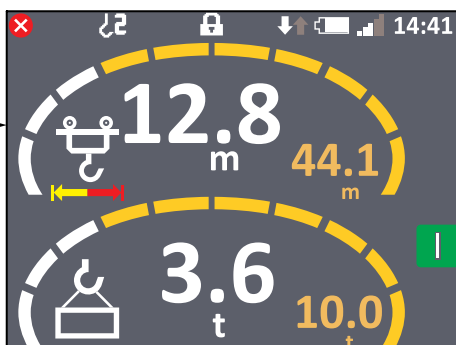
Returning to the "Indicators" screen

15. Press the **"ESC"** key on the **Jog Dial** of the radio control twice.

◀ The **"Indicators"** screen is displayed.



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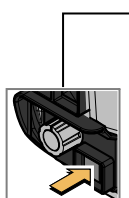
Activating/deactivating a zone

Procedure

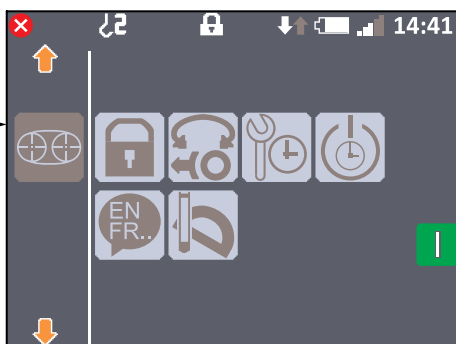
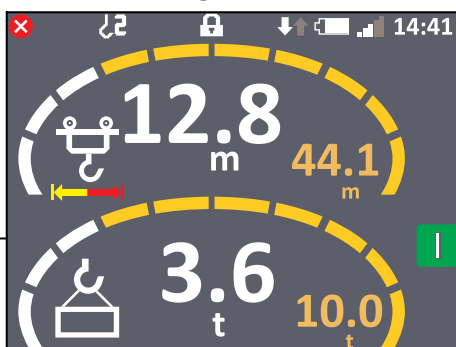
Entering an access code

Accessing the "General/User" screen

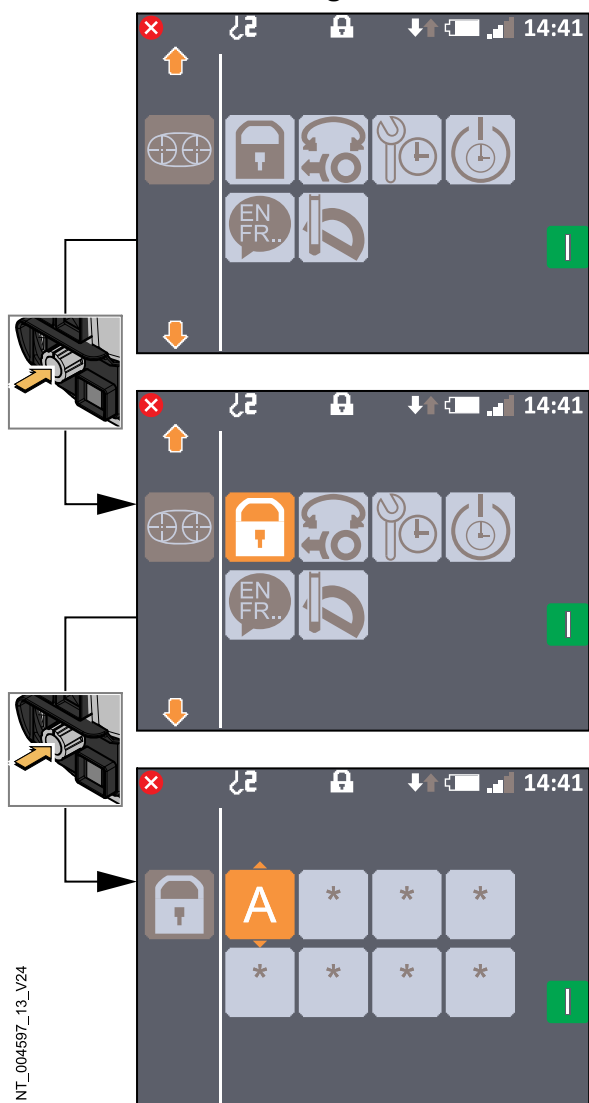
1. Press the **"ESC"** key on the radio control.
- ◀ The **"General/User"** screen is displayed.



NT_004597_32_V24



Accessing the "Access code" menu



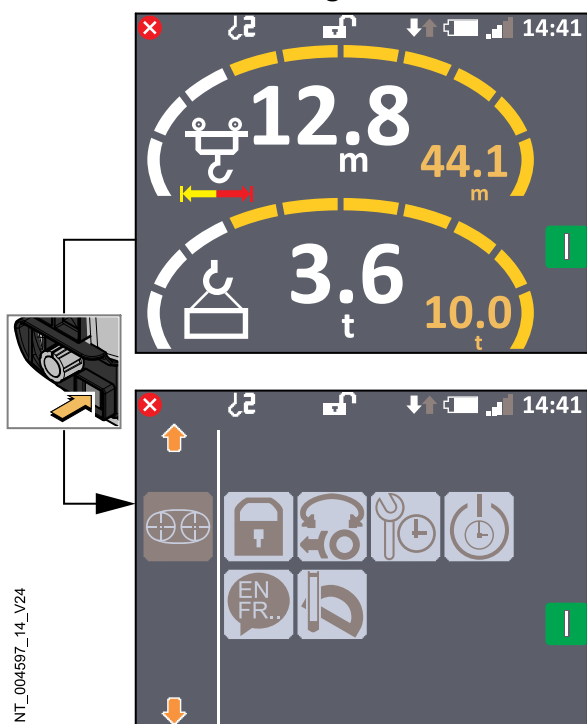
2. Press the **Jog Dial** on the radio control twice.
 - ◀ The screen for entering an **"Access code"** is displayed.

Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

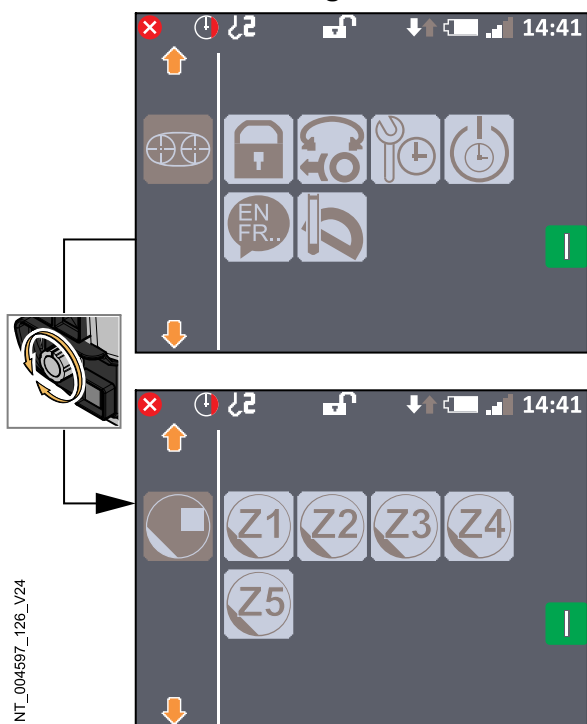
Accessing the "General/User" screen

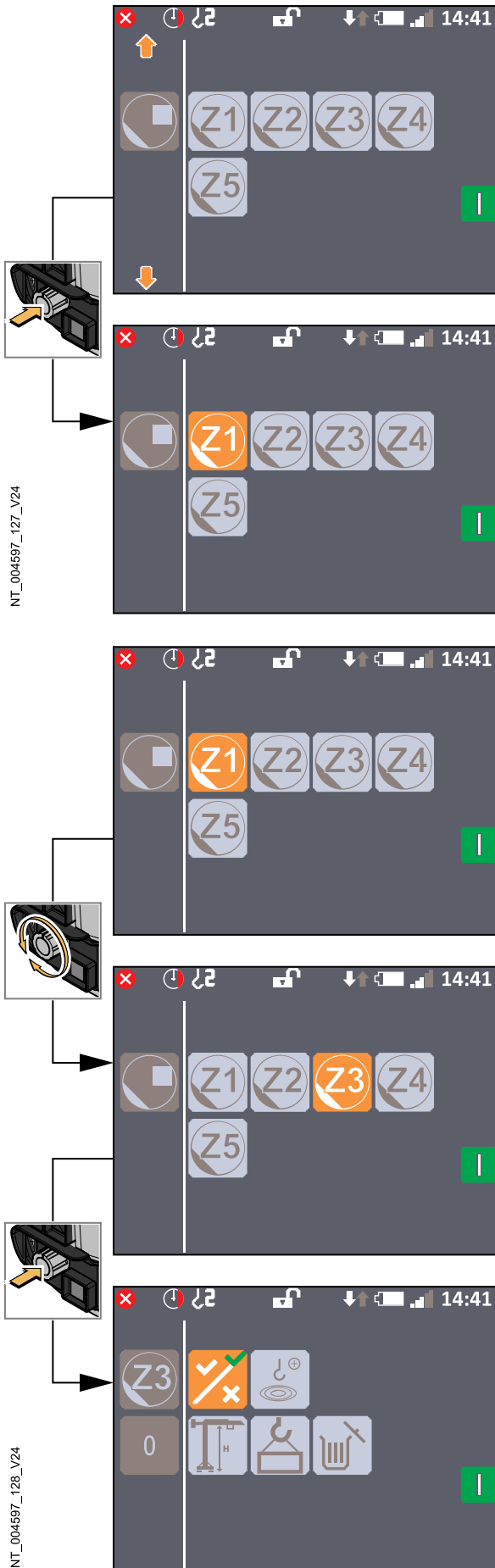
4. Press the **"ESC"** key on the radio control.
 < The **"General/User"** screen is displayed.



Accessing the "Zone selection" screen

5. Use the **Jog Dial** on the radio control to display the **"Zone selection"** screen.





6. Press the **Jog Dial** on the radio control.
 ◀ The icon "**Z1**" is selected.

7. Use the **Jog Dial** on the radio control to select a zone to be created, activated, deactivated, or deleted, then confirm by pressing the **Jog Dial** on the radio control.
 ◀ The "**Zone editing**" screen is displayed.

**Note**

By default, an edited zone is activated automatically. A green check mark ✓ is displayed on the icon for activation and deactivation.

Activating/deactivating a zone

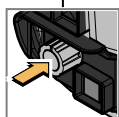
8. Press the **Jog Dial** on the radio control.
 - ◁ A red cross **✗** is displayed on the icon for zone activation or deactivation.
 - ◁ The zone is deactivated.



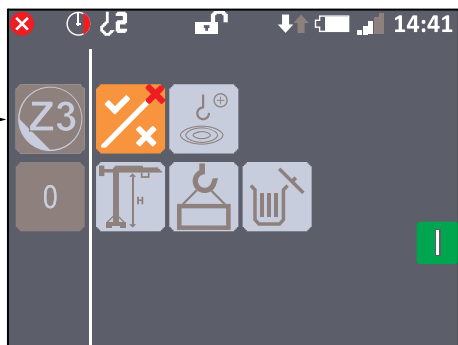
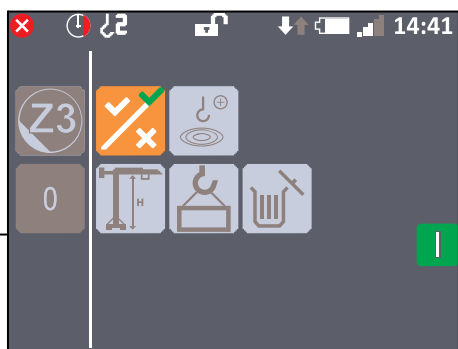
Note

The zone can be activated by repeating the previous step.

The activation or deactivation icon is then displayed with a green check mark **✓**.

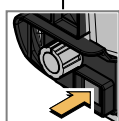


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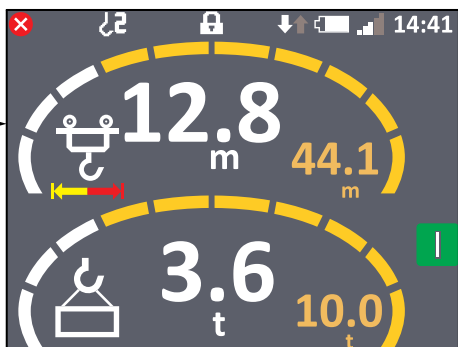


Returning to the "Indicators" screen

9. Press the **"ESC"** key on the **Jog Dial** of the radio control twice.
 - ◁ The **"Indicators"** screen is displayed.



