

METALENSE 2

Operation Tool User Manual

Ver.1.0.0



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I . Overview

1. Introduction

This user manual is a guide for the AR Operating Tools.

2. Target Audience

This manual is intended for users who manage P&C Solution's Metalens 2.

3. User Manual Composition

This user manual consists of a total of 8 chapters, configured as follows.

Chapter	Description
I. Overview	Explains the basic information about the user manual
II. PC IP Settings	Explains how to directly assign the IP to be used for the operating tool connection (Can be omitted).
III. Initial Device Connection	Explains how to connect the device and the operating tool
IV. Dashboard Editing	Explains the composition of the dashboard editing menu and how to operate it
V. Device Control	Explains the composition of the device control menu and how to operate it.
VI. App Control	Explains the composition of the app control menu and how to operate it.
VII. Remote Screenshot and Mirroring	Explains how to capture or monitor the current screen of the device in use.
VIII. HMD Alias Setting	Explains how to set a name for each HMD (Head-Mounted Display) managed.

4. Notes on Connection

If the operating tool and the device (Metalens 2) do not connect, please check the following:

- Please confirm that the Wi-Fi the device is connected to is the same network as the PC where the operating tool is installed.
- Please ensure that the IP and Port entered on the device match the Server Address displayed on the operating tool..

II. PC IP Settings (Optional)

If multiple IPs exist on the PC, you can designate the IP to be used for the operating tool connection according to your needs. If not set manually, one of the existing IPs will be used randomly.

*This process is optional and can be skipped during program installation.

1. Check Installation PC IP

Run the Command Prompt and enter ipconfig -all.

Identify the IP address you wish to use from the IPs displayed after entering the command.

```
C:\>\jyyu>ipconfig -all  
Windows IP Configuration  
  
Host Name . . . . . : [REDACTED]  
Primary Dns Suffix . . . . . :  
Node Type . . . . . : Hybrid  
IP Routing Enabled. . . . . : No  
WINS Proxy Enabled. . . . . : No  
  
Ethernet adapter 이더넷:  
  
Connection-specific DNS Suffix . . . . . :  
Description . . . . . : Realtek Gaming 2.5GbE Family Controller  
Physical Address . . . . . : E8-9C-25-35-A7-7F  
DHCP Enabled. . . . . : No  
Autoconfiguration Enabled . . . . . : Yes  
Link-local IPv6 Address . . . . . : fe80::a0e0:47a7:8d6e:4cfb%17(PREFERRED)  
IPv4 Address . . . . . : 192.168.50.102(PREFERRED) IP #1  
Subnet Mask . . . . . : 255.255.255.0  
IPv4 Address . . . . . : 192.168.50.104(PREFERRED) IP #2  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.50.1  
  
COMMAND PROMPT WINDOW
```

2. Check and Modify INI File

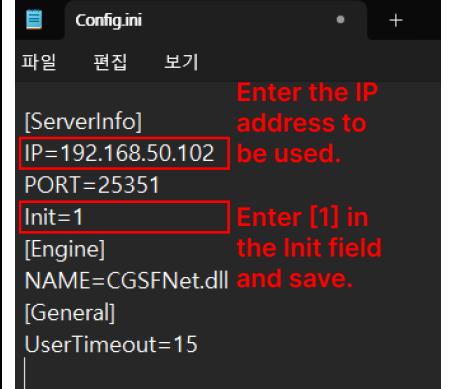
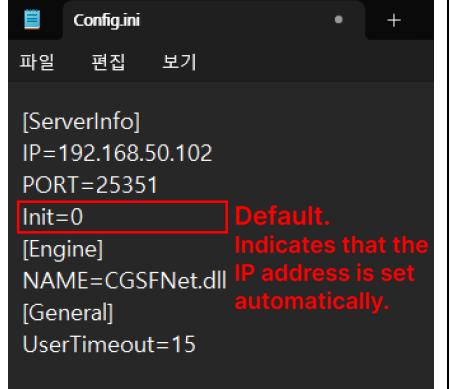
Navigate to the path where the operating tool is installed and run the [Config.ini] file.

