

# HG Setting Tool Instruction Manual

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<https://www.dush.co.jp/>

# Introduction

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This manual describes how to use HG Setting Tool for HG-RL6U2C01 (HG main unit).

HG Setting Tool is a tool to set the operations of HG-RL6U2C01.

You can set the following operations with HG Setting Tool.

- Keycode Setting for sending keycode to a host device and LED Pattern Setting when each gesture is detected.
- Status Indicator LED Setting.
- Lock Setting (Temporary Operation Stop).
- Sensor Sensitivity Setting.
- Hover Time Setting to detect hovering action.
- Gesture Repeat Time Setting to accept only the same gesture.

You can also use this tool to update the software (HgApp) for HG-RL6U2C01.

From here, HG-RL6U2C01 (HG main unit) is referred to as the “Terminal” in this manual.

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# 1 Preparation

## 1.1 Install

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Please execute the following file to install HG Setting Tool.

Self-extracting type: [Setup-HGSettingTool.EXE]

Compressed file type: [setup.exe]

The dedicated installer starts. Follow the messages in the dialog box to proceed with the installation.

Note: HG Setting Tool runs on Windows PCs that meet the following operating environment requirements. Before installation, please make sure that your Windows PC meets the following table requirements.

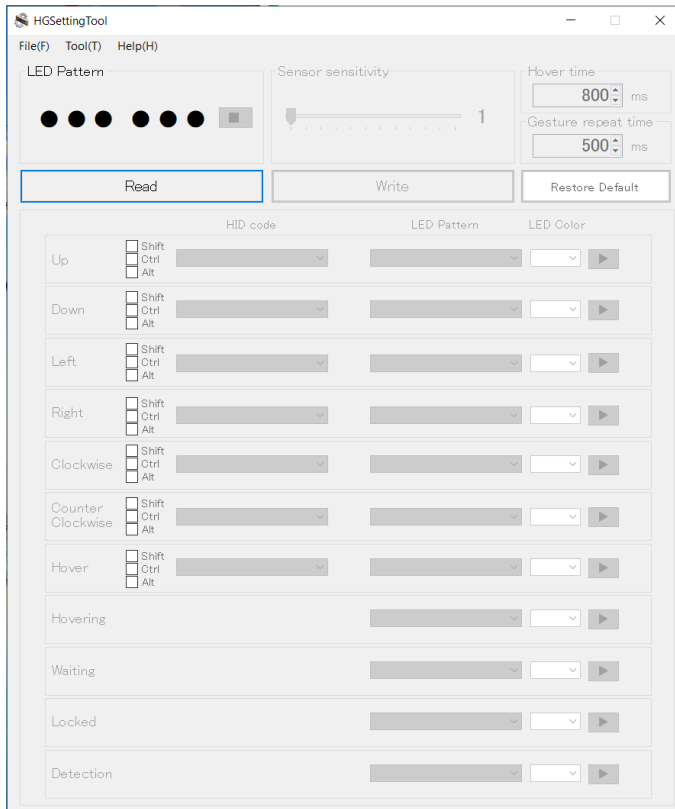
Item	Description
OS	Microsoft® Windows® 10 (64bit version) Microsoft® Windows® 11 (64bit)
Framework	Microsoft® .NET Framework 4.8
Processor (equivalent)	1GHz or higher
Memory	4GB or more
Storage	1 GB or more of free space (Recommended: 4 GB or more)
Display	1280×1024 or wider

Note: Operation in a virtual environment is not guaranteed.

## 1.2 How to Start Tool

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After installation is completed, an icon of HG Setting Tool will be created on your PC desktop. Click the icon on your desktop to start HG Setting Tool. The following application window will open.

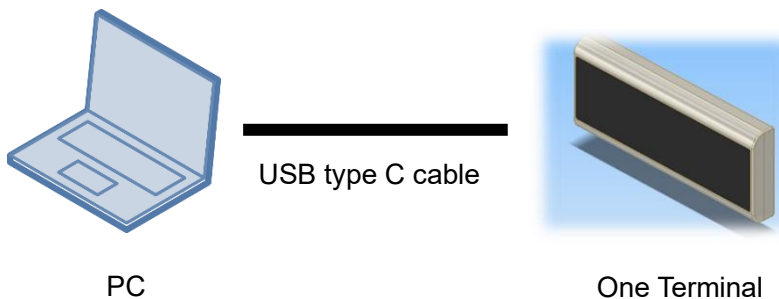


## 1.3 How to Connect PC and Terminal

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Connect your PC and the Terminal with a USB type C cable.

