Smart Construction Pilot Flex Tablet App Handling Manual

August 2023
Ver1.0-0002

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Before you read this manual:

▪ Before you start

- This document describes how to perform the initial setup and how to use the Smart Construction Pilot Flex on a day-to-day basis.
- For displaying units, International System of Units (SI) is used. Explanation, numeral values, illustration, etc. are based on the information as of the time this manual was prepared.
- If you have any questions or opinions, please contact Smart Construction Support Center.
- Use the application after understanding the contract conditions, guarantees, and responsibilities stated in the application software terms of service.
- Screen and display of the application may change when updated. If there are any differences between what is written in this manual and the display on the application screen, operate according to the application display.

▪ Trademark used in this manual

- Smart Construction is the trademarks or registered trademarks of Komatsu Ltd.

* In general, company names, product names, etc. written here are business names, trademarks or registered trademarks of each company.

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Overview

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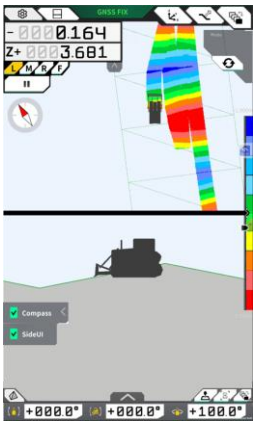
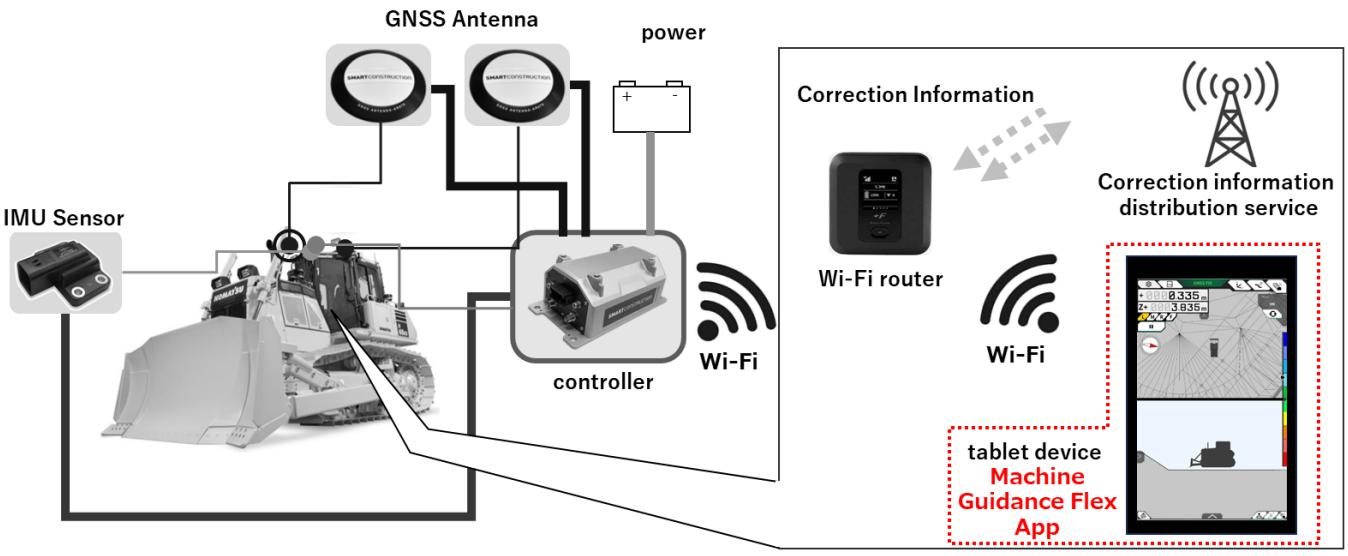
1.1 Overview

1.1.1 About this application

The Smart Construction Pilot Flex application is an application dedicated the machine guidance for providing guidance and travel history information at ground contact points for bulldozers and other mobile construction machine vehicles equipped with the Smart Construction 3D Machine Guidance Flex Kit, hereinafter referred to as the 3DMG Flex Kit (sold separately). To use the software, a license contract is required.



1.1.2 System overview drawing



A tablet device, tablet power feeding apparatus, tablet holder attachment, and Wi-Fi router are required to use the machine guidance.

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1.2 Flow until the start of use

- Set up and register the Pilot Web application
  Project settings and registration of data in advance to use machine guidance.
  To register, information is required such as on controllers of vehicles with 3DMG Flex Kits installed.

- Install the tablet application
  Install the application dedicated to Machine Guidance Flex from the Google Play Store.

- Set up the tablet application
  Connect the tablet and the 3DMG Flex Kit controller via a Wi-Fi router connected to the Internet. Perform initial settings for the tablet application.

- Machine calibration
  For the machine calibration, see the separate manual.

- Set up the project files
  Download and set up the project files registered in the Pilot Web application.

- Start the machine guidance

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02

Chapter

Preparation

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2.1 What to prepare

• Tablet device (types of tablet devices that can be used)

After the machine guidance kit is installed, the guidance functions can be used by operating the tablet device on which the application software is installed.
The following tablet device and OS have been verified to work:
• **Lenovo Tab P11 Pro 2nd Gen (OS: Android12)**

For other devices, please contact the Support Center.
* iOS devices such as iPad are not available.

Supplement

- When the OS software is updated, it will be changed to the latest version at the time of update. Once updated, it is not possible to revert to the previous version that has been used. Please note that depending on when your tablet device was manufactured, updating to the latest version may slow its operation, or the tablet device may not be compatible with the latest version.

- In some rare cases, problems may occur during software updates, such as corruption or deletion of internal data on the tablet device, or the machine body not starting up. When updating the software, copy the data to a PC, etc., for backup in case of unexpected situations, and then perform the operation properly according to the operation instructions of the tablet device manufacturer. For details, please contact the tablet device manufacturer.

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2.2 Setup and registration

▪ Set up the Smart Construction Pilot Web application

The Smart Construction Pilot Web application is a web application for confirming and setting up various information used in the Smart Construction machine guidance, as well as sending the data required for the operation. For details, see “[Smart Construction Retrofit] Pilot Web application (for System management) Operation & Maintenance Manual”.
* It is the common web application in common with Smart Construction Retrofit.

▪ Install the tablet application

Download the required application software “Smart Construction Pilot Flex” from the Google Play Store and install it on the tablet device.

Search for “Smart Construction Pilot Flex” at the Google Play Store. When the Smart Construction Pilot Flex application is successfully installed on your tablet device, the following icon is displayed on the home screen.

Supplement

- To use the Smart Construction Pilot Flex, agreeing with terms of service is required. As the “terms of service” are displayed when Smart Construction Pilot Flex is first started, be sure to read it carefully.
- Connect the tablet device to the Internet before installing the Smart Construction Pilot Flex. The type of connection can be either mobile Wi-Fi or public/company Wi-Fi.

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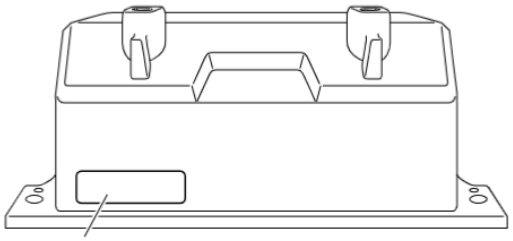
▪ Set up Wi-Fi

Connect the tablet device to the GNSS controller via a Wi-Fi router. How to set up the Wi-Fi router and tablet device depends on the device you use. For FS040W, perform the settings according to the following procedure. Referring to the settings procedure in FS040W, set up the device according to the Operation & Maintenance Manual of your device.