*Build Standard Path: \METALENSE OPT\ARGlass_OPT_Data\StreamingAssets\svr\Config.ini

In the IP item displayed in the ini file, enter the PC's IP you want to use.

Enter [1] in the Init item and save the file.

The initial Init value is set to [0], which means the IP is set automatically.

 <p>Config.ini</p> <p>[ServerInfo] Enter the IP address to be used. IP=192.168.50.102 PORT=25351 Init=1 Enter [1] in the Init field [Engine] NAME=CGSFNet.dll and save. [General] UserTimeout=15</p>	 <p>Config.ini</p> <p>[ServerInfo] IP=192.168.50.102 PORT=25351 Init=0 Default. [Engine] Indicates that the IP address is set automatically. NAME=CGSFNet.dll [General] UserTimeout=15</p>
IP CONFIGURATION METHOD	(DEFAULT) AUTOMATIC IP SETTING

III. Initial Device Connection

1. Check Server Address

Connect the device to the same network as the operating tool PC (Wi-Fi connection).

Enter the operating tool PC's [IP Address] and [Port] into the device you want to connect.

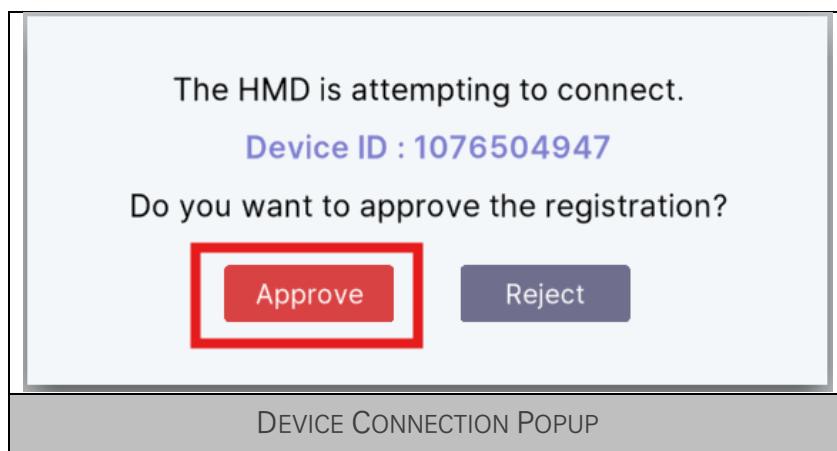
The [IP Address] and [Port] can be checked by clicking the [Settings Button] in the top menu of the operating tool.



2. Device Connection Approval

When the device attempts to connect, a connection popup will appear in the operating tool.

Clicking the [Approve Button] will display the device on the dashboard.



3. Device Connection Disconnection

Go to the [HMD Alias Setting screen].

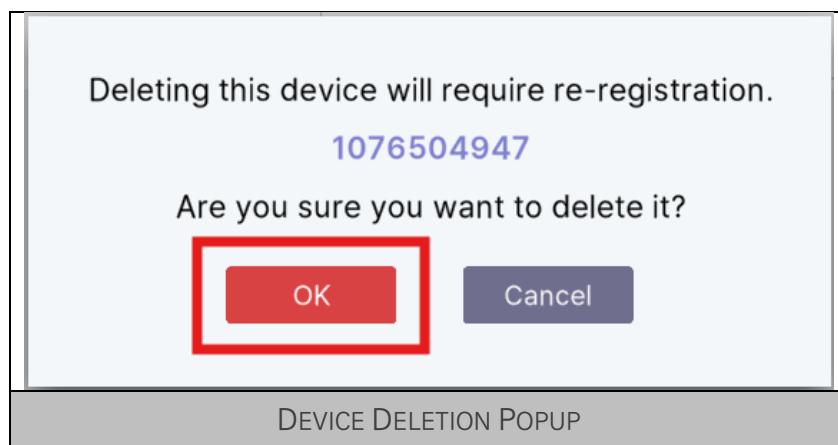
Find the device you want to disconnect from the list of connected devices.