NT_004597_11_V24



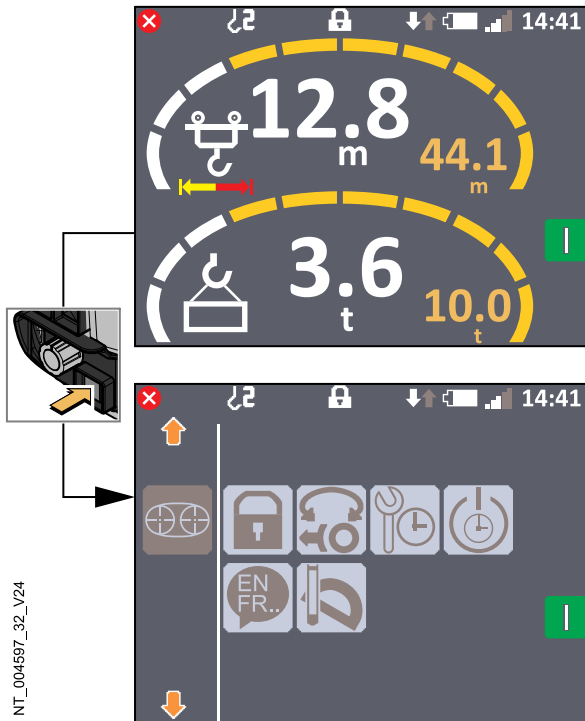
Deleting a zone

Procedure

Entering an access code

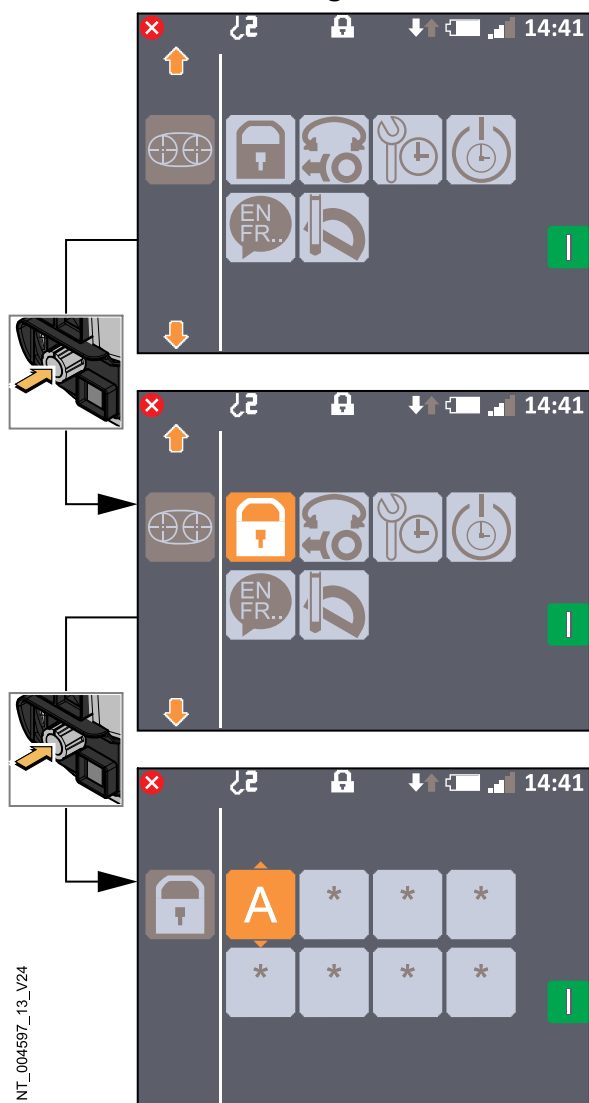
Accessing the "General/User" screen

1. Press the **"ESC"** key on the radio control.
 < The **"General/User"** screen is displayed.



NT_004597_32_V24

Accessing the "Access code" menu



2. Press the **Jog Dial** on the radio control twice.
 - ◀ The screen for entering an **"Access code"** is displayed.

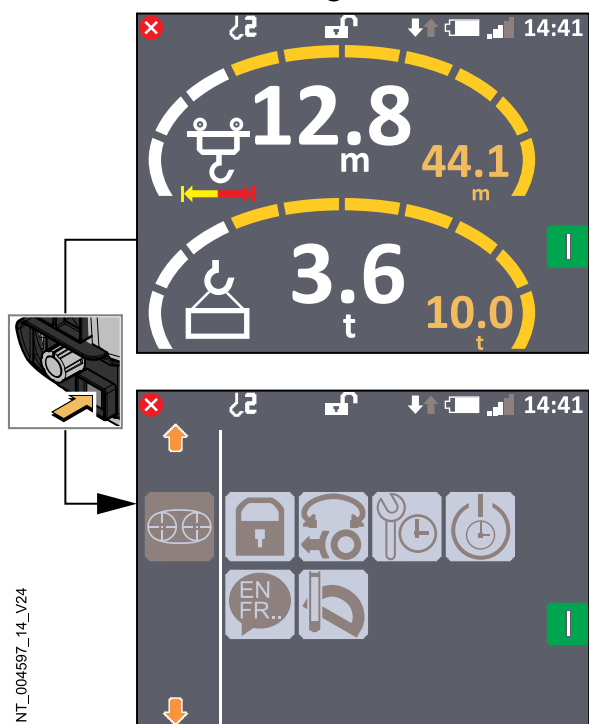
Entering an "Access code"

3. Enter an "Access code" ➡ page 1-28.

NT_004597_13_V24

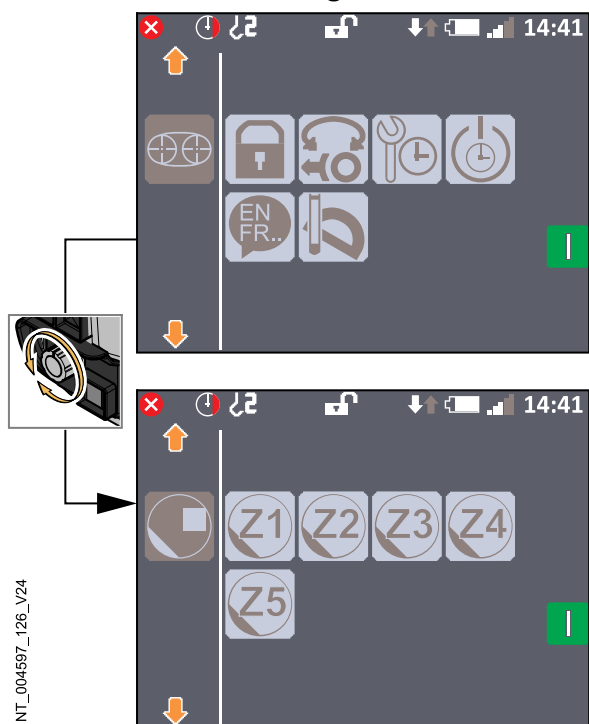
ENU / 2022-10-28

Accessing the "General/User" screen



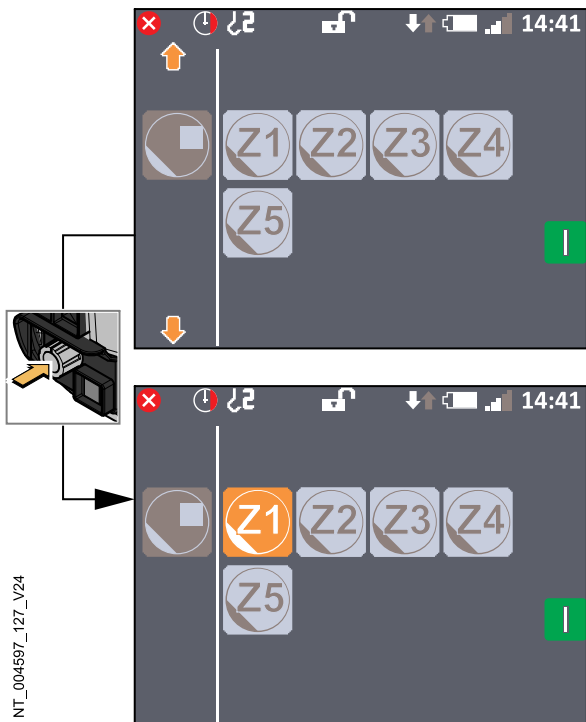
4. Press the **"ESC"** key on the radio control.
 - ◁ The **"General/User"** screen is displayed.

Accessing the "Zone selection" screen



5. Use the **Jog Dial** on the radio control to display the **"Zone selection"** screen.

6. Press the **Jog Dial** on the radio control.
 - ◁ The icon "Z1" is selected.

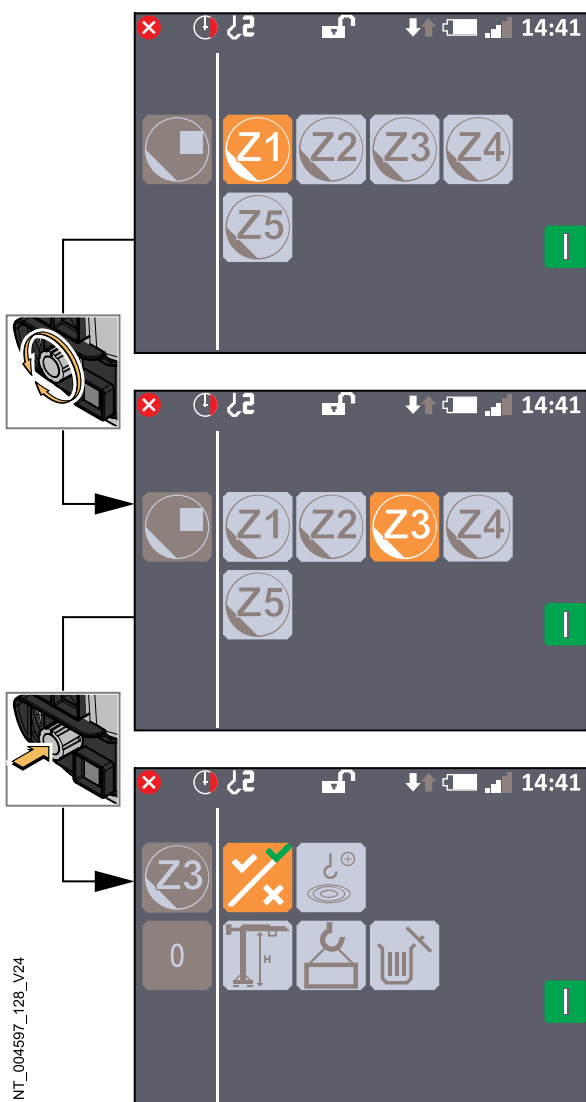


7. Use the **Jog Dial** on the radio control to select a zone to be created, activated, deactivated, or deleted, then confirm by pressing the **Jog Dial** on the radio control.
 - ◁ The "**Zone editing**" screen is displayed.

