3DMG Basic User Manual

EARTHBRAIN

Introduction

【Attention】
This function is available with tablet app version 1.0.06 or later. If you are using an older version, please update the app.

Introduction

This feature is specifically designed to easily utilize the 3D machine guidance function.

With no need for localization or design data, it allows the creation of a 3D target surface from the bucket tip position, enabling straightforward usage of machine guidance.
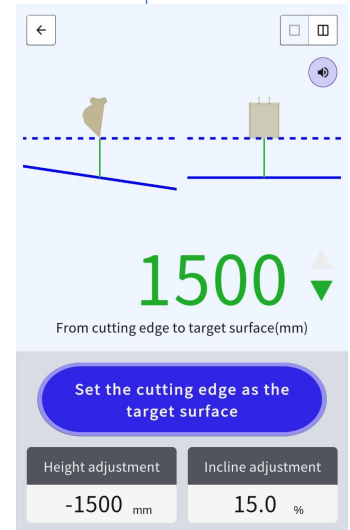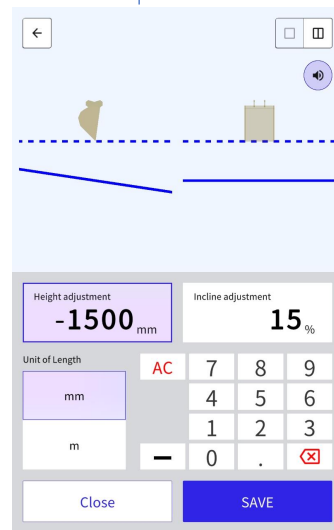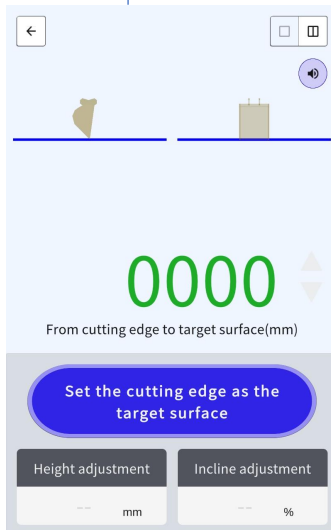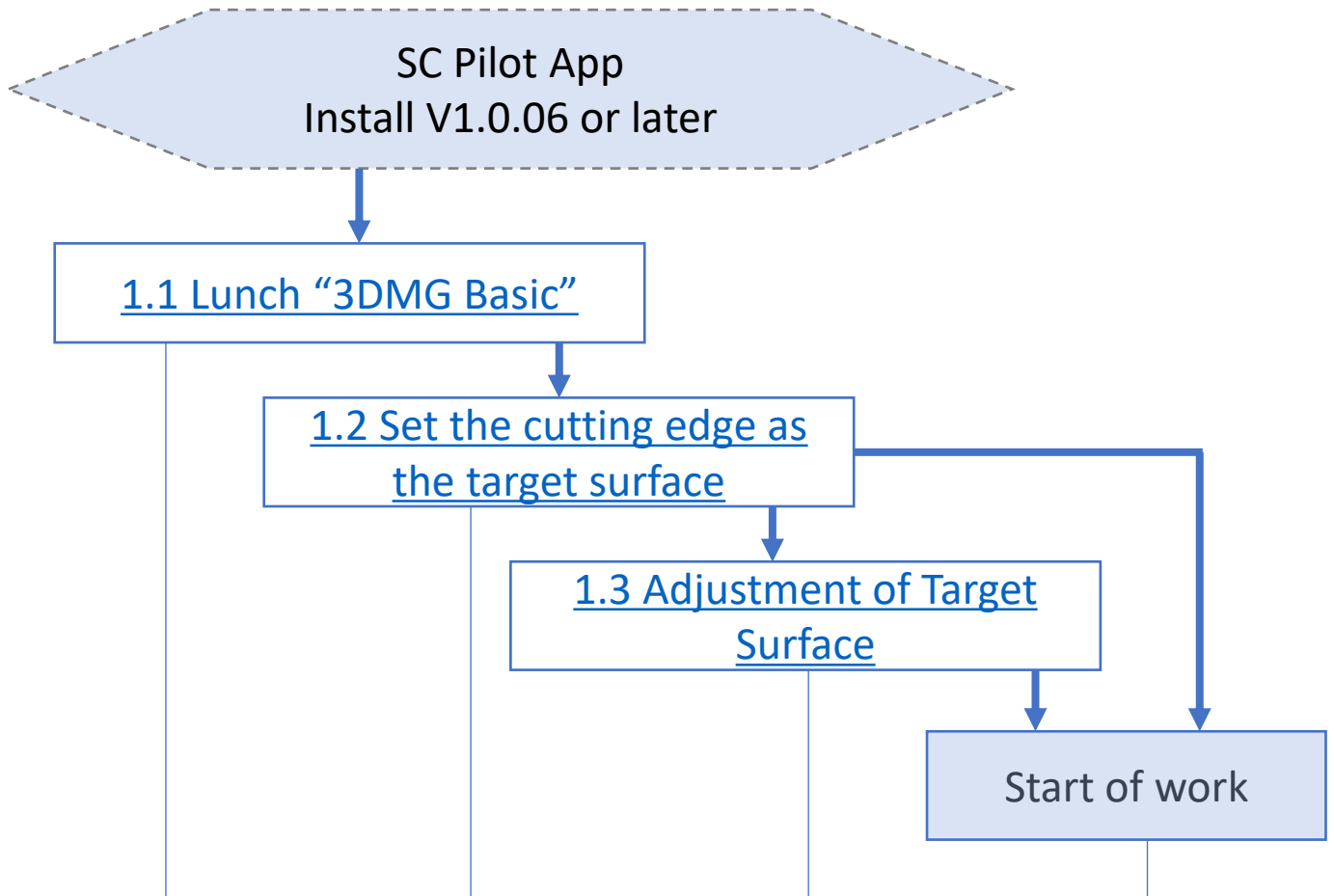