Supplement

The method described here is just an example. For details, see the Operation & Maintenance Manual of your device.

1. Confirm the SSID and password of the GNSS controller.
   • SSID: The SERIAL NUMBER of the GNSS controller



SSID indication position

   • Password: the one that reads SSID backwards.
   (Example) If the SSID is “Retro-48A4934916E4”, the password is “4E6194394A84”.
   Insert the SIM card into the Wi-Fi router.

2. Connect the Wi-Fi router to the PC with a USB cable to charge the battery.
   Prepare the charging cable that matches your Wi-Fi router.
   When connected, the driver is automatically installed on the PC.

3. Start the Wi-Fi router’s settings screen on the PC and login.

4. Set the host IP address to “192.168.128.1” on the DHCP settings screen of the Wi-Fi router.
   If required, change the value of the subnet mask as well.

5. Change the SSID and password of the Wi-Fi router to match the SSID and password of the GNSS controller, as confirmed in step 1.

6. Disable the privacy separator function of the Wi-Fi router.
   If the privacy separator function is valid, information cannot be exchanged between devices and the system will not function.

7. The Wi-Fi router settings are reflected. The Wi-Fi router and GNSS controller are connected.

8. Close the settings screen of the Wi-Fi router and disconnect it from the PC.

9. Enable the Wi-Fi function on the tablet device. The SSID of the GNSS controller is displayed in the Wi-Fi network list.

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03

Chapter

Initial settings for the tablet application

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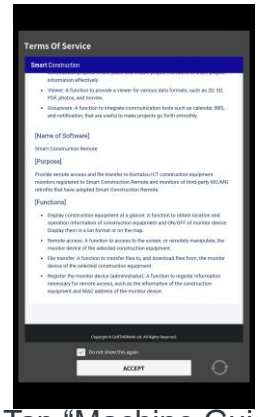
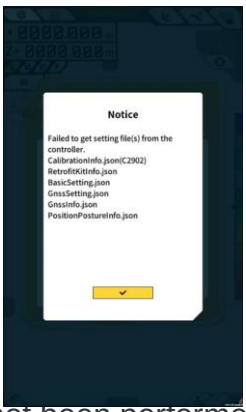
3.1 Smart Construction Pilot Flex Start-up

1. Tap “Smart Construction Pilot Flex” on the tablet screen. The screen shown below is displayed. Select the language to use, and select “OK”.

2. Terms Of Service is displayed. Slide the screen downward to confirm the contents and tap the ✓ button. If there is no need to display the terms of service from next time onward, please select “Do not display from next time onward” before accepting the Usage Agreement. A start-up screen is displayed.



3. Tap “Machine Guidance”. If the machine calibration has not been completed, the following screen is displayed. Then, tap the ✓ button.



If the machine calibration has not been performed, perform the calibration.
See the calibration manual.

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3.2 Set language and units

To change the language, follow the steps below. Length and weight units can also be changed.

1. From the start-up screen, tap “Common Settings”.

2. Select “Language”, “Unit of Length”, “Coordinate”, and “FreeSpaceThreshold”. Then, tap the ✓ button.

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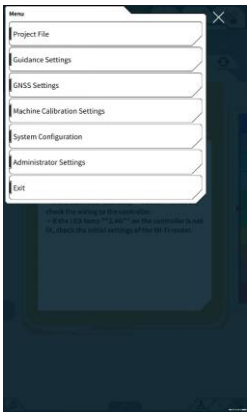
3.3 Project files

The following operations are possible from the “Project File Menu” for project files (3D design data) used in the machine guidance function.

Project File Download	Download project files from the Smart Construction Server.
Create project files	Create new project files
Select project files	Select and load the project files on the tablet.
Select design surface	Select a design surface to be used in the project.
Edit project files	Edit the project files.

1. Tap ⚙ to open the menu.



2. Tap the “Project File”.

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3.3 Project files

3.3.1 Download project files

1. Tap  button.
   A list of project files registered on the Smart Construction Server is displayed.

2. Tap the download button for the target project files. Tap the ✓ button to download the files.

3. After the completion of downloading, you can designate the target project files by tapping the ✓ button.

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3.3.2 Create project files

You can create project files on the tablet.

1. Tap [+] button.

2. Input the project name.

3. Tapping [✎] button brings you to the Localization/Projection settings screen. Then, enter the coordinate system.

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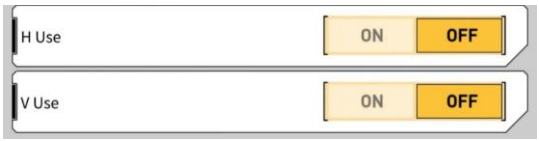
3.3 Project files

<Localization settings>

- Tapping + button brings you to the Add Control Points screen.

▶ Add control points

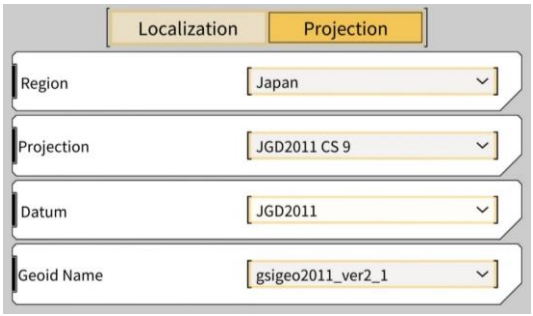
- Input the Control Points name.
- Input the distance N, E, and Z from the reference point.
- Align the control points and measurement points with the left/right edge (front/rear), and tap ↻ button to acquire the coordinates.
- To use the horizontal/vertical residual, tap ON/OFF.



- To discard the control points, tap 🗑 button.
- When all settings are finished, tap the ✓ button to save the settings.

<Projection settings>

- Tap “Projection” at the top of the screen.



- Select Region / Projection / Datum / Geoid Name.
- To save the settings, tap the ✓ button at the lower right of the screen.
- If the required file has not yet been downloaded, a confirmation window is displayed. Then, tap the ✓ button to download the file.

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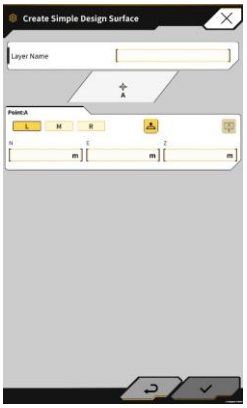
3.3 Project files

4. To create a simple design surface, tap [ ] button to move to the Create Simple Design Surface screen. Cutting edge coordinates can be acquired and measured with 1 to 3 points.

(1 point measurement)

- Tap “Flat Plane” and tap the → button at the lower right of the screen.

- Enter the layer name.



- Align the left/right edge (front/rear) of the system measurement point with the target station and tap the [ ] button to acquire the measurement coordinates.
- If the topographic survey points have been acquired in advance, the coordinates of the survey points can be acquired by tapping the [ ] button.
  Select a point on the target layer and tap the ✓ button at the lower right of the screen.

  Tap [ ] button to confirm the coordinate information.

- Tap the ✓ button at the lower right of the screen to save the design surface. To use a design surface in a project, tap the ✓ button in the Confirmation window.

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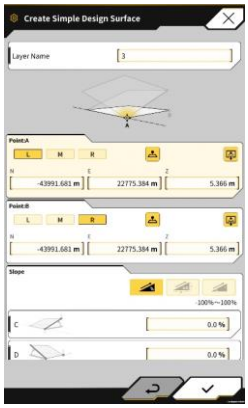
(2 point measurement)

- Tap “2 Point Sloping Plane” and tap the → button at the lower right of the screen.
- As with 1 point measurement, a layer name input and acquirement of system measurement point coordinates are done.