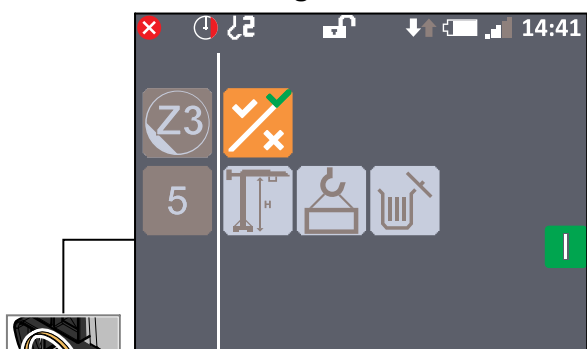


Note

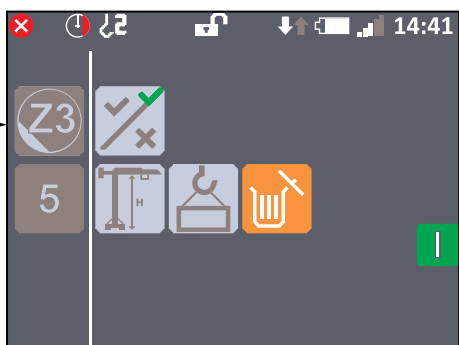
By default, an edited zone is activated automatically. A green check mark ✓ is displayed on the icon for activation and deactivation.



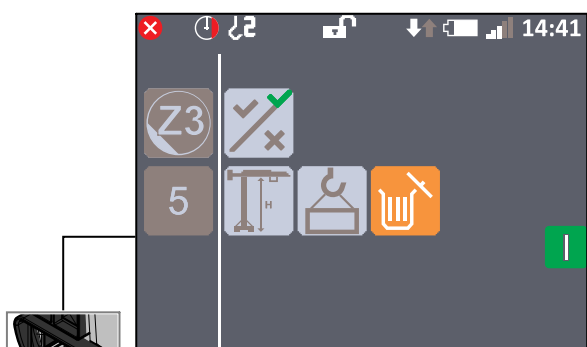
Deleting a zone



NT_004597_145_V24



8. Use the **Jog Dial** to select the icon for deleting the zone.



NT_004597_146_V24

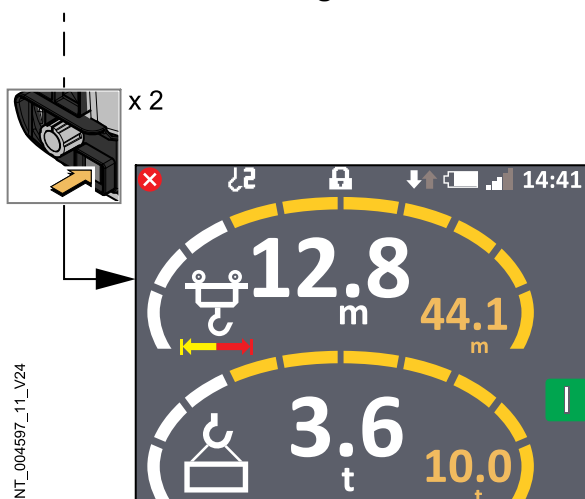


9. Press the **Jog Dial** on the radio control.
- < The zone's number of points changes to 0.
 - < The zone activation and deactivation icon is selected.
 - < The zone is deleted.

Returning to the "Indicators" screen

10. Press the **"ESC"** key on the **Jog Dial** of the radio control twice.

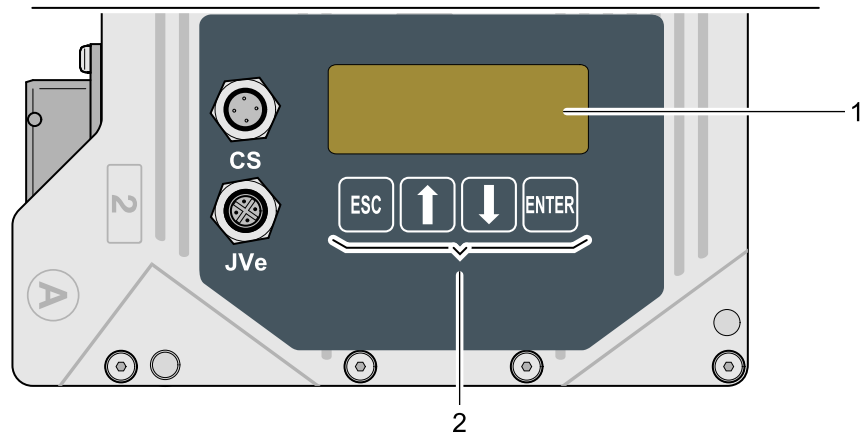
◀ The **"Indicators"** screen is displayed.



2 'CCT' Crane Control Tower System

2.1 'CCT' Crane Control Tower

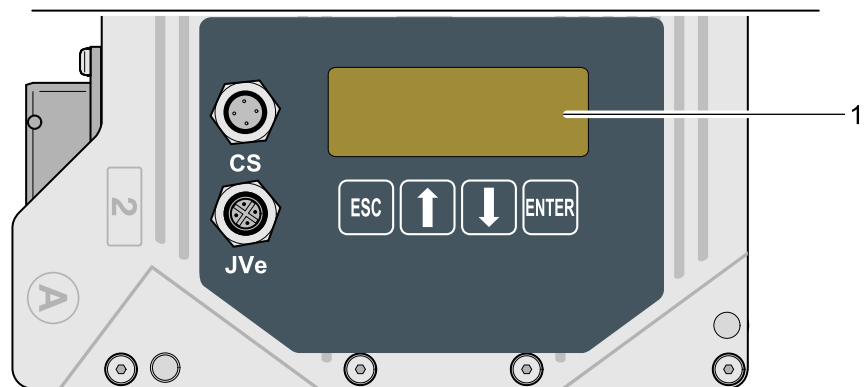
2.1.1 Foreword - CCT



The CCT computer consists of a screen (1) and a keypad with 4 keys (2).

2.1.2 Display and navigation

Screen



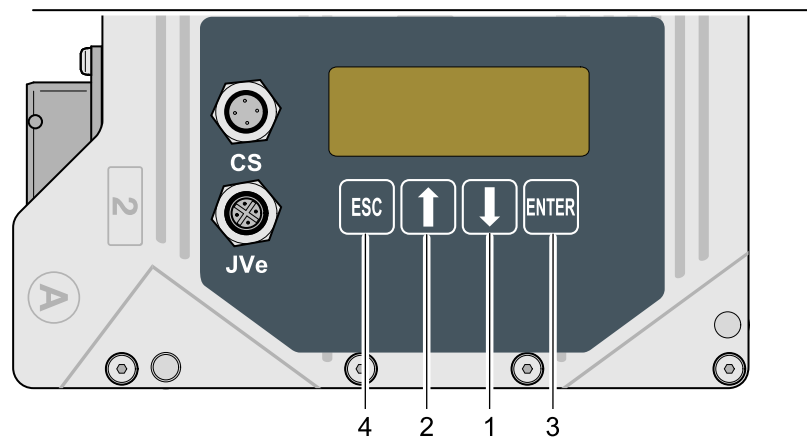
The screen (1) is made up of 4 lines with 20 characters per line.

NT_004599_56_V1.12

NT_004599_57_V1.12

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Keypad



Note

The keypad has four keys.

The **"Scroll down arrow"** (1)  allows scrolling down or reducing an entered value.

The **"Scroll up arrow"** (2)  allows scrolling up or increasing an entered value.

The **"Enter"** key (3)  allows you to confirm a position, a calibration, a selection, or a value.

The **"Escape"** key (4)  allows you to exit a menu or a setting without confirming, and to display the menu screen.

2.1.3 Access codes

Access codes

The access codes give access to certain functions, adjustments, or settings according to the authorization level.