Note: Only one Terminal can be connected to your PC at once

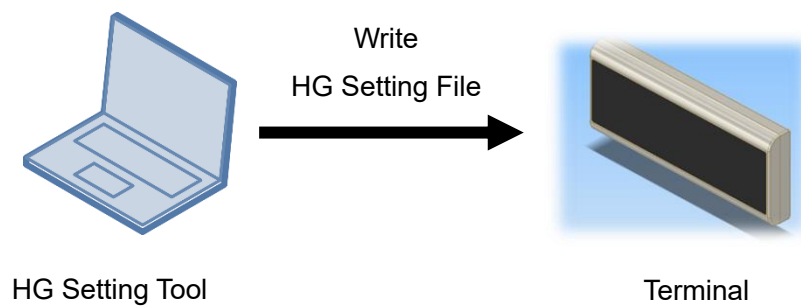


## 2 How to use

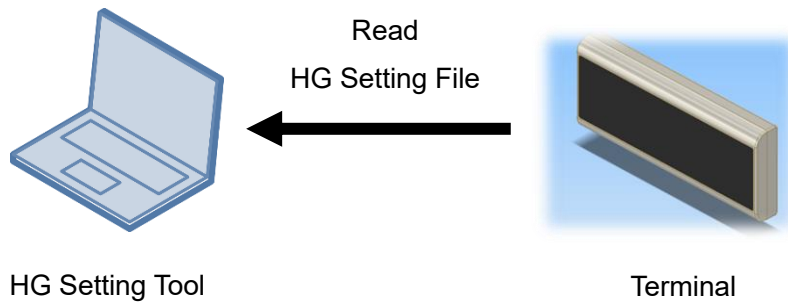
### 2.1 Summary

---

Create a setting file (hereinafter “setting file” is referred to as “HG setting file”) that defines each gesture detection pattern, etc., by HG Setting Tool. Write an HG setting file data to the Terminal with the USB type C cable to change the setting details in the Terminal.



Reading an HG setting file in the Terminal is also available.



## 2.2 Create HG Setting File

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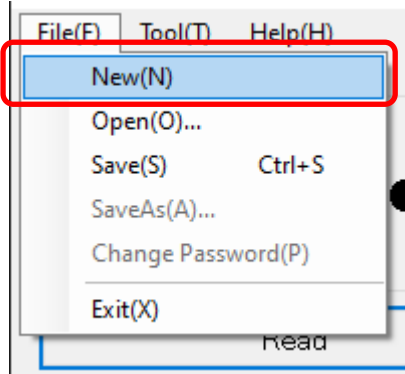
Click [New] to create a new HG setting file.

Click [Open] or [Read] to edit an existing HG setting file,

### 2.2.1 Create New HG Setting File

Click on [File] from the menu at the top. Then click on [New].

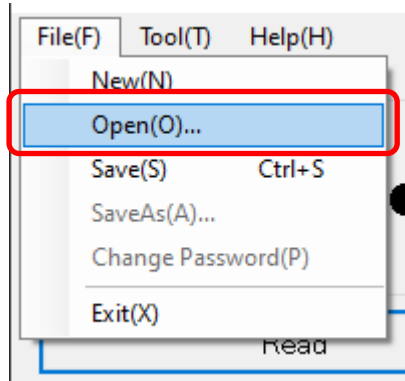
A new HG setting file is created with default settings.



### 2.2.2 Open Existing HG Setting File

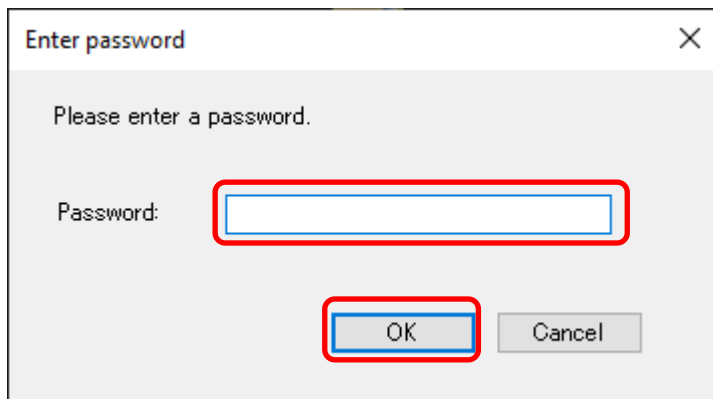
Click on [File] from the menu at the top. Then click on [Open].

Select an existing HG setting file with "ges" extension.



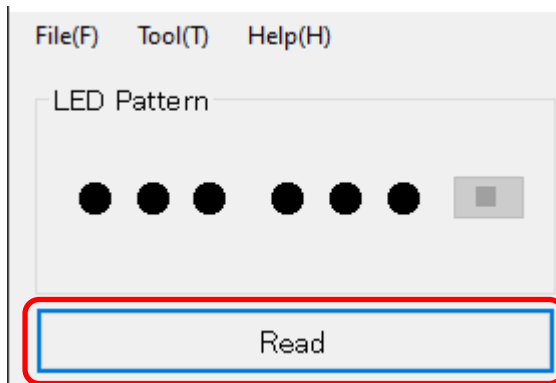


If the HG setting file is password protected, the following dialog box will appear.  
Enter your password. Then click on [OK].

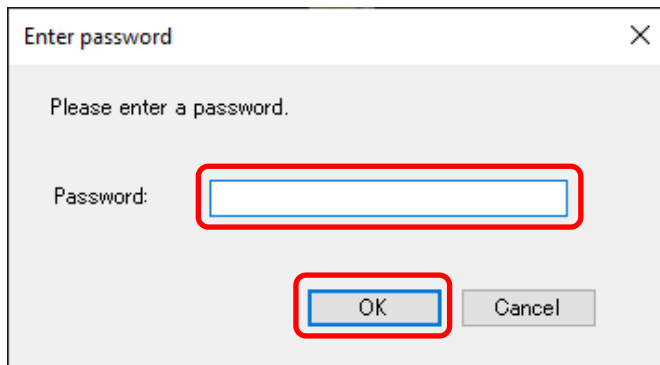


### 2.2.3 Read HG Setting File from Terminal

Click on [Read] while the Terminal and PC are connected with the USB type C cable.  
Read a current HG setting file from the Terminal.  
Then the detailed setting is displayed.