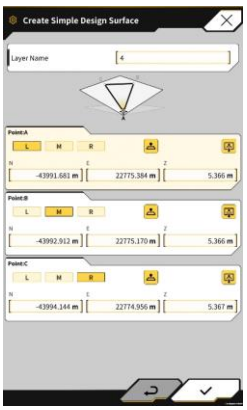


- Input the slope information. Tap  to select the method of inputting the slope (%/ratio/degrees).

- Tap the ✓ button at the lower right of the screen to save the design surface. To use a design surface in a project, tap the ✓ button in the confirmation window.

(3 point measurement)

- Tap “3 Point Sloping Plane” and tap the → button at the lower right of the screen.
- As with 1 point/2 point measurement, a layer name input and acquirement of system measurement point coordinates are done.



- Tap the ✓ button at the lower right of the screen to save the design surface. To use a design surface in a project, tap the ✓ button in the confirmation window.

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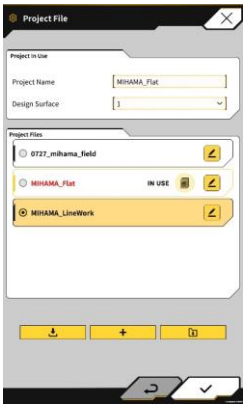
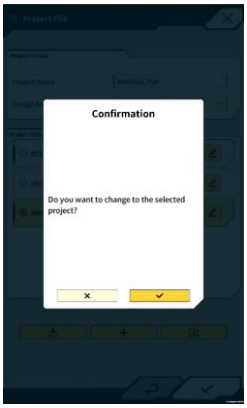
3.3.3 Select project files

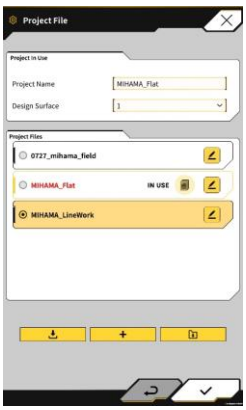
1. When you tap a listed project file, it will be highlighted with yellow hatching.
2. Tap the ✓ button at the lower right of the screen.
3. Tapping the ✓ button in the Confirmation window sets the selected project files.





3.3.4 Select project display layer

1. Tap the pull-down menu on “Design Surface”. The list of the design surfaces that exist in the project files is displayed.



2. Tap the design surface you want to display to select it.
3. Tap the ✓ button at the lower right of the screen. If a confirmation window is displayed, tap the ✓ button.

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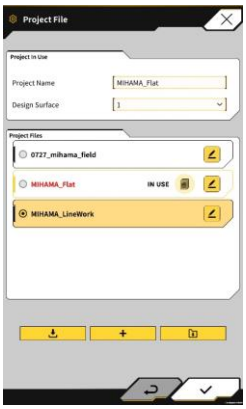
3.3.5 Edit project files

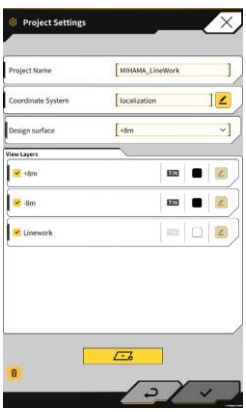
1. Tap  button on the target project files.

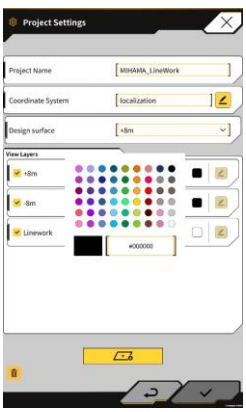


2. Each item can be edited. (For Edit project names, Edit coordinate systems, Select design surfaces, and Create simple design surface, see “3.3.2 Create project files”)

   You can select the layer to display. When you check layers in the list, they are displayed on the machine guidance screen. When you unchecking them, they are not displayed.

   Tap a color button between “TIN” and “  ” to change the color of the display layer.





3. When you finish editing, tap the ✓ button at the lower right of the screen. The confirmation window is displayed. Tap the ✓ button when you want to save the settings.

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04

Chapter

Machine guidance

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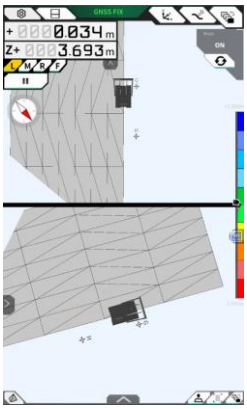
4.1 Use the machine guidance function

4.1.1 Start up main screen

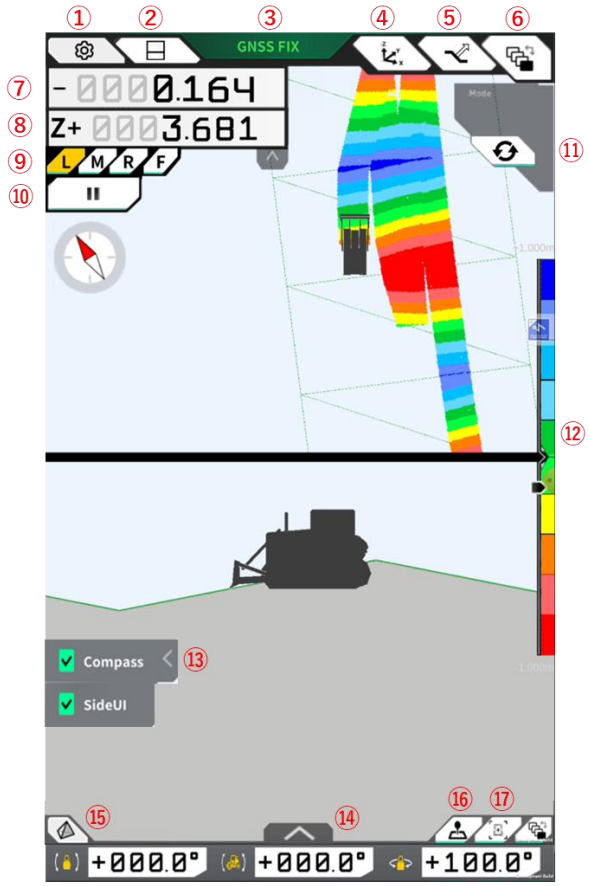
1. Tap “Machine Guidance” on the start-up screen. Required data for startup is loaded and the main screen is displayed.

   If the required data cannot be acquired, an error notification will be provided.



4.1.2 Main screen operation

The function of each icon displayed on the main screen is as shown below.