Clicking the [Trash Can Button] on the far right of the item will display a deletion confirmation popup.

The screenshot shows the 'HMD ALIAS SETTING SCREEN' with two devices connected. Device 1 has a battery level of 87% and Device 2 has 100%. Both have their Unique IDs listed. There are input fields for entering display names and 'Save' buttons. On the right, there's a 'Manage' section with a count of 2, and two trash can icons are highlighted with red boxes.

Clicking the [OK Button] will delete all information about the device from the operating tool and disconnect the connection.

Deleted devices can be re-registered through the initial registration process.



IV. Dashboard Edit

1. Change Card Arrangement

You can change the placement of the connected device's cards by clicking the [Edit Style Button].



2. Style Edit Menu

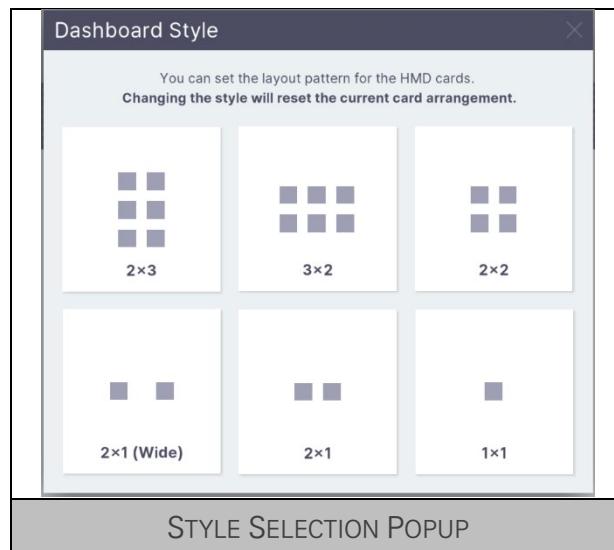
Clicking the [Edit Style Button] on the top right of the screen displays the Style Edit Menu at that location.



2-1. Style Change Button

You can set the layout style of the card group through Style Change.

Clicking the [Change Style Button] opens the Style Selection Popup, which offers six card layout options.



2-2. Auto Sort Button

Clicking the [Auto Sort Button] rearranges all devices in the order they were registered in the operating tool.

2-3. Add/Delete Table Button

Clicking the [+ Button] adds a group table.

Clicking the [- Button] deletes the last group table.

Group tables that already have devices placed cannot be deleted.

2-4. Quit Button

Clicking the [Quit Button] exits the editing mode.

V. Device Control

1. Device Control Method

Control Method : [Select device to control] → [Select command] → Click[Execute Button]



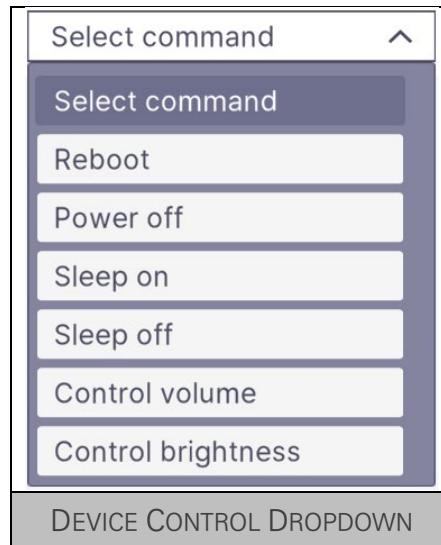
2. Types of Device Control Functions

2-1. Power-Related Control

- 1 Reboot: Shuts down the device power and starts it again.
2. Power Off: Shuts down the device power completely.
3. Sleep On: Changes the device to power-saving mode.
4. Sleep Off: Activates the device from power-saving mode.