Notes

- Please perform various initial settings such as machine calibration, bucket configuration, GNSS settings, etc., required to utilize the Machine Guidance using the "Machine Guidance" function in advance.
- You can download the above-mentioned setup manual from the following support site.

  Tablet application manual

- There is no menu to change various settings in 3DMG Basic. Please handle any errors or issues using the "Machine Guidance" function.
- 3DMG Basic, the payload function is not available.

Usage flow

SC Pilot App
Install V1.0.06 or later

1.1 Lunch "3DMG Basic"

1.2 Set the cutting edge as the target surface

1.3 Adjustment of Target Surface

Start of work

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Guidance Screen

■Switch between a 1-screen (profile view) and a 2-screen (profile view and section view).

■ Toggle the audio output ON/OFF for proximity alerts to the target surface.

■ Guidance Screen
○ Dotted Line
Represents the surface where the "cutting edge is set to the target surface."
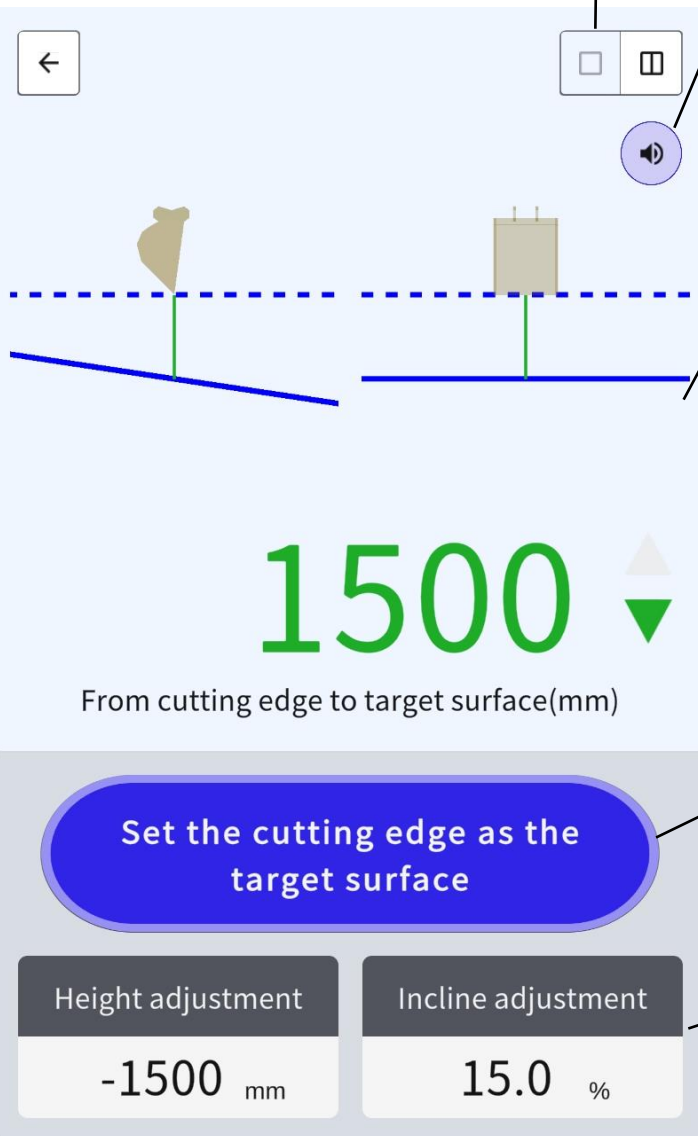
○ Solid Line
Represents the target surface.