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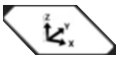
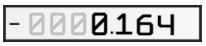
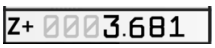
4.1 Use the machine guidance function

No	Icon	Name	Function
1		Menu button	Display the menu.
2		Display split switching button	Each tap switches the display split (full screen display ⇔ 2 split display).
3		GNSS status button	Tap the button to display the GNSS status code information.
4		Location measurement button	Tapping the button brings you to the location measurement screen.
5		Target surface offset setting button	Tapping the button brings you to the offset setting screen of the target surface. After completing the settings, the offset surface from the slope is displayed.
6		View switching button	Display the view switching button.
7		Display the distance from the target surface	Display the distance from the selected target surface or the offset surface.
8		Elevation display	Display the height of elevation.
9		Location position view switching button	The current measurement location is displayed (in yellow). Six locations in total: (F: front, R: rear) of (L: left, M: center of body, R: right)
10		Archive data acquisition ON/OFF button	Stops (‖) and resumes (▶) acquiring archive data. If it is stopped, the archive will not be updated.
11		Heatmap color display ON/OFF button	Switch heatmap ON/OFF for construction record. Regardless of ON/OFF of the display, the archive will be updated.
12		Heatmap color bar	Display the range of heights where the distance to the target surface is arbitrarily set in color.
13		Subwindow display 1	Tap it to display a subwindow. With the subwindow, you can turn ON/OFF the display elements.
14		Subwindow display 2	Tap it to display a subwindow. With the subwindow, the roll/pitch angle and direction angle of the machine body can be displayed.
15		Target surface TIN (Triangulated Irregular Network) select button	Tapping the button brings you to the full-screen target surface TIN select screen (see “4.1.4 Target surface TIN select view”). When you complete the selection, you will return to the original screen. Multiple TINs are selected by the selected TIN and the angle of the specified range.
16		Topographic survey point add button	Record the coordinates of the current specified survey point. Tap the button to add the surveyed points to the topographic survey point list screen.
17		Button to display at the center of the machine	Switch the machine display to the center of the screen.

TIN (Triangulated Irregular Network): A digital data structure that depicts the earth’s surface in a set of triangles.
In this application, it is used to set the target surface.

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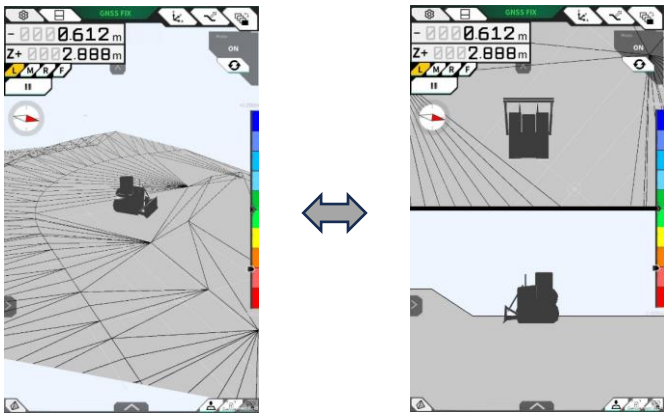
4.1 Use the machine guidance function

■ Display the menu

Tap ⚙ .

■ Switch the display split.

Tap ⊟ to switch the display of the main screen.
(Full screen display ⇔ 2-split display)



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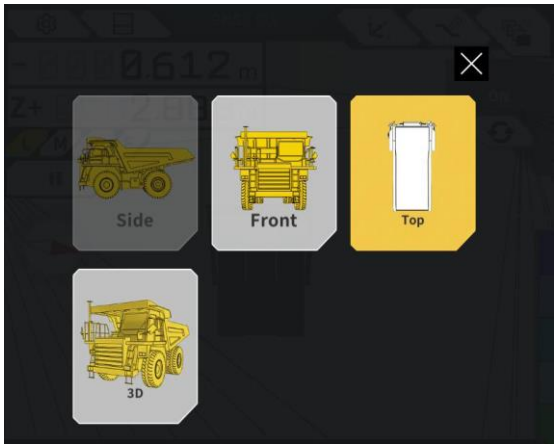
4.1 Use the machine guidance function

■ Switch the view

Tap  to display the view switching screen. Tap each icon to switch to the following display. In 2 split display, the display can be switched for each screen.



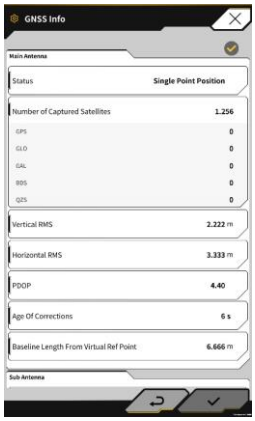
- Side: Operator side viewpoint
- Front: Operator front viewpoint
- Top: Top viewpoint
- 3D: 3D free viewpoint

■ Switch the measurement location

Tap “L”, “M”, “R”, or “F(R)” to switch the location of the measurement point displayed on the screen to front left, front middle, front right, rear left, rear middle, or rear right.

■ Display the GNSS information

Tap  to display the GNSS information.



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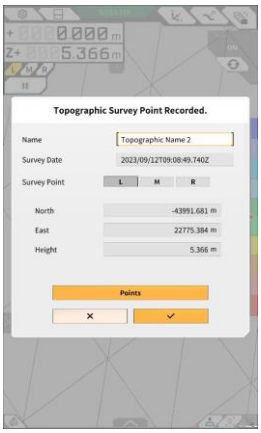
■ Add the topographic survey point

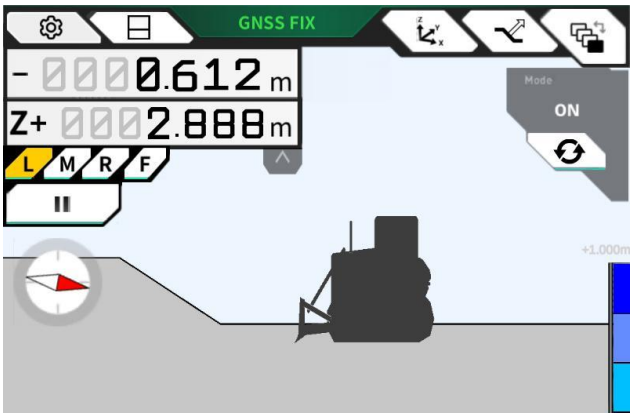
Tap  to record the current location of the system survey point.



When the record button is tapped, the name of the survey point can be edited.
Tap the “Topographic Survey Point List” button to display a list of survey points.
To save the survey point, tap the “Save” button.

4.1.3 Operation of guidance view

The guidance view on the main screen shows the design surface and the Kit-equipped machine. You can slide with your finger and zoom in and out.



- You can slide by swiping (touching the screen with one finger and tracing the screen).
- You can zoom in by pinching out (touching the screen with two fingers and moving them apart).
- You can zoom out by pinching in (touching the screen with two fingers and moving them in a pinching manner).

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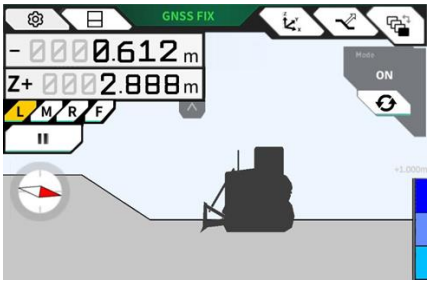
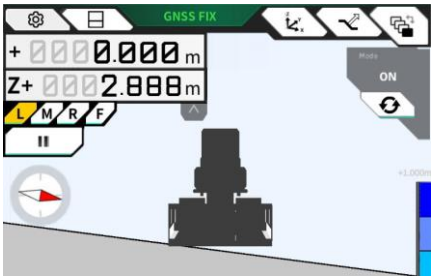
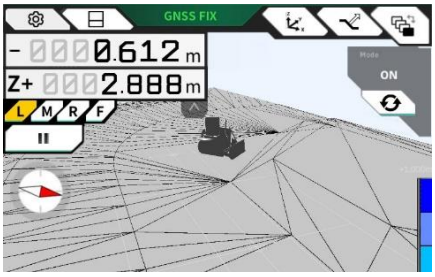
4.1 Use the machine guidance function

Tap to switch the viewpoint.

View	Viewpoint	Function
	Operator side viewpoint	You can confirm how the machine is positioned relative to the design surface in the side view of the Kit-equipped machine.
	Operator front viewpoint	You can confirm how the machine is positioned relative to the design surface in the operator's viewpoint.
	Top viewpoint	You can confirm the site location by looking down from the top viewpoint.
	3D free viewpoint	The status of the current construction can be viewed in a 3D image from a free viewpoint.