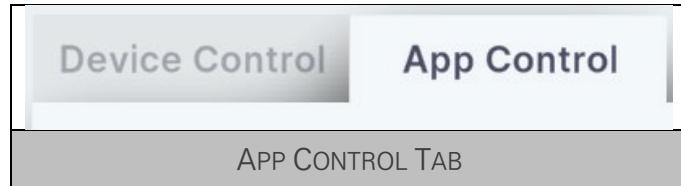
2-2. Setting Control

1. Volume: Changes the device's volume (0 to 15 levels).
2. Screen Brightness: Changes the device's screen brightness (0 to 5 levels)



VI. App Control

Clicking the [App Control Tab] displays the related menu.



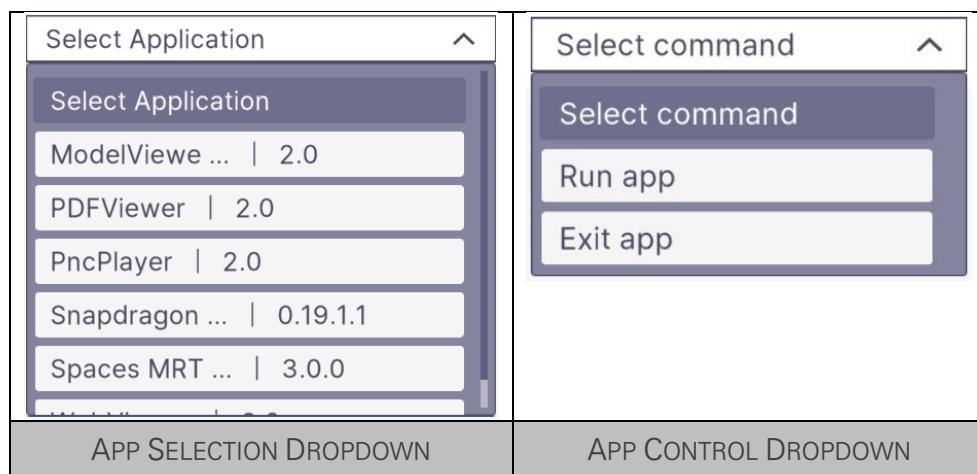
1. App Control Method

App Control Method : [Select device to control] → [Select App] → [Select command] → Click [Execute Button].



2. Types of App Control Functions

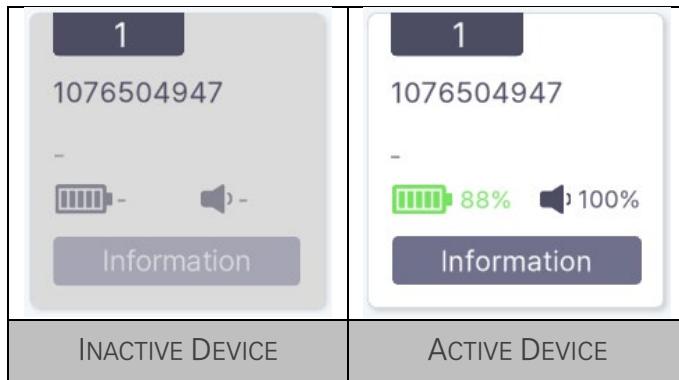
1. Run App : Runs the selected app on the selected device.
2. Close App : Closes the selected app on the selected device.