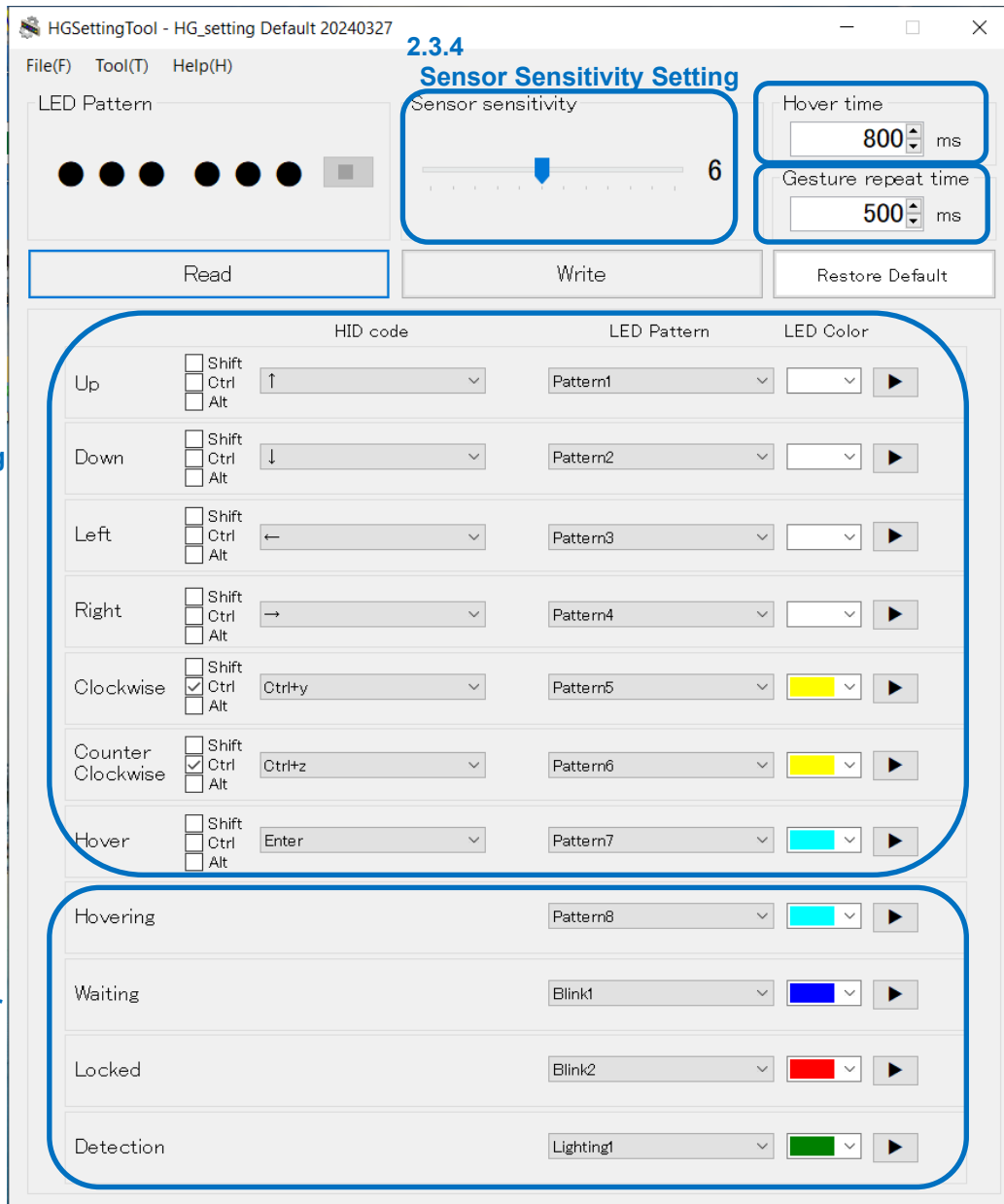


If the HG setting file is password protected, the following dialog box will appear.  
Enter your password. Then click on [OK].



- Since your devices are switched during communication, the Windows device connection / disconnection sound is played.
- Only one Terminal can be connected to your PC at once.
- If communication fails, reconnect the USB type C cable.

## 2.3 How to Setup



\* The above image is the default settings.

## 2.3.1 Gesture Setting

Set each keycode to be sent to a host device and each LED lighting pattern for detection confirmation when each gesture is detected.