○ From cutting edge to target surface
Displays the distance from the cutting edge (center of the bucket) to the target surface.
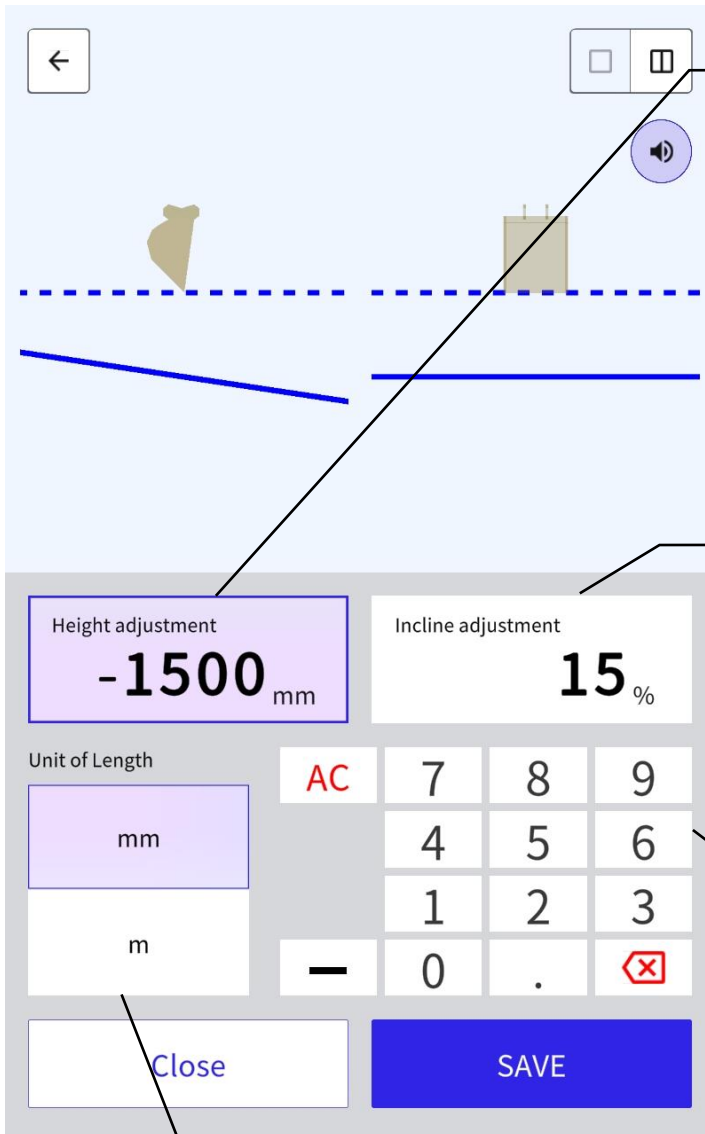

← □ Ⅲ

1500 ▼

From cutting edge to target surface(mm)

Set the cutting edge as the target surface

Height adjustment	Incline adjustment
-1500 mm	15.0 %

■Sets the cutting edge (center of the bucket) to the target surface.

■Displays the height and incline values set relative to the cutting edge's target surface.
Tapping switches to the adjustment screen for the target surface.