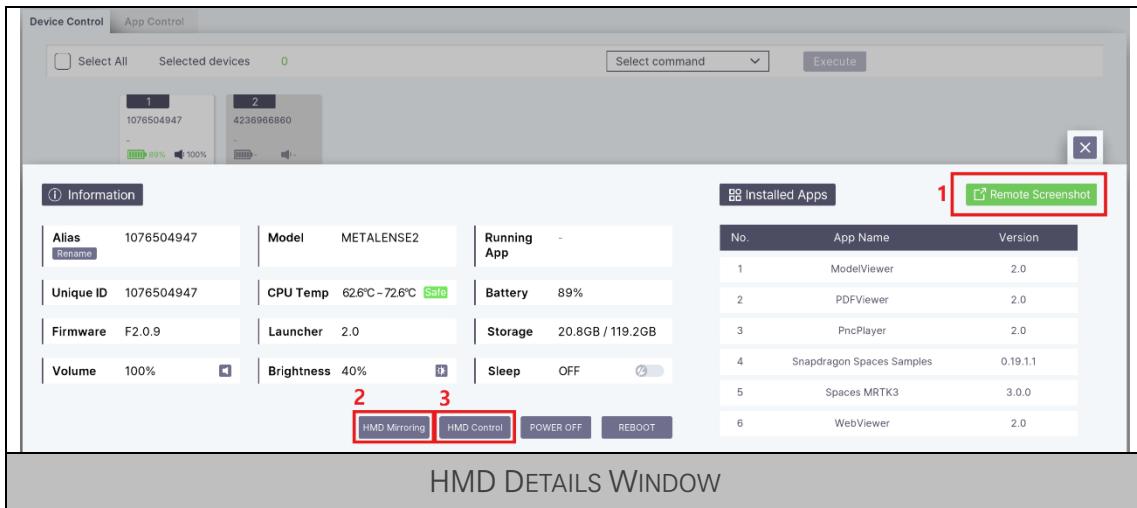
VII. Remote Screenshot and Mirroring

1. Check Device Connection Status

This is provided in the [HMD Details Window] displayed when clicking the [Information Button] on the activated device card in the dashboard. The [Information Button] is activated when the device is connected.



2. Open Details Window



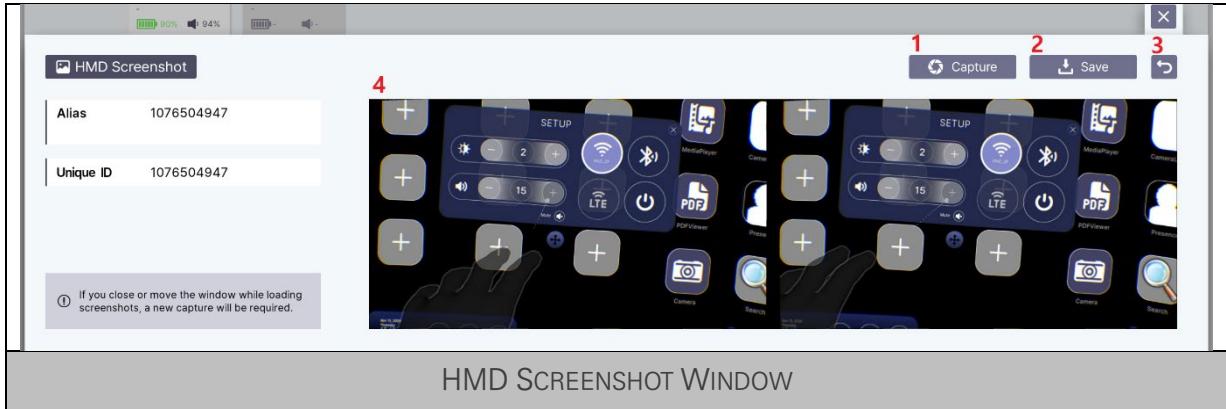
1. Remote Screenshot: Changes to the screenshot capture screen when clicked.
2. HMD Mirroring: Creates a window displaying the virtual and real environment as seen from the device's perspective.
3. HMD Control: Creates a window displaying the virtual environment as seen from the device's perspective.

3. HMD Screenshot Capture

Clicking the [Remote Screenshot Button] on the top right of the details window changes the

configuration of the details window.

The main components include the [Capture Button], [Save Button], [Back Button], and [Screenshot Preview Area].