### Gesture Type

Up	<input type="checkbox"/> Shift <input type="checkbox"/> Ctrl <input type="checkbox"/> Alt	↑	Pattern1		▶
Down	<input type="checkbox"/> Shift <input type="checkbox"/> Ctrl <input type="checkbox"/> Alt	↓	Pattern2		▶
Left	<input type="checkbox"/> Shift <input type="checkbox"/> Ctrl <input type="checkbox"/> Alt	←	Pattern3		▶
Right	<input type="checkbox"/> Shift <input type="checkbox"/> Ctrl <input type="checkbox"/> Alt	→	Pattern4		▶
Clockwise	<input type="checkbox"/> Shift <input checked="" type="checkbox"/> Ctrl <input type="checkbox"/> Alt	Ctrl+y	Pattern5	Yellow	▶
Counter Clockwise	<input type="checkbox"/> Shift <input checked="" type="checkbox"/> Ctrl <input type="checkbox"/> Alt	Ctrl+z	Pattern6	Yellow	▶
Hover	<input type="checkbox"/> Shift <input type="checkbox"/> Ctrl <input type="checkbox"/> Alt	Enter	Pattern7	Cyan	▶

The following table shows each gesture type and the corresponding description.

Gesture Type	Description
Up	Move hand vertically from down to up
Down	Move hand vertically from up to down
Left	Move hand horizontally from right to left
Right	Move hand horizontally from left to right
Clockwise*	Move hand in clockwise movement
Counterclockwise*	Move hand in counterclockwise movement
Hover	Hold hand over the sensor for a specific period of time. * Holding time can be changed by referring to [2.3.5 Hover Time Setting] * The detection distance is about 5cm with the default settings. However, it changes from 5 to 10 cm depending on [2.3.4 Sensor Sensitivity Setting]

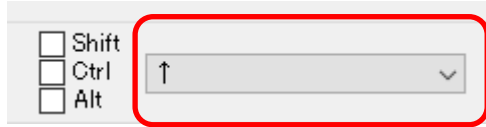
\* In case of any difficulty of the recognition of clockwise and counterclockwise gestures, move your hand small and fast.

## Keycode Setting

Set each of the USB HID keycodes to be sent to the host device when each of the gestures is detected.

Adding Shift, Ctrl, Alt to each of the USB HID keycodes is available.

The USB HID keycode\*1 corresponding to a settable key is outputted from the Terminal.



The following table shows each settable key and the corresponding USB HID keycode.

Settable Key	USB HID Keycode
↑	0x52
↓	0x51
←	0x50
→	0x4F
Enter	0x28
Esc	0x29
Backspace	0x2A
Tab	0x2B
Space	0x2C
Insert	0x49
Delete	0x4C
F1	0x3A
F2	0x3B
F3	0x3C
F4	0x3D
F5	0x3E
F6	0x3F
F7	0x40
F8	0x41
F9	0x42
F10	0x43
F11	0x44
F12	0x45
1	0x1E
2	0x1F
3	0x20
4	0x21
5	0x22
6	0x23
7	0x24

Settable Key	USB HID Keycode
8	0x25
9	0x26
0	0x27
a	0x04
b	0x05
c	0x06
d	0x07
e	0x08
f	0x09
g	0x0A
h	0x0B
i	0x0C
j	0x0D
k	0x0E
l	0x0F
m	0x10
n	0x11
o	0x12
p	0x13
q	0x14
r	0x15
s	0x16
t	0x17
u	0x18
v	0x19
w	0x1A
x	0x1B
y	0x1C
z	0x1D

The following are the special operations, then any USB HID keycodes are not sent.

Settable Key	Operation
(Not set)	Nothing
Inter Lock*2	Lock / Unlock

Check the box to add Shift, Ctrl, Alt

\*1 This is a unique ID to identify the key to be sent from the USB connected HID device to the host device. This is represented as a hexadecimal number (0x\*\*).

\*2 For details on Inter Lock, refer to [2.3.3 Lock Settings (Temporary Operation Stop)]

## LED Pattern Setting

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The LEDs of the Terminal light up when each of the gestures is detected.


Set each of the LED lighting patterns and LED color patterns for each of the gestures.

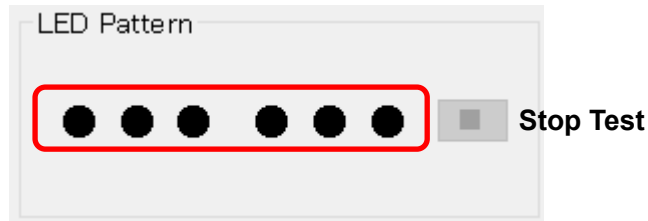
**LED Lighting Pattern**      **LED Color Pattern**

Pattern 1             **Play Button**

The following table shows each LED lighting pattern and the corresponding description.

LED Lighting Pattern	Description
(Not set)	Any LEDs do not light up
Pattern 1	Spread to left and right from center.
Pattern 2	Gather from left and right to center
Pattern 3	Flow from center to left
Pattern 4	Flow from center to right
Pattern 5	Flow from left to right, then back to left
Pattern 6	Flow from right to left, then back to right
Pattern 7	All LEDs blink









Click on [Test button  ]. Check the test result of the LED lighting pattern on HG Setting Tool.



\* The test result is an image. This image is different from actual LEDs display. Please transfer your LED lighting pattern to the Terminal and check the actual LEDs display.

## 2.3.2 Status Indicator LED Setting

Set each of the LED lighting patterns to indicate each status (4 types in total).