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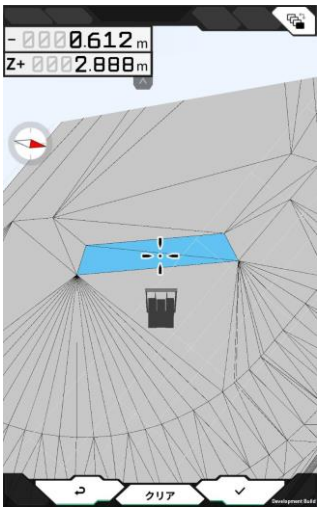
4.1.4 Target surface TIN select view

Tap  on the guidance main screen to switch to the target surface TIN select view. The highlighted light blue surface in the center of the screen is selected as the target surface. The target surface can be moved by sliding the screen.



- Tap the ✓ button to confirm the target surface and return to the previous screen.
- Tap the “Clear” button to cancel selecting the target surface and return to the previous screen.
- Tap the ⏎ button to reset change contents on the target surface TIN select view and return to the previous screen.

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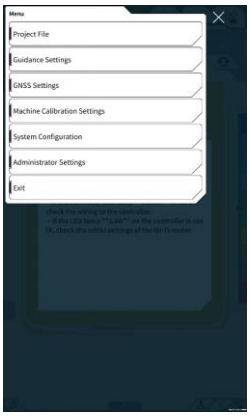
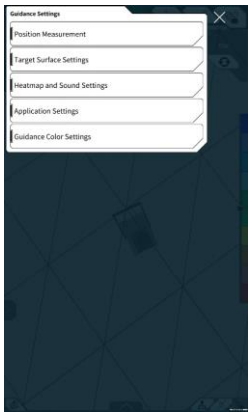
4.2 Set up machine guidance

From the “Guidance Settings” menu, the following menus can be selected.

Position Measurement	Measure the coordinates at the system measurement location and confirm and change the settings to offset by the specified number.
Target Surface Settings	You can change the offset value on the target surface.
Heatmap and Sound Settings	The heatmap display and sound guidance volume can be set according to the distance between the system measurement points and the design surface.
Application Settings	Confirm and change the settings of SMART CONSTRUCTION 3D Machine Guidance.
Guidance Color Settings	Change TIN, the target surface, and the background color.

1. Tap ⚙ to open the menu.
   Tap “Guidance Settings”.





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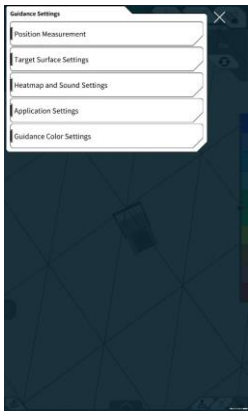
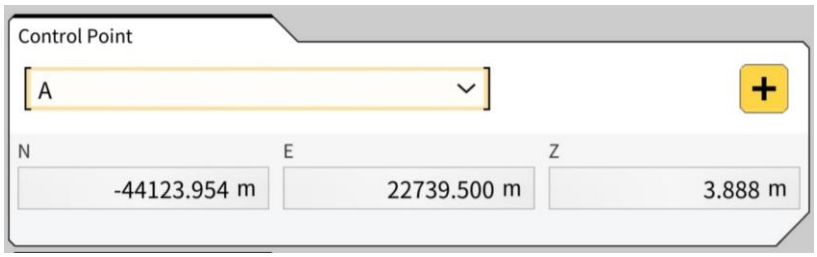
4.2.1 Location measurement

1. In the “Guidance Settings” menu, tap “Position Measurement”.



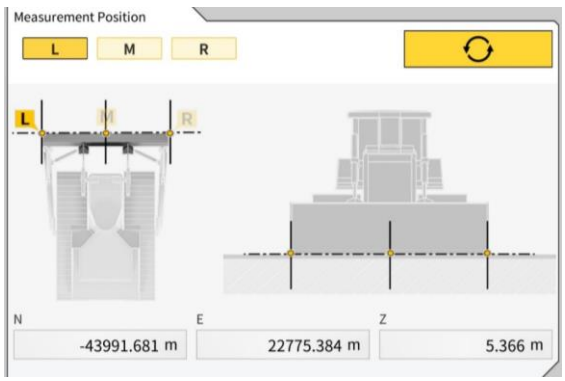
2. Refer to the following, and perform the settings.

- Select the reference point.
- Select the reference point that is already saved. To set up manually, tap + button, enter values for name, N, E, and Z, and tap the ✓ button.



- Measure the location of the system measurement point.

  Select the cutting edge measurement position L/M/R, enter the distance to the reference point △Z, and tap the button. In a few seconds, the coordinates of the cutting edge position are displayed. If GNSS is not fixed, the display of button will change to “RTK NOT FIX”, so please fix it before measurement.



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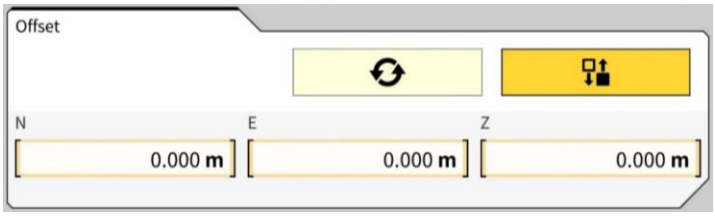
- Offset the difference and reflect it on the cutting edge.

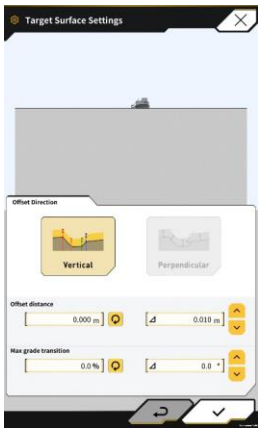
  When the cutting edge position is measured while the reference point is set, the difference between the reference point and the cutting edge position is displayed in “Difference”.

  Tap  button to set the difference to the offset value. To cancel the offset, tap  button.



4.2.2 Change target settings

In “Guidance Settings”, tap “Target Surface Settings” to go to the settings screen. You can change the target surface offset settings and the target surface selection settings. (For the procedure to select a target surface, see “4.1.4 Target surface TIN select view”.)



■ Change the offset settings on the target surface

The target surface is moved up or down by the set offset value.

1. Select the offset direction.

   Vertical : Offset in the vertical direction
   Perpendicular: Offset in the perpendicular direction to the target surface

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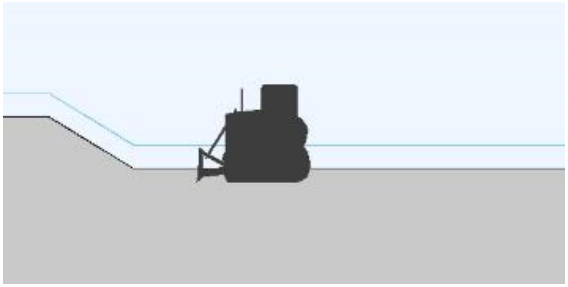
2. Set up the offset distance.

   The target surface is offset by the number entered in “Offset distance”. You can reset the input content by tapping .

   When entering a number in ⊿ and tapping , the offset distance goes up or down by the entered number.

   The offset target surface is displayed in green line on the guidance screen.



3. Tap the ✓ button to reflect the settings.

■ Change the maximum slope change of the target surface

In the target surface TIN select view, you can set the range that will be selected as the target surface.