3-1. Capture Button

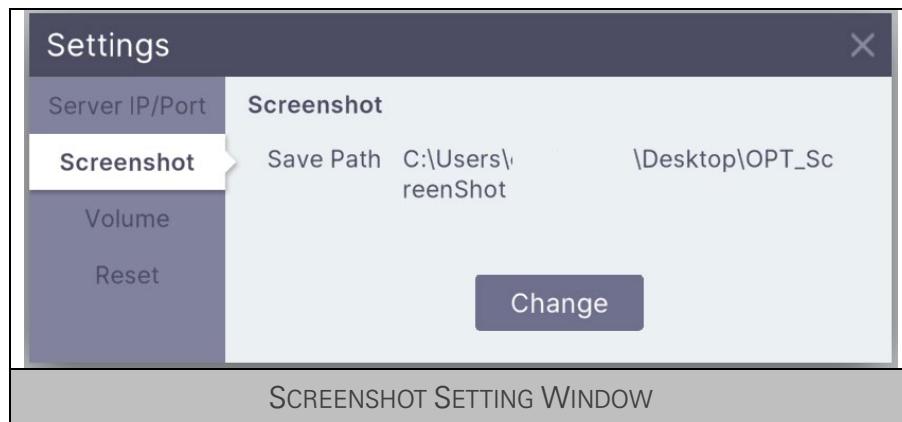
Displays a confirmation popup window when clicked.

Clicking Confirm again captures the current HMD screen and displays it in the Screenshot Preview Area below.

3-2. Save Button

Saves the original image displayed in the preview area to the PC.

The save path can be checked or changed in the operating tool settings.



3-3. Back Button

Click to exit screenshot mode and return to device details view.

3-4. Screenshot Preview Area

Displays the captured screen based on both lenses of the device. The actual surrounding environment is not captured.

4. Real-time Screen Monitoring

Clicking the [HMD Mirroring Button] in the details window displays the monitoring screen in a separate window. You can view the virtual environment and the actual surrounding environment in real-time as seen from the device's perspective.



5. Screen Control Monitoring

- Clicking the [HMD Control Button] in the details window displays the control screen in a separate window..



5-1. Restrictions and Usage

It only works with apps that allow touch or mouse operation within the screen.

It can be used to operate system UI that cannot be directly controlled on the device, or to transfer apps or files to the device.

5-2. App Installation

Dragging and dropping the apk file to be installed onto the Screen Control window will automatically install the app on the device.

5-3. File Transfer

Dragging and dropping the file to be transferred onto the Screen Control window will save the file to the device's [Download Folder].

VIII. HMD Alias Setting

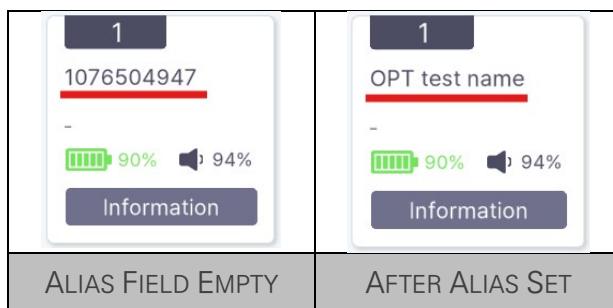
In the [Rename HMD Screen], you can set a name for each device for management purposes.

The screenshot shows the 'Rename HMD' interface. At the top, there are tabs for 'Dashboard' and 'Rename HMD'. Below the tabs, it says 'SYSTEM AR Operating Tools' and 'Devices are displayed in the order in which they were registered.' There are two entries in the list:

No.	Connection	Battery	Unique ID	Alias	Manage
1	Wi-Fi	90%	1076504947	OPT test name	Save
2	Wi-Fi	-	4236966860	Enter display name.	Save

A large grey bar at the bottom is labeled 'ALIAS SETTING WINDOW'.

The alias is displayed on the dashboard and in the device's device information. If no alias is set, the Unique ID is displayed



1. Alias Setting Method (1)

Enter the desired alias in the Device Alias field.

The screenshot shows the 'Rename HMD' interface with one device entry. The alias field is highlighted with a red box and contains 'OPT test name'. The rest of the interface is similar to the previous screenshot.

2. Alias Setting Method (2)

Open the details window for the device you want to change on the [Dashboard].

Click the [Rename Button] for the Device Alias.

Enter the alias in the displayed box and click the [Save Button], and the name will be immediately applied

(i) Information	(i) Information
Alias 1076504947 Rename	Alias OPT test Save Cancel
DETAILS – ALIAS FIELD	SCREEN AFTER CLICKING EDIT

-END-

2025-10-16

Based on METALENSE_OPT_ver.1.0.0 (Release Version).