Status			
Hovering	Pattern8		
Waiting	Blink1		
Locked	Blink2		
Detection	Lighting1		

The following table shows each status and the corresponding description.

Status	Description
Hovering	This status occurs when holding hand over the sensor (Hovering action). * If held for a specific period of time, the keycode registered to "Hover" will be sent. *The range of the Hover Time can be changed by referring to [2.3.5 Hover Time Setting].
Waiting	Normal unlocked status. Each gesture can be detectable.
Locked	Locked status. Gesture set with "InterLock" can lock/unlock. All gestures other than those set with "Interlock" will be ignored.
Detection	Hand itself is detected in standby status, but any specific gestures were not detected.

## LED Patterns Setting


The LEDs of the Terminal light up even when any gesture is not operated. Set each of the LED lighting patterns and LED color patterns for each of the statuses.

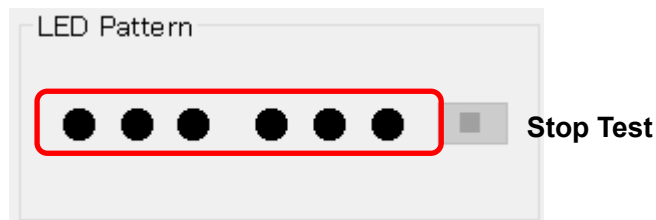


The following table shows each LED lighting pattern and the corresponding description.

LED Lighting Pattern	Description
Pattern 8	Flow from left to right
Blink 1	Rightmost LED blinks
Blink 2	Leftmost LED blinks
Lighting 1	Rightmost LED lights up

\*Above LED lighting patterns are set as the default settings for the statuses.

Click on [Test button ]. Check the test result of the LED lighting pattern on HG Setting Tool.



\* The test result is an image. This image is different from actual LEDs display. Please transfer your LED lighting pattern to the Terminal and check the actual LEDs display.

\* Test may take some time depending on the LED lighting pattern.

## 2.3.3 Lock Setting (Temporary Operation Stop)

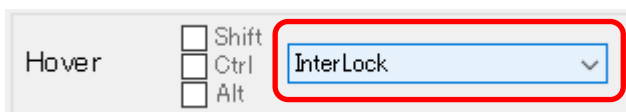
To prevent accidental operation, the gesture operations other than a specific gesture can be temporarily disabled. The specific gesture mentioned here is a gesture set with “Inter Lock”.

While “InterLock” is working, all gestures other than the specific gesture are ignored.

### How to Setup Inter Lock

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Select [InterLock] in the USB HID keycode dropdown list.

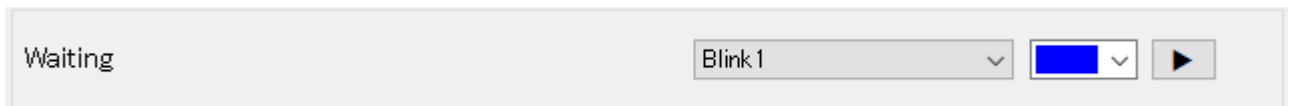


### How to lock/unlock

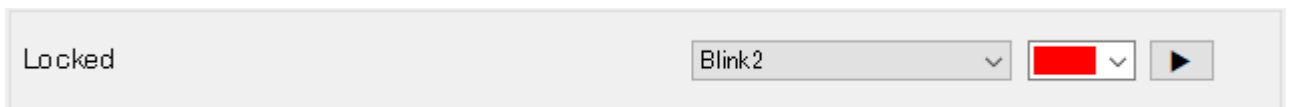
---

Making a gesture set with “InterLock” allows to lock and unlock alternately.

During the unlocked status, the LED lighting pattern and the LED color pattern set for the “Waiting” status are displayed.



During the locked status, the LED lighting pattern and the LED color pattern set for the “Locked” status are displayed.



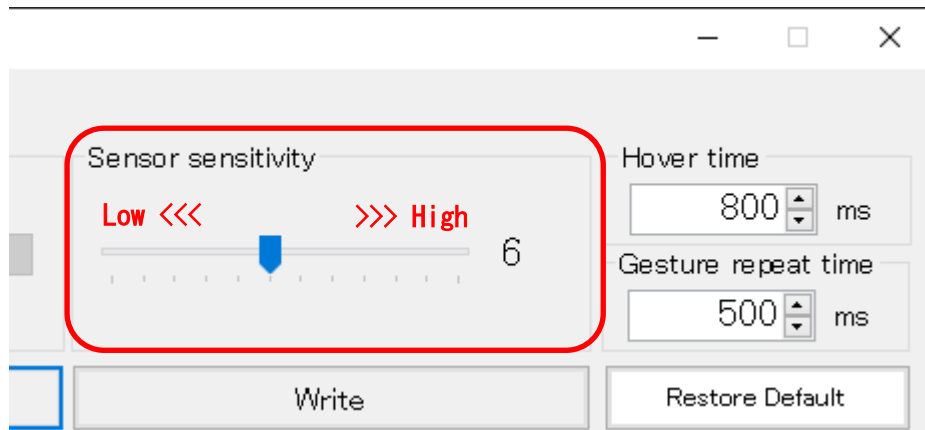


## 2.3.4 Sensor Sensitivity Setting

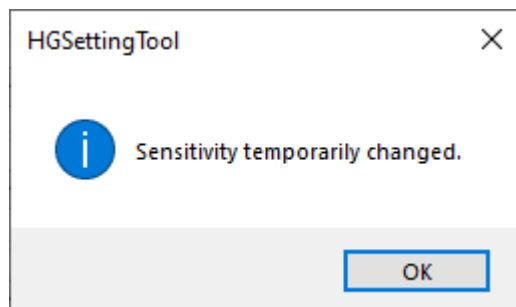
Set the sensor sensitivity.