1. In “Maximum Slope Change”, enter the slope change you wish to set as the target surface.

   You can perform settings by setting the change amount in ⊿, and tapping .
   In the target surface TIN select view, a design surface with a slope less than the maximum slope change value and adjacent to the TIN on the selection icon can be set as the target surface.

2. Tap the ✓ button to reflect the settings.

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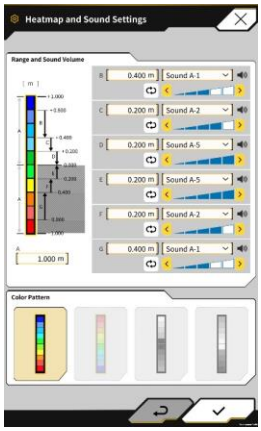
4.2.3 Change heatmap and volume settings

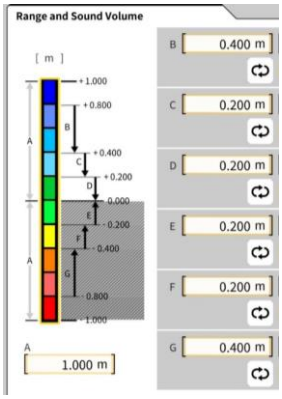
Depending on the measurement position and distance to the target surface, a heatmap display and beep sound can be set.

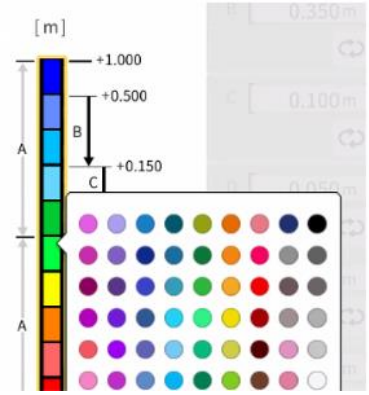
1. In the “Guidance Settings” menu, tap “Heatmap and Sound Settings”. The current settings are displayed.



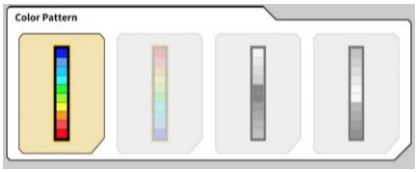
2. Refer to the following, and change the settings.

- Enter the numbers in “Range and Sound Volume” to change the range of the heatmap display.
- Tap the rectangle in the “Range and Sound Volume” heatmap to specify one color at a time.





- From “Color Pattern”, select 4 patterns of heatmaps prepared in advance.
- Tap on “Range and Sound Volume” to set the volume of the sound that will be emitted at five different levels when approaching the distance set in the heatmap. Sound can be selected from 30 different types and heard by pressing the speaker button.



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4.2.4 Change application settings

1. In the “Guidance Settings” menu, tap “Application Settings”.

   The current settings of Smart Construction 3D Machine Guidance Flex are displayed.

Name	Function
Clear the driving archive	Delete the heatmap of the driving archive.
Display the reference point name	Switch the reference point name display ON/OFF.
Digit number of decimal points	Switch the effective accuracy when displaying the distance from the measurement position to the target surface.
Distance and direction	Switch the calculation method of the distance between the measurement position and the design surface using [Vertical / Perpendicular to design surface].
Maximum baseline length	Set the effective distance of the caution to be displayed when getting too far from the control point.
Machine body display mode	Switch the machine body display to ON/OFF.
Side display rotation mode	When the machine guidance “Side” display view is ON, construction machinery is displayed with it horizontally fixed. When it is OFF, the design surface is displayed with it horizontally fixed.
Target surface expansion	Switch the target surface expansion to ON/OFF.
Light bar size	Switch between large, medium and small of the light bar size.

2. Change the settings and tap the ✓ button. Changed content is reflected and you return to the Guidance screen.

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05

Chapter

Change the settings

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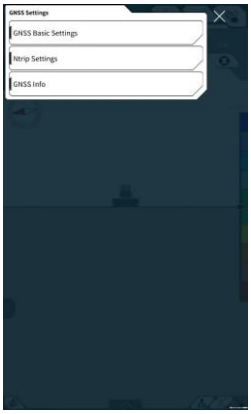
5.1 Change the GNSS settings

From the “GNSS Settings” menu, the following menus can be selected.

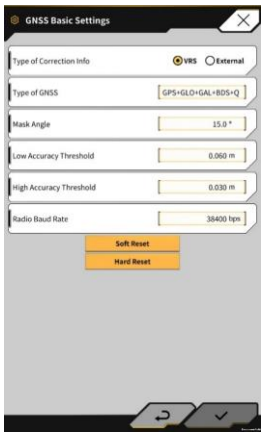
GNSS Basic Settings	Display the GNSS basic settings.
Ntrip Settings	Confirm the Ntrip settings.
GNSS Info	Display GNSS information such as status and number of satellites used.

1. Tap ⚙ to open the menu.
2. Tap “GNSS Settings”.



5.1.1 Confirm and change GNSS settings

1. In the “GNSS Settings” menu, tap “GNSS Basic Settings”.



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2. Refer to the following, and perform the settings.

- Edit each item to change the GNSS settings and tap the ✓ button. Changed content is reflected and you return to the previous screen.
- Tap “GNSS Hot Reset” to reset the satellite correction data in the GNSS receiver. When it is completed successfully, you return to the previous screen.
- Tap “GNSS Worm Reset” to re-acquire the orbits (ephemeris) of each satellite by resetting the satellite correction information in the GNSS receiver. When it is completed successfully, you return to the previous screen.

5.1.2 Change Ntrip settings

Ntrip is an acronym for “The Networked Transport of RTCM via Internet Protocol”. It is a protocol for distributing the differential GPS (DGPS) data via the Internet. Please note that what to enter in the form will vary depending on the service being used.

1. In the “GNSS Settings” menu, tap “Ntrip Settings”.
   Ntrip caster server authentication information and connection status logs are displayed.

2. Refer to the following, and perform the settings.

- Tap the button to acquire the mount point from the Ntrip caster.
- You can also enter the mount point name manually.

3. Tap the ✓ button to start the Ntrip connection.

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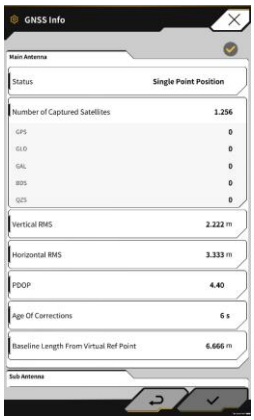
5.1.3 Confirm GNSS information

1. In the “GNSS Settings” menu, tap “GNSS Info”.
   A list of GNSS information is displayed.



   Confirm that the “Vertical RMS” and “Horizontal RMS” of the “Main Antenna” are 0.02 or less. If it is not 0.02 or less, wait until reception conditions for the satellite are better before checking again.

2. Tap the ✓ button. You return to the previous screen.

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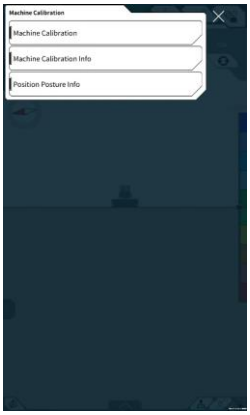
5.2 Change the machine calibration settings

From the “Machine Calibration Settings” menu, the following functions are available.

Machine Calibration	Perform calibration of the Kit-equipped machine.
Machine Calibration Info	Displays calibration information list of the Kit-equipped machine.
Position Posture Info	Displays information about the position and posture of the Kit-equipped machine.