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Target surface adjustment Screen

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■ Height Adjustment
Adjust the height of the target surface based on the height set at the bucket tip position. The target surface can be raised with a positive value or lowered with a negative value.

<Input Range>
-20m to 20m

■ Incline Adjustment
Adjust the incline of the target surface.

<% Input Range>
-400% to 400%

<Ratio Input Range>
-1000～-0.25　0.25～1000

■ Numeric Keypad
Tap to input values for height and incline adjustment.

■ Length Units
Switch the units of length. The set unit will be reflected on the guidance screen.

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01

Chapter

How to Use

1.1 Lunch "3DMG Basic"

1. After launching the app, tap on "3DMG Basic"
2. The "3DMG Basic" screen will be displayed.

※During startup, you may encounter errors such as "Controller not connected" due to connection delays with the controller, or "Positioning accuracy decreased" due to delays in GNSS FIX. Please wait until the connection is established or the FIX process completes.
If you also see sensor errors like IMU errors, please contact the support center for assistance.
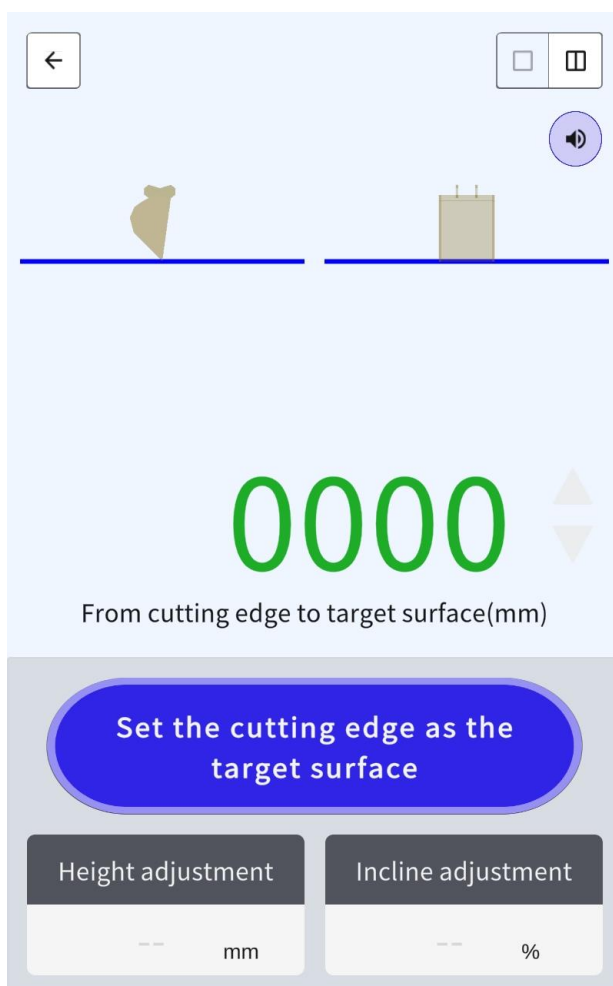

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1.2 Set the cutting edge as the target surface