Move the slider toward “High” to increase the value if the sensor does not respond well.

Move the slider toward “Low” to decrease the value if the sensor malfunctions.



If the slider is moved while your PC and the Terminal are connected, the sensor sensitivity of the Terminal is temporarily changed to check the actual sensor operation.




Writing is necessary to save the new sensor sensitivity setting data to the Terminal. Please refer to [2.5 Write HG Setting File to Terminal].

\*If the power is turned off without clicking on [Write], the Terminal setting will remain at current setting.

## 2.3.5 Hover Time Setting

Set the range of the hover time until the “Hovering” status finishes and the keycode registered to “Hover” is sent.

(Directly input a value in the box or click on the up/down switch : up/down in 100ms step)


The settable range is 100ms - 10000ms.

Writing is necessary to save the new hover time setting data to the Terminal. Please refer to [2.5 Write HG Setting File to Terminal].



## 2.3.6 Gesture Repeat Time Setting

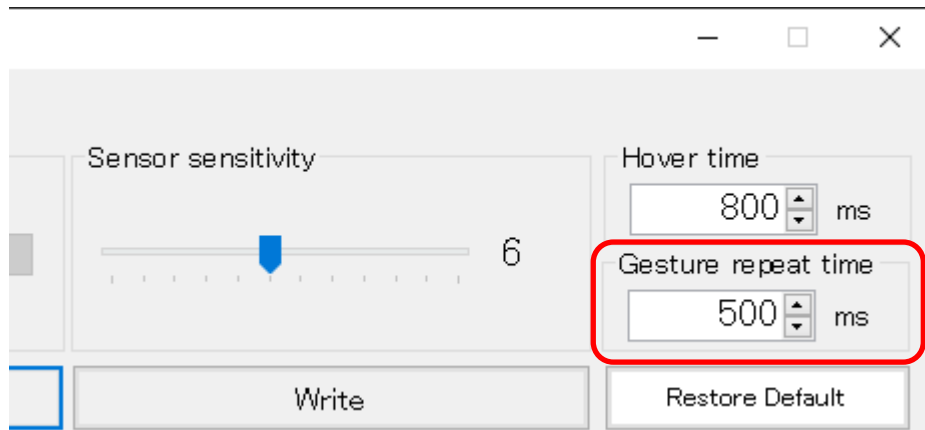
Set the gesture repeat time to accept only the same gesture.

(Directly input a value in the box or click on the up/down switch : up/down in 100ms step)

In case of making a series of the same gesture in the same direction, such as scrolling the display, increase the value to prevent unintended gestures from being inputted. On the other hand, in case of making quick gestures in multiple directions, decrease the value.

The settable range is 0ms - 5000ms.

Writing is necessary to save the new gesture repeat time setting data to the Terminal. Please refer to [2.5 Write HG Setting File to Terminal].



## 2.3.7 Restore to Default Value Setting

Click on [Restore Default], all settings of the HG setting file will be restored to the default values.

Writing is necessary to save the restore to default value setting data to the Terminal. Please refer to [2.5 Write HG Setting File to Terminal].



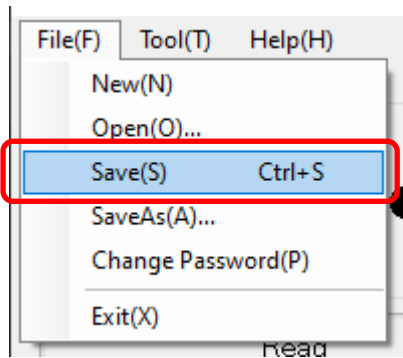
## 2.4 Save HG Setting File

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### 2.4.1 Save

Click on [File] from the menu at the top. Then click on [Save].

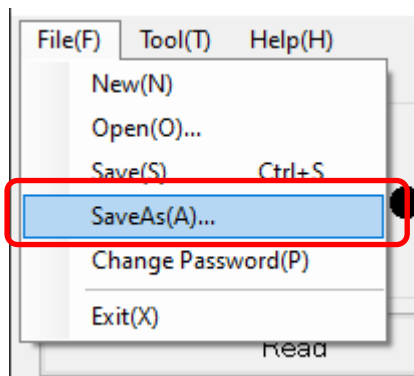
A currently opened HG setting file is overwritten.



### 2.4.2 Save As

Click on [File] from the menu at the top. Then click on [SaveAs].

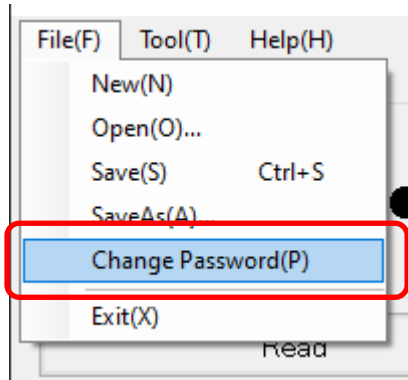
A currently opened HG setting file is saved with a different name.