There are four levels of authorization:

- The **"Fitter"** access code: intended for the customer, this code is specific to the crane and is linked to its serial number. It is used to fit the crane and put it into service. It is valid for the lifetime of the crane.

The **"Fitter"** access code is provided in the letter accompanying the delivery of the technical manuals ➡ page 2-4.



Note

This code is specific to this crane and must never be transmitted to a third party or used for another crane. The use of this code is reserved exclusively for the cases listed and described in the technical manual of the crane to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of misuse of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

- The **"Technician"** access code: for technicians having received **CCS** training at the **'Manitowoc'** training center .
This access code is linked to the technician's ID. It is valid for one year.



Note

Under no circumstances may this code be sent to a third party. The use of this code is reserved exclusively for the cases listed and described in the technical manual to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of mis-use of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

- The **"Temporary"** access code: for a client or technician finding themselves in a locked situation.
This access code is valid for 24 hours.
To obtain this access code, contact your usual **Potain** service network agent.



Note

Under no circumstances may this code be sent to a third party. The use of this code is reserved exclusively for the cases listed and described in the technical manual to the exclusion of any other use. Since using this code gives access to the machine's settings, incorrect parameterization can cause a risky situation that could lead to an accident. **Manitowoc** accepts no responsibility in the event of mis-use of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane.

- The **"Replacement"** access code: only valid for one SCM computer. This access code is for replacing the SCM computer; it allows adjustment of the system's time and input of the crane's serial number.
To obtain this access code, contact your usual **Potain** service network agent.



Note

Once entered, the **"Fitter"** access codes are active for 10 minutes. Beyond this time, a pop-up window opens on the **CCS Display**⁽¹⁾ and asks for renewal of this activation time. If no confirmation is given, the system returns to an operating mode without an activated access code.

⁽¹⁾ depending on model

2. 'CCT' Crane Control Tower System

2.1 'CCT' Crane Control Tower

Access code rights CCS

	Fitter	Technician	Temporary	Replacement
Adjustments/Settings	YES	Yes	YES	NO
Anti-collision system adjustment	YES	YES	YES	NO
Top Site adjustment	YES	YES	YES	NO
Commissioning mode	YES	YES	YES	NO
Fitting mode	YES	YES	YES	NO
Shunt mode	NO	NO	YES	NO
Serial no. adjustment	NO	NO	NO	YES
System time setting	NO	NO	NO	YES
Free standing height adjustment ⁽¹⁾ ⁽¹⁾ depending on model	NO	NO	YES	NO
Updating software using "CCS Flash"	NO	YES	YES	NO
High maintenance position and low maintenance position ⁽¹⁾ ⁽¹⁾ depending on model	NO	YES	YES	NO

"Fitter" access code

Example of letter with the technical manual:



Note

The **"Fitter"** access code is written in the highlighted sentence.



Charlieu, 06/05/2020
N/REF : **123123**

XXXXXXXXXX
XXX
XXX
XXX

RE: DISPATCH OF TECHNICAL DOCUMENTATION

Dear Sirs,

Please find enclosed the technical documents for your crane:

Type: MDTxxx	Execution: 123456789	Machine N°: 123123
---------------------	-----------------------------	---------------------------

This dispatch comprises the following documents:

1 INSTRUCTION – USB DRIVE – including:

- Operator Manual
- Operator Manual Annexes
- Maintenance Manual
- Parts Manual
- CCS Manual.

Please find attached the CCS customer access code for this crane: **ABC12345**.

This code is specific to this crane and must never be transmitted to a third party or used for another crane. The use of this code is reserved exclusively for the cases listed and described in the technical manual of this crane to the exclusion of any other use.

Because using this code gives access to the machine control, incorrect parameterization can lead to a risky situation in which an accident could occur.

Manitowoc accepts no responsibility in the event of misuse of this code, in the event of use not in accordance with the technical manual, or in the event of use in cases other than those described in the technical manual of the crane. We wish you safe receipt of these documents and thank you once again for your confidence.

Yours sincerely,

Thierry HERAUT
Technical Publications Manager

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NT_004678_01

Entering a value or password via the 'CCT' computer



Note

Example: entering a password.

Procedure

1. Use the arrows to enter the first letter of the password, then press the key to confirm.
 - ◁ The first letter of the password is confirmed, and the second letter is selected.
2. Repeat the above step for all the letters and digits making up the password.
3. Press to confirm the password.
 - ◁ The password is confirmed.

Logging out the password via the 'CCT' computer



Note

Two situations allow you to log out the password:

- Automatic logout after 10 minutes of inactivity.
 - Carrying out the following procedure.
-

Pre-tasks

- ▶ A password has been entered and confirmed.

Procedure

1. Use the arrows to select the **"Password"** menu, then press the key to confirm.
2. Press the key.
 - ◁ The password is logged out. The **Menu** screen is displayed.

2.1.4 Additional configuration and teach-in programming of the crane using the CCT computer

Additional configuration and teach-in programming of the crane using the CCT computer



DANGER

Risk of falling crane

During teach-in programming or maintenance, the limit switches, load limiters, and moment cutouts are deactivated.

- ▶ During maintenance or teach-in programming of the system, the operator must take care not to exceed the limit switches, load limiters, and moment cutouts. The operator must observe the specifications on the type plate.
-



Note

The "additional" teach-in programming procedure allows you to save values and calibrate certain positions that are not accessible during radio control teach-in programming.

In the **"Teach-in programming"** menu, all movements are operable; the speeds are limited to 50% of their maximum values.



Note

The values, options, and equipment mentioned in this procedure are given as examples only.

Perform the configuration and teach-in programming of the crane using only the values, options, and equipment corresponding to the crane.

Procedure

"Configuration and teach-in programming" settings

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows   to select the **"Password"** menu.
3. Press  to confirm.
 ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Teach-in programming" menu



Note

Procedure to be followed from the home screen.

5. Use the arrows   to select the **"Teach-in programming"** menu, then press the  key to confirm.
 ◁ The **"Teach-in programming"** menu is displayed.

Saving the "3 dead turns" position

6. Use the arrows   to select the **"Height"** submenu, then press the  key to confirm.
 ◁ The **"Height"** submenu is displayed.

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7. Use the arrows   to select the **"3 dead turns"** setting and press the  key to confirm.
 - ◁ The **"3 dead turns"** setting is preselected .
8. Perform a lowering movement until there are only 3 turns of wound cable on the hoisting winch drum (3 dead turns).



Note

In certain cases, some of the cable might be unwound on the ground. Keep it taut during the winding and unwinding phases.

9. Press the  key twice.
 - ◁ The  symbol will appear to the right of the setting, and the **"3 dead turns"** position will be memorized.
10. Press the  key.
 - ◁ The **"Teach-in programming"** menu is displayed.
11. Make an upward hoisting movement to position the top of the pulley blocks at the distance (d) from the lowest point of the trolley.

Technical data	
Distance (d) between the top of the pulley blocks and the lowest point of the trolley	1 m



Note

In certain cases, some of the rope might be unwound on the ground. Keep it taut during the winding and unwinding phases.

Saving the "Limit switch/Pre-alarm"



Note

The **"Limit switch/Pre-alarm"** setting tells the system what the pre-alarm triggering threshold is for the load or the moment.

12. Use the arrows   to select the **"Thresholds"** submenu, then press the  key to confirm.
 - ◁ The **"Thresholds"** submenu is displayed.
13. Press the  key twice.
 - ◁ The **"Pre-alarm"** setting is selected .
14. Use the arrows   to enter the threshold value for the **"Limit switch/Pre-alarm"** setting and press  to confirm.

Technical data	
Recommended value	90 %
Possible settings range	50 % to 90 %

- ◁ The symbol  appears to the right of the **"Prealarm"** setting, and the value is saved.
15. Press the  key twice.
 - ◁ The **"Teach-in programming"** menu is displayed.