1. Tap ⚙ to open the menu.
2. Tap “Machine Calibration Settings”.



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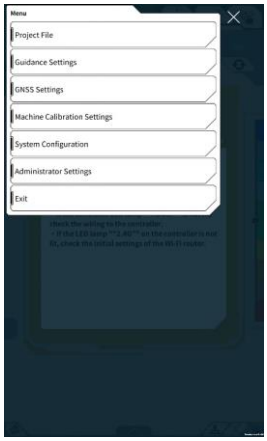
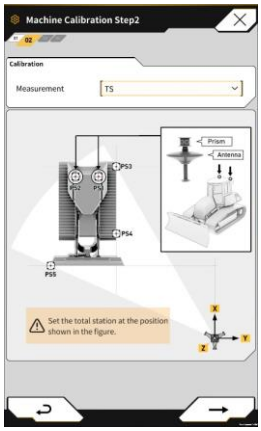
5.2 Change the machine calibration settings

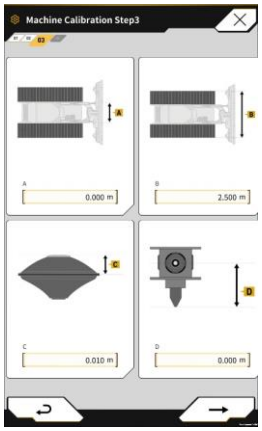
5.2.1 Execute machine calibration

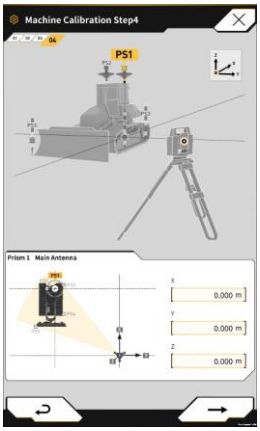
In “Machine Calibration Settings”, tap “Machine Calibration”.
See the calibration manual for details.

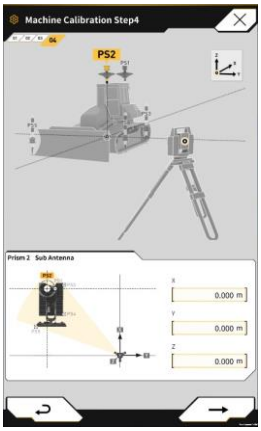


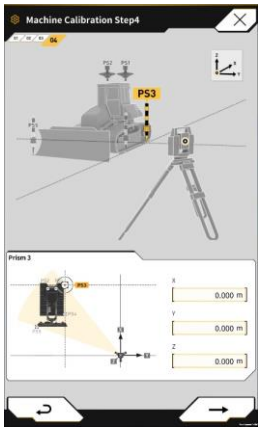
1. Total station (TS) calibration

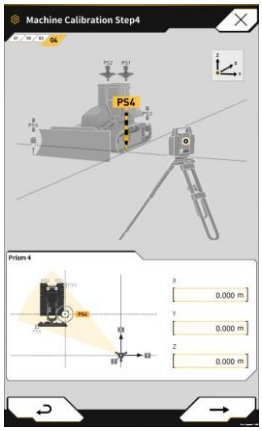


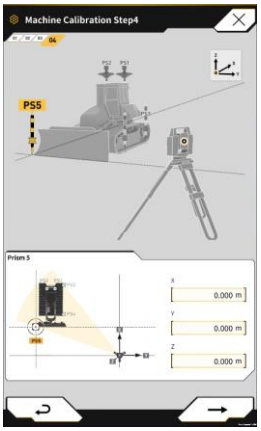












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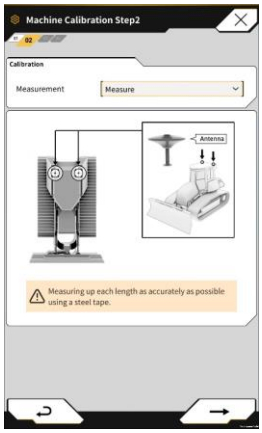
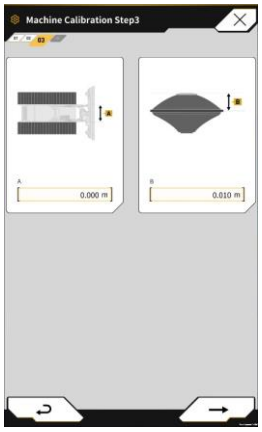
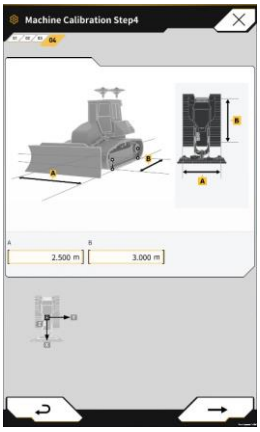
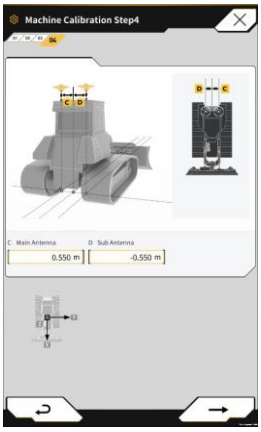
5.2 Change the machine calibration settings

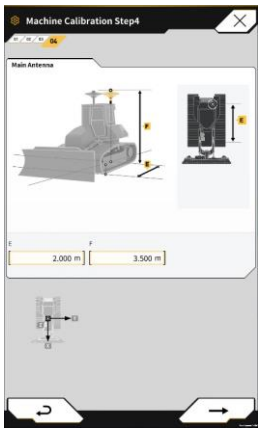
2. Major calibration

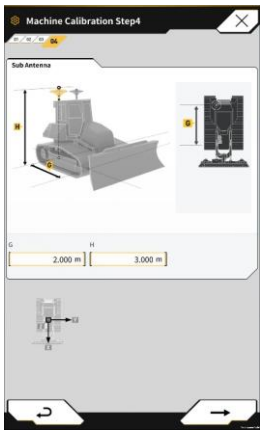












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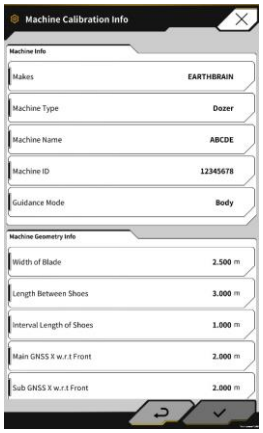
5.2.2 Confirm machine calibration information

Note

As a general rule, do not change each setting item because changing it will change the calibration setting value as well. Refer to the Instructions for installation if any changes are required. For distribution destination of Instructions for installation, ID and password, please refer to the form included with the product.

In “Machine Calibration Settings” menu, tap “Machine Calibration Info”. A list of current calibration information is displayed.



5.2.3 Confirm machine position and posture

1. In “Machine Calibration Settings” menu, tap “Position Posture Info”. Detail information on the position and angle of the machine is displayed.

2. Tap the ✓ button. You return to the guidance screen.

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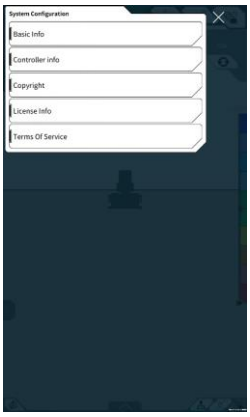
5.3 System configuration

From the “System Configuration” menu, the following menus can be selected.

Controller info	Display information on this kit, such as firmware version.
Copyright	Display calibration information list of the Kit-equipped machine.
License info	Confirm the license information for this kit.
Terms Of Service	Confirm the terms of service.