## 2.4.3 Password Setting

Click on [File] from the menu at the top. Then click on [Change Password].

A currently opened HG setting file can be password protected.

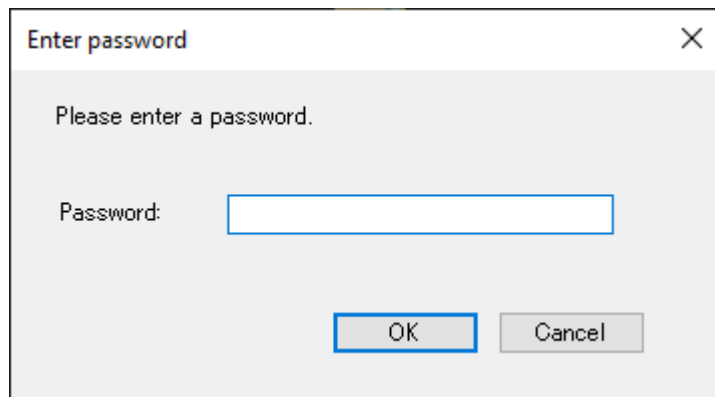


The password protected HG setting file requires your password to open it.

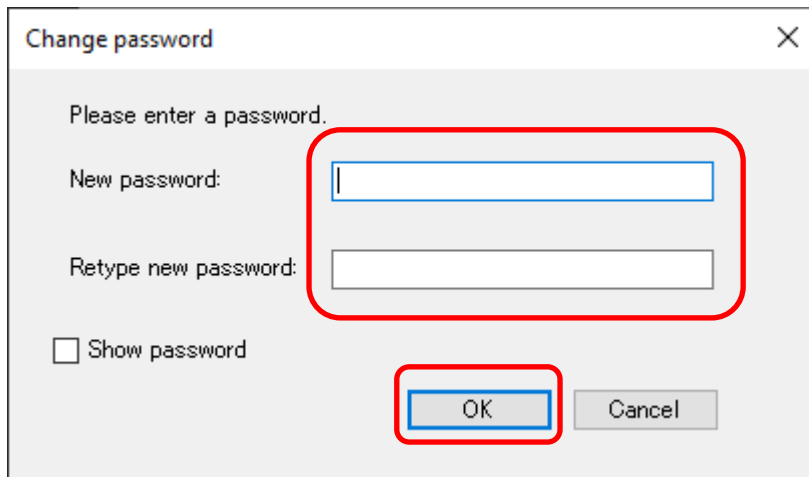
If the password protected HG setting file is written to the Terminal, your password is required when reading it from the Terminal.

Password: Please set your password with 4 digits.

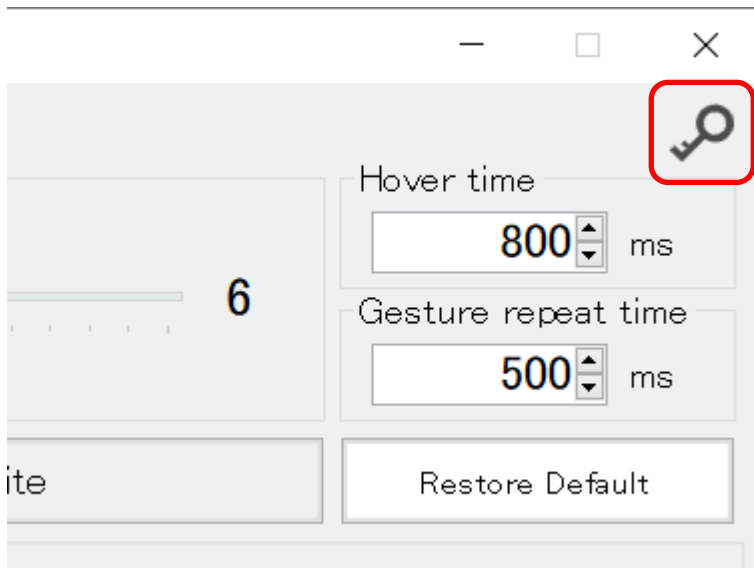
\*Overwriting is available even on the Terminal where the password protected HG setting file was written.



To delete your password that has already been set, leave the new password and the Retype new password fields blank and click on [OK].



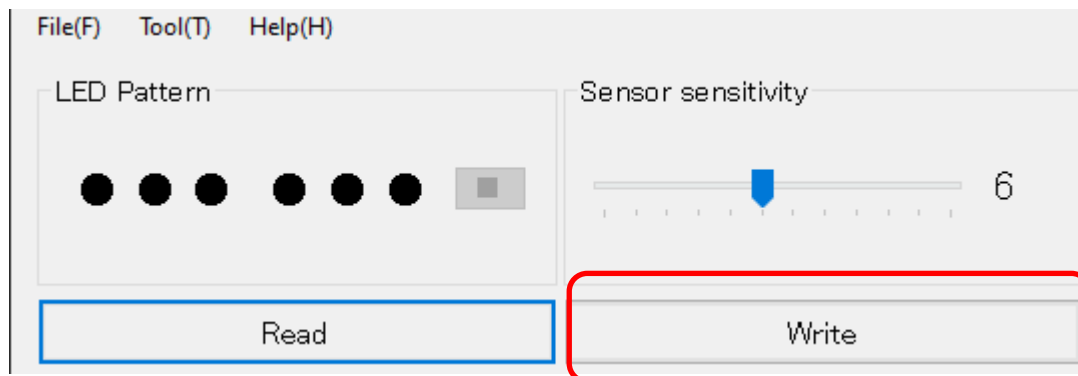
When the password protected HG setting file is opened, the key symbol appears in the upper right corner of the tool window.