Saving the "Wind / Prealarm" setting



Note

The **"Wind / Prealarm"** setting tells the system the prealarm triggering threshold according to the wind speed.

16. Use the arrows to select the **"Wind"** submenu,   then press the  key to confirm.
 - ◁ The **"Wind"** submenu is displayed.
17. Press the  key twice.
 - ◁ The **"Thresholds / Pre-alarm"** setting is selected .
18. Use the arrows   to enter the value for the **"Thresholds / Pre-alarm"** setting, then press the  key to confirm.

Technical data	
Recommended value	50 km/h
Possible settings range	0 km/h to 50 km/h

- ◁ The symbol  appears to the right of the setting, and the **"Wind / Pre-alarm"** value is saved.

Saving the "Wind / Alarm" setting



Note

The **"Wind / Prealarm"** setting tells the system the alarm triggering threshold according to the wind speed.

19. Use the arrows   to select the **"Thresholds / Alarm"** submenu, then press the  key.
 - ◁ The **"Alarm"** setting is selected .
20. Use the arrows   to enter the value for the **"Wind / Alarm"** setting, then press the  key to confirm.

Technical data	
Recommended value	72 km/h
Possible settings – The value of the "Wind / Alarm" parameter must be between the previously entered "Wind / Prealarm" value and 72 km/h.	Max. 72 km/h

- ◁ The symbol  appears to the right of the setting, and the **"Wind / Alarm"** value is saved.

21. Press the  key.
 - ◁ The **"Wind"** menu is displayed.

Saving the "Wind / Silent Free Slewing" setting



Note

The **"Wind / Silent Free Slewing"** setting allows the "Wind" alarms to be activated or deactivated when the crane is in weathervane mode. By default, the parameter is set to "NO", so the "wind" alarms remain active in the weathervane mode.

22. Use the arrows   to select the **"Wind"** menu, then press the  key to confirm.
 - ◁ The **"Wind"** submenu is displayed.
23. Use the arrows   to select the **"Silent Free Slewing"** submenu, then press the  key to confirm.
 - ◁ The **"Silent Free Slewing"** parameter is preselected .
24. Press the  key.
 - ◁ The status of the **"Silent Free Slewing"** parameter is selected .
25. Use the arrows   to select **"Yes"** or **"No"**, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the status of the **"Silent Free Slewing"** parameter.

Returning to the home screen

26. Press the  key four times.

◁ The home screen is displayed.

2.1.5 Pairing of "Slewing encoders"

Foreword - "Pairing of slewing encoders"

The slewing encoders consist of two encoders:

- The "CAN CTRL slewing encoder" or "Main encoder"
- The "CAN SENS slewing encoder" or "Redundant encoder"

The procedure for pairing the slewing encoders must be carried out for each of the two slewing encoders.

Pairing of "slewing encoders"

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.

◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows   to select the "Password" menu.

3. Press  to confirm.

◁ The screen for entering the "Password" is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the "Fitting" submenu, then press the  key to confirm.

◁ The "Fitting" menu is displayed.

Accessing the "Encoder" submenu

6. Use the arrows   to select the "Encoder" submenu, then press the  key to confirm.

◁ The "CAN CTRL slewing encoder" component is preselected  .

Accessing the "CAN CTRL slewing encoder" submenu

7. Display the "CAN CTRL slewing encoder" screen by pressing the  key.

- ◁ The encoder screen is displayed. The status **"CAN CTRL Slewing encoder""Dissociated OK"** is preselected .

Pairing the "CAN CTRL slewing encoder"



Note

The procedure is the same for pairing the **"CAN CTRL slewing encoder (or main encoder)"** and the **"CAN SENS slewing encoder (or redundant encoder)"**.

8. Use the arrows   to select the serial number (detected automatically) of the **"CAN CTRL slewing encoder"**, then press the  key to confirm.
 - ◁ The serial number of the **"CAN CTRL slewing encoder"** is selected .
9. Confirm the serial number of the **"CAN CTRL slewing encoder"** by pressing the  key.
 - ◁ The symbol  appears to the right of the **"CAN CTRL slewing encoder"** number. The encoder is paired.

Returning to the "Encoder" submenu

10. Press the  key once.
 - ◁ The **"Encoder"** submenu is displayed.

Pairing the "CAN SENS slewing encoder"

11. Repeat the previous five steps to pair the **"CAN SENS slewing encoder"**.

Returning to the home screen

12. Press the  key four times.
 - ◁ The home screen is displayed.
13. Restart the crane.

2.1.6 Entering the activation code for an "Option ability"

Entering the activation code for an "Option ability"



Note

The activation code is sent when the option is purchased from your **Manitowoc** agent.

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◁ The **Menu** screen is displayed.

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Accessing the "Password" menu

2. Use the arrows   to select the **"Password"** menu.
3. Press  to confirm.
 - ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the **"Fitting"** submenu, then press the  key to confirm.
 - ◁ The **"Fitting"** menu is displayed.

Entering the activation code for an "Option ability"

6. Use the arrows   to select the **"Options ability"** submenu and press the key  to confirm.
 - ◁ The field for entering the option's activation code is preselected  .



Note

An option's activation code is made up of 10 digits.

7. Press the  key.
 - ◁ The first digit of the activation code is selected .
8. Use the arrows   to enter the first digit of the activation code, then press the  key to confirm.
 - ◁ The first digit of the activation code is confirmed and the second is selected.



Note

The activation code is sent when the option is purchased from your **Manitowoc** agent.

9. Repeat the preceding step for every digit of the activation code, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the code, the code is confirmed, and the option is activated.

Returning to the home screen

10. Press the  key three times.
 - ◁ The home screen is displayed.

2.1.7 Changing the "Frequency group"

Foreword - "Frequency group" menu

The **"Frequency group"** menu makes it possible to change the frequency group when the radio link between the transmitter (radio control) and its receiver suffers disturbances.

Several frequency groups are available. For more details, contact your usual **Potain** service network agent.

Changing the "Frequency group"

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows to select the **"Password"** menu.
3. Press to confirm.
 - ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows to select the **"Fitting"** submenu, then press the key to confirm.
 - ◁ The **"Fitting"** menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows to select the **"Configuration"** submenu, then press the key to confirm.
 - ◁ The **"Configuration"** menu is displayed.

Accessing the "Radio control" submenu

7. Use the arrows to select the **"Radio control"** submenu, then press the key to confirm.
 - ◁ The **"Radio Control"** submenu is displayed.

Accessing the "Receiver" submenu

8. Press to confirm.
 - ◁ The **"Receiver"** submenu is displayed.

Configuring the "Frequency group" parameter

9. Use the arrows to select the **"Group"** parameter, then press the key to confirm.
 - ◁ The value for the **"Frequency group"** is selected .
10. Use the arrows to select the new **"Group"**, then press the key to confirm.
 - ◁ The symbol appears to the right of the selected **"Group"**.

Returning to the home screen

11. Press the key five times.

- ◀ The home screen is displayed.

Changing the frequency group on the 'CCS' system



Note

After the modification has been carried out on the CCT system, it is also necessary to modify the **"Frequency group"** on the **'CCS' system**.

12. Change the **"Frequency group"** on the **'CCS' system**. ➡ page 1-106

2.1.8 Activating or deactivating "2 transmitters" mode

Foreword - "2 transmitters" menu

The **"2 transmitters"** menu allows you to activate or deactivate the possibility of using a second radio control for driving the crane.

Activating or deactivating "2 transmitters" mode

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◀ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows   to select the **"Password"** menu.
3. Press  to confirm.
 - ◀ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the **'CCT' computer**. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the **"Fitting"** submenu, then press the  key to confirm.
 - ◀ The **"Fitting"** menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows   to select the **"Configuration"** submenu, then press the  key to confirm.
 - ◀ The **"Configuration"** menu is displayed.

Accessing the "Radio control" submenu

7. Use the arrows   to select the **"Radio control"** submenu, then press the  key to confirm.
 - ◁ The **"Radio Control"** submenu is displayed.