1. Tap ⚙ to open the menu.
2. Tap “System Configuration”.

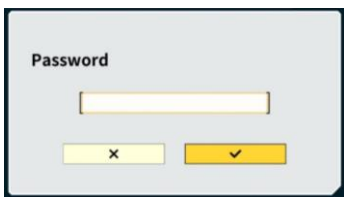


5.3.1 Confirm basic information

Network settings are not usually required to be changed.

1. In “System Configuration” menu, tap “Basic Info”. A list of current network settings is displayed.
2. Tap the ✓ button. You return to the previous screen.

* If “Lock with Admin Password” is set to ON in “System Settings”, a pop-up window for entering the password is displayed, so enter the password and tap the ✓ button.



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5.3.2 Confirm controller information

1. In “System Configuration” menu, tap “Controller Info”. Controller information of this kit is displayed.
2. Tap the ✓ button. You return to the previous screen.

5.3.3 Confirm copyright information

1. In “System Configuration” menu, tap “Copyright”. Information about copyright is displayed.
2. Tap the ✓ button. You return to the previous screen.

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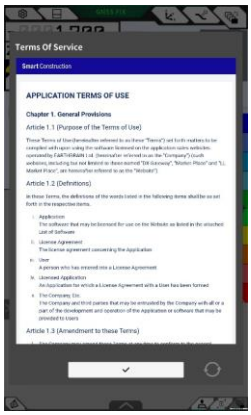
5.3.4 Confirm license information

1. In “System Configuration” menu, tap “License Info”. A License ID and expiration date of this kit is displayed.
2. Tap the ✓ button. You return to the previous screen.

5.3.5 Confirm terms of service

1. In the “System Configuration” menu, tap “Terms Of Service”. The terms of service is displayed.
2. Tap the ✓ button. You return to the previous screen.



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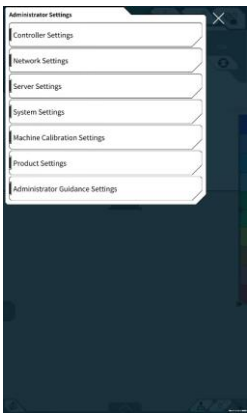
5.4 Administrator settings

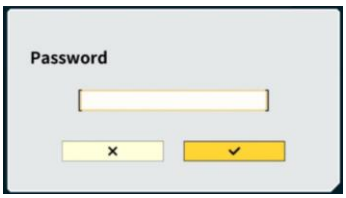
From “Administrator Settings” menu, the following menus can be selected.

Controller Settings	Display information on this kit, such as firmware version.
Network Settings	Confirm and change the network settings.
Server Settings	Confirm and change the server settings.
System Settings	Confirm and change the system settings.
Machine Calibration Settings	Display calibration information list of the Kit-equipped machine. You can also make corrections.
Product Settings	Confirm the product settings.
Administrator Guidance Settings	Check the administrator guidance settings.

1. Tap ⚙ to open the menu.
2. Tap “System Configuration”.



* If “Lock with Admin Password” is set to ON in “System Settings”, a pop-up window for entering the password is displayed, so enter the password and tap the ✓ button.



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5.4 Administrator settings

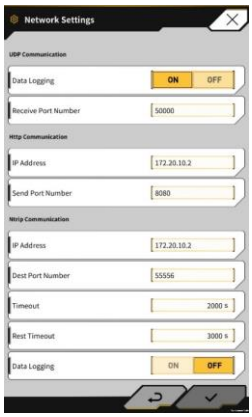
5.4.1 Confirm controller information

1. In “Administrator Settings” menu, tap “Controller Settings”. Controller settings of this kit are displayed.
2. Tap the ✓ button. You return to the previous screen.

5.4.2 Set up network

Network settings are not usually required to be changed.

1. In “Administrator Settings” menu, tap “Network Settings”. A list of current network settings is displayed.



2. Change the settings.

Supplement

Turning “Data Logging” off stops acquiring logs. Do not turn it off unnecessarily.

3. Tap the ✓ button. Changed content is reflected and you return to the previous screen.

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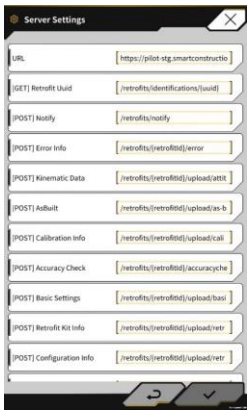
5.4.3 Change server settings

Note

Do not change server settings unless specifically instructed to do so.

The system may stop working properly.

1. In “Administrator Settings” menu, tap “Server Settings”. The current server settings are displayed.



2. Change the settings. Tap the ✓ button.

5.4.4 Change system settings

Supplement

When you set the “Admin Password” and turn “Lock with Admin Password” ON, you will become unable to enter the system configuration menu unless you enter the password. If you want to prevent unintended system changes, please set an administrator password.

1. In “Administrator Settings” menu, tap “Server Settings”.
   The current server settings are displayed.

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2. Change the settings.

Supplement

When you turning on “Debug Mode”, debug information is displayed on the screen.
Do not turn ON the “Debug Mode” unless you perform troubleshooting.

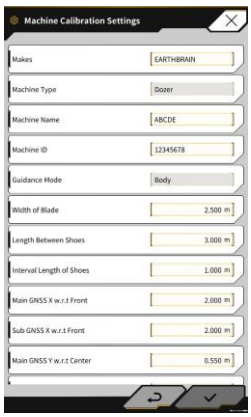
3. Tap the ✓ button.
Changed content is reflected and you return to the previous screen.

5.4.5 Change machine calibration settings

Note

As a general rule, do not change each setting item because changing it will change the calibration setting value as well. If any change is required, see the Instructions for Installation. For distribution destination of Instructions for installation, ID and password, please refer to the form included with the product.

1. In “Administrator Settings” menu, tap “Machine Calibration Settings”.
A list of current calibration settings is displayed.



2. Change the settings. Tap the ✓ button.
Changed content is reflected and you return to the previous screen.

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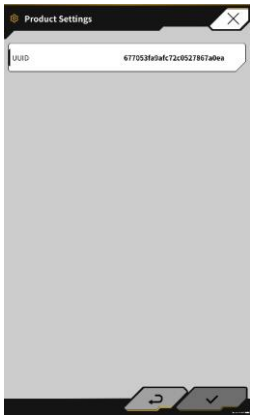
5.4.6 Confirm product settings

1. In “Administrator Settings” menu, tap “Product Settings”.
   The current product settings are displayed.

Supplement

UUID means a unique ID for this kit.
You cannot change it.



2. Tap the ✓ button.
   You return to the previous screen.

5.4.7 Confirm administrator guidance settings

Note

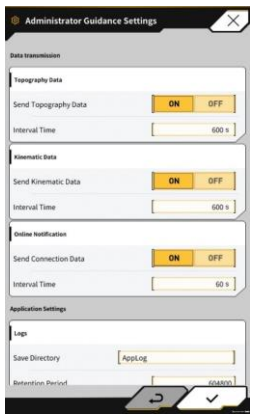
Do not change the guidance settings unless specifically instructed to do so.

The system may stop working properly.

1. In “Administrator Settings” menu, tap “Administrator Guidance Settings”.
   The guidance user settings are displayed.

2. Change the settings.

3. Tap the ✓ button.
   Changed content is reflected and you return to the previous screen.



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Inquiry on products

EARTHBRAIN Ltd.
You can contact support via the following site:
https://support.smartconstruction.com/hc/requests/new
Select your region from the language options at the top right of the page.

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Revisions archive

Created/revised date	Revisions content
Aug. 3, 2023	Initial version
Sep. 4, 2023	Added “Set up Wi-Fi” in “2.2 Setup and registration”

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