## 2.5 Write HG Setting File to Terminal

Click on [Write] while your PC and the Terminal are connected with the USB type C cable.

Write a HG setting file to the Terminal.



### 【Notes】

All LEDs on the Terminal turn yellow during writing.

The Terminal will automatically restart after writing.

Never disconnect the cable from the Terminal until it is restarted and in "Standby Mode\*".

\*In the initial status, the rightmost LED blinks blue slowly.

- Since your devices are switched during communication, the Windows device connection / disconnection sound is played.
- Only one Terminal can be connected to your PC at once.
- If communication fails, reconnect the USB type C cable.

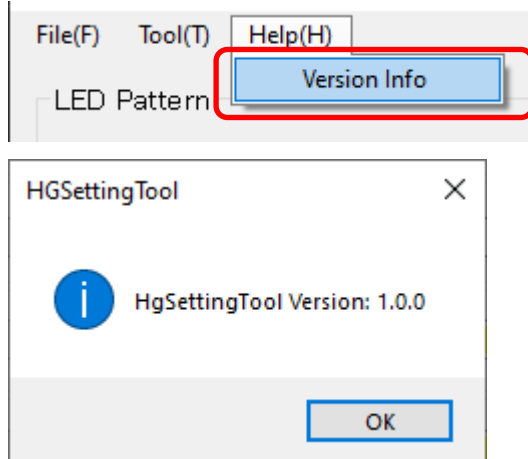
# 3 Other

## 3.1 Check HG Setting Tool Version

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Click on [Help] from the menu at the top. Then click on [Version Info].

Check the version of HG Setting Tool.



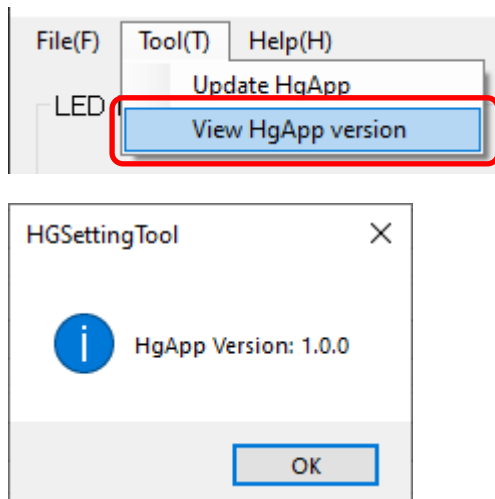
## 3.2 Check HgApp Version

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Click on [Tool] from the menu at the top. Then click on [View HgApp version].

Check the application version in the Terminal.

\*Check it while your PC and the Terminal and are connected with the USB type C cable.





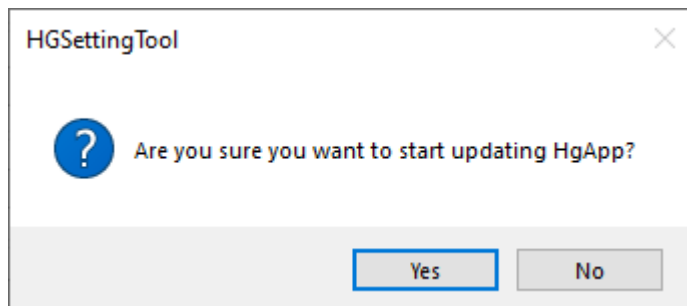
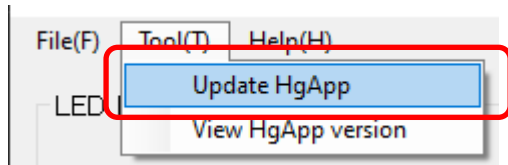
## 3.3 Update HgApp

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Click on [Tool] from the menu at the top. Then click on [Update HgApp].

Update the applications in the Terminal.

\*Update it while your PC and the Terminal and are connected with the USB type C cable.



### 【Notes】

All LEDs on the Terminal turn yellow during writing.

The Terminal will automatically restart after writing.

Never disconnect the cable from the Terminal until it is restarted and in "Standby Mode\*".

\*In the initial status, the rightmost LED blinks blue slowly.

- Since your devices are switched during communication, the Windows device connection / disconnection sound is played.
- Only one Terminal can be connected to your PC at once.
- If communication fails, reconnect the USB type C cable.

# Contact Us

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For comments or inquiries, feel free to contact us via e-mail.

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DMC Co., Ltd.

Office hours: 9:00a.m to 5:00 p.m. (JST)

(Except Saturdays, Sundays, national holidays, and year-end and New Year holidays)

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