Accessing the "Transmitter" submenu

8. Use the arrows   to select the **"Transmitter"** submenu, then press the  key to confirm.
 - ◁ The **"Transmitter"** submenu is displayed.

Activating or deactivating "2 transmitters" mode

9. Use the arrows   to select the **"2 transmitters"** parameter, then press the  key to confirm.
 - ◁ The value of the **"2 transmitters"** mode is selected .
10. Use the arrows   to select the desired value of the **"2 transmitters"** mode, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the selected value of the **"2 transmitters"** mode.



Note

"Yes" = "2 transmitters" mode activated

"No" = "2 transmitters" mode deactivated

Returning to the home screen

11. Press the  key five times.
 - ◁ The home screen is displayed.

2.1.9 Entering the addresses of the radio controls "Address 1" and "Address 2"

Foreword - "Address 1" menu and "Address 2" menu

The **"Address 1"** menu allows you to enter the address of the radio control delivered as a standard with the crane.

The **"Address 2"** menu allows you to enter the address of the second radio control for using **"2 transmitters" mode**. ➡ page 2-14



Note

The address of a radio control can be seen on its start page when the radio control is switched on.

Entering the addresses of the radio controls "Addresses 1" and "Addresses 2"

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows   to select the **"Password"** menu.
3. Press  to confirm.
 - ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the **"Fitting"** submenu, then press the  key to confirm.
 - ◁ The **"Fitting"** menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows   to select the **"Configuration"** submenu, then press the  key to confirm.
 - ◁ The **"Configuration"** menu is displayed.

Accessing the "Radio control" submenu

7. Use the arrows   to select the **"Radio control"** submenu, then press the  key to confirm.
 - ◁ The **"Radio Control"** submenu is displayed.

Accessing the "Transmitter" submenu

8. Use the arrows   to select the **"Transmitter"** submenu, then press the  key to confirm.
 - ◁ The **"Transmitter"** submenu is displayed.

Entering the addresses of the radio controls "Addresses 1" and "Addresses 2"

9. Use the arrows   to select the **"Address 1"** parameter, then press the  key to confirm.
 - ◁ The value of the **"Address 1"** parameter is selected .
10. Enter the address of the radio control agent ➡ page 2-6.
11. Repeat the two previous steps for the **"Address 2"** parameter when using **"2 transmitters"** mode.

Returning to the home screen

12. Press the  key five times.
 - ◁ The home screen is displayed.

2.1.10 Activating and deactivating the "Safety protocol"

Foreword - "Secured radio link" menu



Note

The secured radio link allows protection of communication between the transmitter (radio control) and its receiver against piracy.

It is possible to activate or deactivate the secured radio link (or Safety Protocol) of the radio control:

- : Secured radio link activated.
- : Secured radio link deactivated.

Activating and deactivating the "Safety Protocol"

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows   to select the **"Password"** menu.
3. Press  to confirm.
 - ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the **"Fitting"** submenu, then press the  key to confirm.
 - ◁ The **"Fitting"** menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows   to select the **"Configuration"** submenu, then press the  key to confirm.
 - ◁ The **"Configuration"** menu is displayed.

Accessing the "Radio control" submenu

7. Use the arrows   to select the **"Radio control"** submenu, then press the  key to confirm.
 - ◁ The **"Radio Control"** submenu is displayed.

Accessing the "Safety Protocol" submenu

8. Use the arrows   to select the **"Safety Protocol"** submenu, then press the  key to confirm.
 - ◁ The "Safety Protocol" submenu is displayed.

Activating and deactivating the "Safety Protocol"

9. Press the  key.
 - ◁ The status of the **"Enable"** setting is selected .
10. Use the arrows   to select **"Yes"** or **"No"**, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the status of the **"Enable"** setting.



Note

The **"Diagnosis"** setting must indicate **"OK"**. If it indicates **"Err"** refer to the fault log for the source of the fault ➡ page 1-95.

Returning to the home screen

11. Press the  key five times.
 - ◁ The home screen is displayed.

Activation/deactivation of the secured link on the 'CCS' system



Note

After completing the modification on the **'CCT'** system, it is also necessary to make the same modification on the **'CCS' system**.

12. Activate/deactivate the secured link on the **'CCS'** system. ➡ page 1-115

2.1.11 Adjusting the "Release" setting

Adjusting the "Release" setting



Note

The parameters in this group allow the adjustment of the deceleration ramp and torque in the "Release" mode.



Note

Adjusting the deceleration ramp has a more noticeable effect when the crane is without load or with light load.

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◁ The **Menu** screen is displayed.

Accessing the "General" menu

2. Press the  key.
 - ◁ The **"General"** menu is displayed.

Accessing the "Slewing" submenu

3. Use the arrows   to select the **"Slewing"** submenu, then press the  key to confirm.
 - ◁ The **"Weathervaning system"** submenu is preselected.

Accessing the "Ramps" submenu

4. Use the arrows   to select the **"Ramps"** submenu, then press the  key to confirm.
 - ◁ The **"Release"** parameter is preselected  .

Adjusting the "Release" setting



Note

This parameter controls the deceleration ramp when the joystick is released. The setting range is from 80% to 100%. By default, the value is set to 100%.



Note

The closer the adjustment value is to 80%, the greater the stopping angle of the crane. The crane will slow down and come to a stop more slowly. In this situation the crane is said to be "gliding".

5. Press the  key.
 - ◁ The **"Release"** parameter is selected  .
6. Use the arrows   to enter the **"Release"** parameter value, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the **"Release"** parameter, and the value is saved.

Returning to the home screen

7. Press the  key four times.
 - ◁ The home screen is displayed.

2.1.12 Adjusting the "Counter slewing" parameters

Adjusting the "Counter slewing" parameters



Note

The parameters in this group allow the adjustment of the deceleration ramp and torque in the "Counter slewing" mode.



Note

Adjusting the deceleration ramp has a more noticeable effect when the crane is without load or with light load.

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the key.
 - ◁ The **Menu** screen is displayed.

Accessing the "General" menu

2. Press the key.
 - ◁ The **"General"** menu is displayed.

Accessing the "Slewing" submenu

3. Use the arrows to select the **"Slewing"** submenu, then press the key to confirm.
 - ◁ The **"Weathervaning system"** submenu is preselected.

Accessing the "Ramps" submenu

4. Use the arrows to select the **"Ramps"** submenu, then press the key to confirm.
 - ◁ The **"Release"** parameter is preselected .

Activating and deactivating the "Counter slewing" parameter



Note

The **"Counter slewing"** parameter controls the deceleration ramp during counter slewing on the joystick.

Activating the "Counter slewing" parameter



Note

The **"Counter slewing"** parameter is set to **"No"** by default. The parameter is therefore deactivated.

5. Use the arrows   to select the **"Counter slewing"** parameter, then press the  key to confirm.
 - ◁ The **"Counter slewing"** parameter is selected .
6. Use the arrows   to select **"Yes"**, then press the  key to confirm.
 - ◁ The **"Counter slewing"** parameter is activated.

Adjusting the "Value" of the "Counter slewing" parameter



Note

The setting range is from 100% to 120%. By default, the value is set to 100%



Note

The closer the adjustment value is to 120%, the smaller the stopping angle of the crane. The crane will slow down and come to a stop more quickly.

7. Use the arrows   to select the **"Value"** parameter, then press the  key to confirm.
 - ◁ The **"Value"** parameter is selected .
8. Use the arrows   to change the **"Value"**, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the **"Value"**. The **"Value"** is saved.

Returning to the home screen

9. Press the  key four times.
 - ◁ The home screen is displayed.

2.1.13 Activating and deactivating the "California OSHA" option

Activating and deactivating the "California OSHA" option



Note

Regulations in force in some countries or states require specific values for the load limiter.

The **"California OSHA"** option makes it possible to parameterize the load limiter to meet these requirements.