1. Move the machine's cutting edge to the desired reference location.
2. Tap "Set the cutting edge as the target surface."
3. A 3D target surface is set at the position of the cutting edge.
   If you want to adjust the height or incline, tap "Height adjustment" or "Incline adjustment"
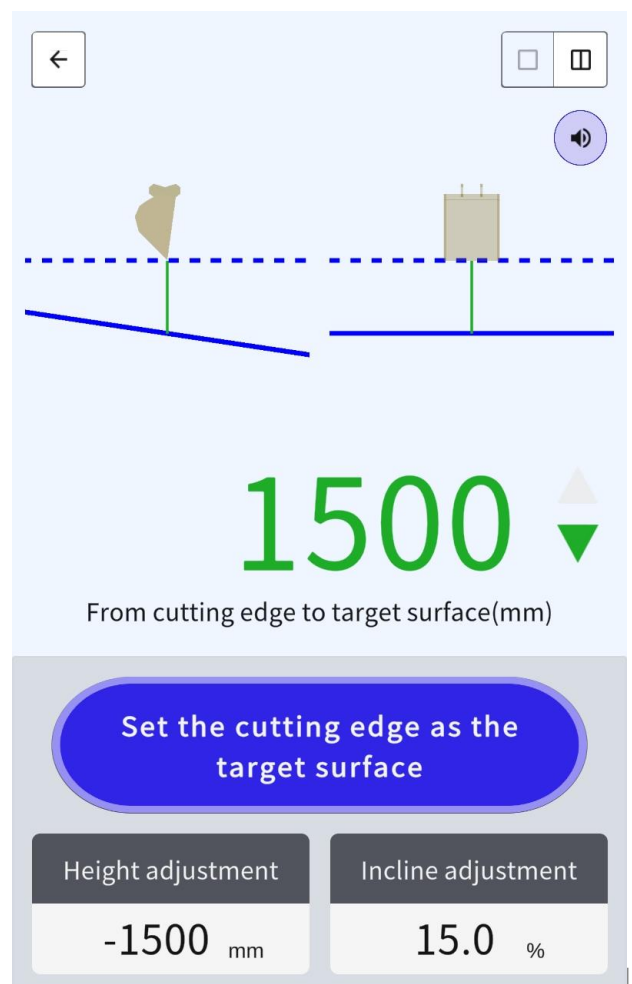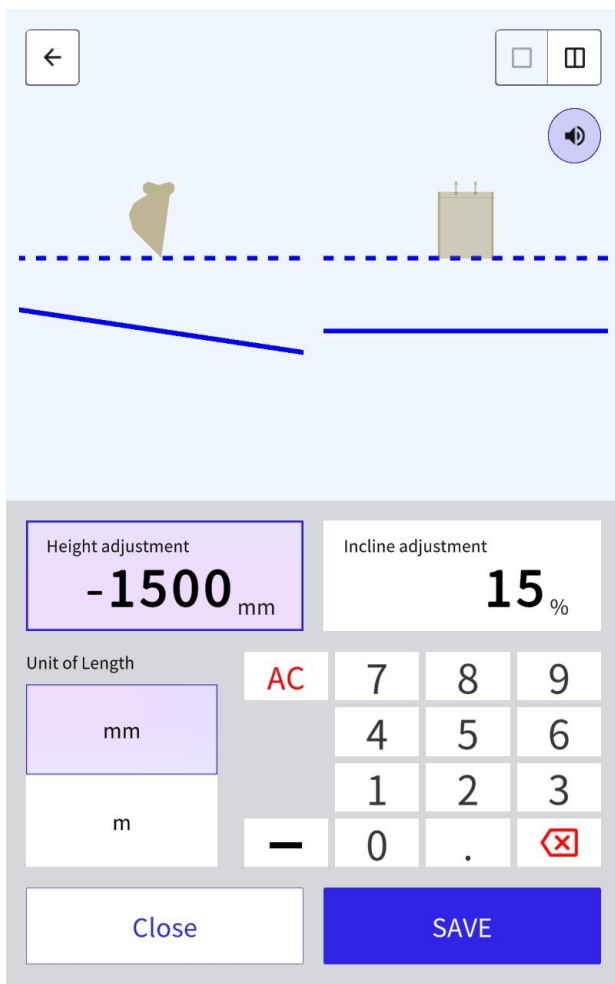   → 1.3. Adjusting of target surface.

1.3 Adjustment of Target Surface

1. Tap the item you want to adjust.
2. Enter the value to adjust using the numeric keypad.
3. After inputting the value, tap "Save" to proceed to the guidance screen and start the construction.

※Height adjustment: The height set by the cutting edge is the reference.
※Incline adjustment: The direction of bucket when setting the cutting edge target surface is the reference.

02

Chapter

Notes

2.1   Notes

- Please perform various initial settings such as machine calibration, bucket configuration, GNSS settings, etc., required to utilize the Machine Guidance using the "Machine Guidance" function in advance.

- You can download the above-mentioned setup manual from the following support site.

    Tablet application manual

- There is no menu to change various settings in 3DMG Basic. Please handle any errors or issues using the "Machine Guidance" function.

- 3DMG Basic, the payload function is not available.

- The construction history data in the "3DMG Basic" feature is not uploaded to the server. Therefore, please be aware that construction history will not be registered in the SC Dashboard.

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Contact information

Inquiries about products and defects:

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