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◁ The **Menu** screen is displayed.

2. 'CCT' Crane Control Tower System

2.1 'CCT' Crane Control Tower

Accessing the "Password" menu

2. Use the arrows   to select the **"Password"** menu.
3. Press  to confirm.
 - ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the **"Fitting"** submenu, then press the  key to confirm.
 - ◁ The **"Fitting"** menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows   to select the **"Configuration"** submenu, then press the  key to confirm.
 - ◁ The **"Configuration"** menu is displayed.

Accessing the "Options" submenu

7. Use the arrows   to select the **"Options"** submenu, then press the  key to confirm.
 - ◁ The **"Options"** submenu is displayed.

Accessing the "Options 2" submenu

8. Use the arrows   to select the **"Options 2"** submenu, then press the  key to confirm.
 - ◁ The **"Options 2"** submenu is displayed.

Activation of the "California OSHA" option

9. Use the arrows   to select the **"California OSHA"** option, then press the  key to confirm.
 - ◁ The setting for the **"California OSHA"** option is preselected .
10. Press the  key.
 - ◁ The setting for the option is selected .
11. Use the arrows   to select **"Yes"**, then press the  key.
 - ◁ The symbol  will appear to the right of the setting for the option and the value will be stored.



Note

"No": option not activated.

"Yes": option activated.

Returning to the home screen

12. Press the  key six times.
 - ◁ The home screen is displayed.

2.1.14 Activating and deactivating the "Lamp shunt zone" option

Activating and deactivating the "Lamp shunt zone" option



Note

The "**Lamp shunt zone**" option allows you to activate or deactivate a flashing light when the **Topsite** option is bypassed.



Note

If the crane is originally delivered with the flashing light, it must not be deactivated.

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows to select the "**Password**" menu.
3. Press to confirm.
 - ◁ The screen for entering the "**Password**" is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the '**CCT**' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows to select the "**Fitting**" submenu, then press the key to confirm.
 - ◁ The "**Fitting**" menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows to select the "**Configuration**" submenu, then press the key to confirm.
 - ◁ The "**Configuration**" menu is displayed.

Accessing the "Options" submenu

7. Use the arrows to select the "**Options**" submenu, then press the key to confirm.
 - ◁ The "**Options**" submenu is displayed.

Accessing the "Options 2" submenu

8. Use the arrows   to select the **"Options 2"** submenu, then press the  key to confirm.
 - ◁ The **"Options 2"** submenu is displayed.

Accessing the "Lamp shunt zone" submenu

9. Use the arrows   to select the **"Lamp shunt zone"** submenu, then press the  key to confirm.
 - ◁ The **"Lamp shunt zone"** submenu is displayed.

Activating and deactivating the "Lamp shunt zone" option

10. Press the  key.
 - ◁ The status for the **"Lamp shunt zone"** option is preselected.  .
11. Press the  key.
 - ◁ The status for the **"Lamp shunt zone"** option is selected.  .
12. Use the arrows   to select **"Yes"** or **"No"**, then press the  key to confirm.
 - ◁ The symbol  appears to the right of the status of the **"Lamp shunt zone"** parameter.

Returning to the home screen

13. Press the  key six times.
 - ◁ The home screen is displayed.

2.1.15 "Hoist emcy management type" menu

Foreword - "Hoist emcy management type" menu

The **"Hoist emcy management type"** menu allows you to choose between two modes for winding the hoist rope during a sudden stop (emergency stop, power failure, over-speed fault, etc.) of the hoisting movement with a small load.

There are two modes:

- **"Limited Speed"** (default mode)
- **"Maximum Speed"**

"Limited Speed" mode limits the maximum hoisting speed. It ensures optimal winding of the hoist rope on the drum in case of a sudden stop of the hoisting movement with a small load

"Maximum Speed" mode allows hoisting movements without speed limitation. This mode does not ensure optimal winding of the hoist rope on the drum in case of a sudden stop of the hoisting movement with a small load. A fault message  page 1-95 could be displayed during a sudden stop.



Note

A sudden stop (emergency stop, power failure, overspeed fault, etc.) of the hoisting movement with a small load may result in poor winding of the hoist rope on the drum. To overcome this problem, the **"Limited Speed"** mode is activated by default.

Selection of the "Hoist emcy management type" mode

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the **CCT**



Note

Procedure to be followed from the home screen.

1. Press the key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows to select the **"Password"** menu.
3. Press to confirm.
 - ◁ The screen for entering the **"Password"** is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows to select the **"Fitting"** submenu, then press the key to confirm.
 - ◁ The **"Fitting"** menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows to select the **"Configuration"** submenu, then press the key to confirm.
 - ◁ The **"Configuration"** menu is displayed.

Selection of the "Hoist emcy management type" mode

7. Use the scrolling arrows to select the **"Hoist emcy management type"** parameter, then press the key to confirm.
 - ◁ The value of the **"Hoist emcy management type"** mode is selected .
8. Use the scrolling arrows to select the desired mode for **"Hoist emcy management type"**, then press the key to confirm.
 - ◁ The symbol appears to the right of the value of the selected **"Hoist emcy management type"** mode.



Note

"Limited Speed" = With a speed limitation during a hoisting movement with a small load.

"Maximum Speed" = Without speed limitation during a hoisting movement with a small load.

Returning to the home screen

9. Press the key as many times as is necessary to return to the home screen.
 - ◁ The home screen is displayed.

2.1.16 Activating or deactivating the "3rd jib section cut" option

Activating or deactivating the "3rd jib section cut" option



Note

The "3rd jib section cut" option indicates to the on-board computer whether or not the extension of the 3rd jib section is fitted.

Procedure

Accessing the "Menu" screen



Note

Procedure to be followed on the CCT



Note

Procedure to be followed from the home screen.

1. Press the  key.
 - ◁ The **Menu** screen is displayed.

Accessing the "Password" menu

2. Use the arrows   to select the "Password" menu.
3. Press  to confirm.
 - ◁ The screen for entering the "Password" is displayed. The first letter of the password is selected.

Entering a value or password via the 'CCT' computer

4. Enter a value or password via the 'CCT' computer. ➡ page 2-6

Accessing the "Fitting" submenu

5. Use the arrows   to select the "Fitting" submenu, then press the  key to confirm.
 - ◁ The "Fitting" menu is displayed.

Accessing the "Configuration" submenu

6. Use the arrows   to select the "Configuration" submenu, then press the  key to confirm.
 - ◁ The "Configuration" menu is displayed.

Accessing the "Options" submenu

7. Use the arrows   to select the "Options" submenu, then press the  key to confirm.
 - ◁ The "Options" submenu is displayed.

Accessing the "Options 3" submenu

8. Use the arrows   to select the "Options 3" submenu, then press the  key to confirm.
 - ◁ The "Options 3" submenu is displayed.

Accessing the "3rd jib section cut" submenu

9. Use the arrows   to select the **"3rd jib section cut"** submenu, then press the  key to confirm.
 - ◁ The **"3rd jib section cut"** submenu is displayed.

Activating or deactivating the "3rd jib section cut" option

10. Press the  key.
 - ◁ The status of the **"3rd jib section cut"** option is preselected  .
11. Press the  key.
 - ◁ The status of the **"3rd jib section cut"** option is selected  .
12. Choose one of the following alternatives.
 - Alternative 1 of 2 – The extension of the third jib section is fitted**
 - ▶ Use the arrows   to select **"No"** then press the  key to confirm.
 - ◁ The  symbol is displayed on the right of the status of the **"3rd jib section cut"** parameter.
 - Alternative 2 of 2 – The extension of the third jib section is dismantled**
 - ▶ Use the arrows   to select **"Yes"**, then press the  key to confirm.
 - ◁ The  symbol is displayed on the right of the status of the **"3rd jib section cut"** parameter.

Returning to the home screen

13. Press the  key six times.
 - ◁ The home screen is displayed.



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