



ILME-FR7

Network Setting Guide

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1. Summary

This document describes how to set up multiple cameras for use in a local environment using the Sony ILME-FR7 interchangeable lens digital camera. Hereinafter, this product ILME-FR7 will be referred to as "camera" or "this unit".

1.1. About 3rd-party services and software

- Different terms of use may apply.
- The provision of services and software updates may be interrupted or terminated without notice.
- The description of services and software is subject to change without notice.
- Sony will not be liable for any claims made by users or a third party due to the use of services and software of other companies.

2. Network System Diagrams and Flowcharts

This chapter describes a configuration diagram of the network system and an overview of the procedures for connecting the cameras to the network.

2.1. Network System configuration diagram and hardware connection configuration diagram

The following figure is a configuration diagram of the network system created as an example in this manual. In this example, the system will consist of two RM-IP500 remote controllers, three ILME-FR7 cameras, and two tablet devices. Each device is assumed to have an arbitrary unique IP address.

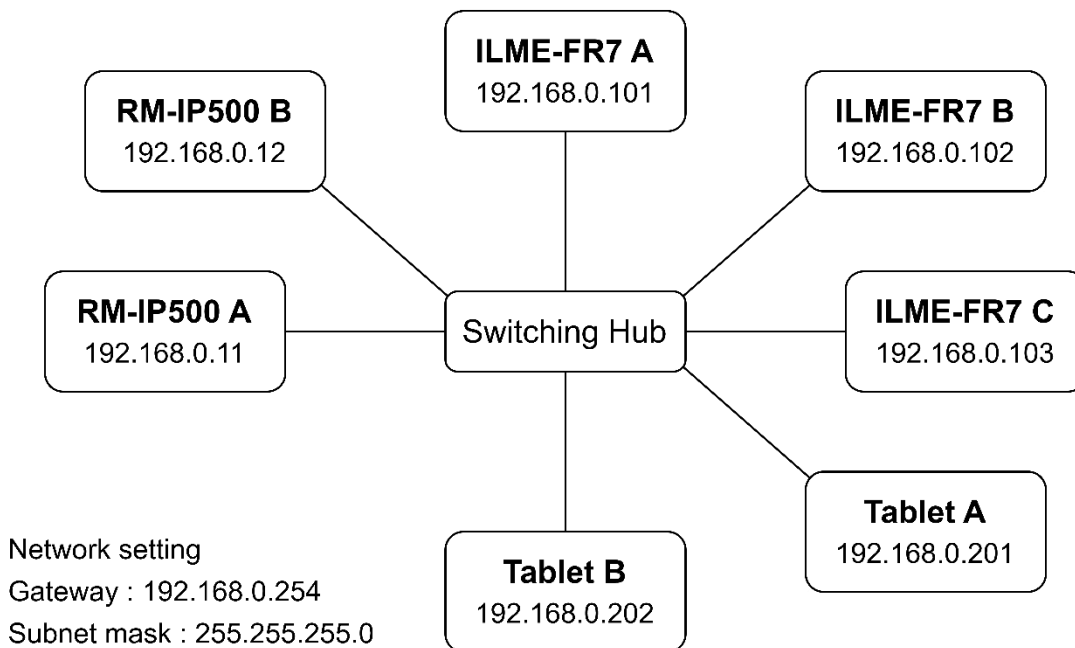


Figure 1 The configuration diagram of the Network System

In addition, the hardware connection configuration diagram is shown below. Please refer to each section of Chapter 4 for how to connect the cables to each device.

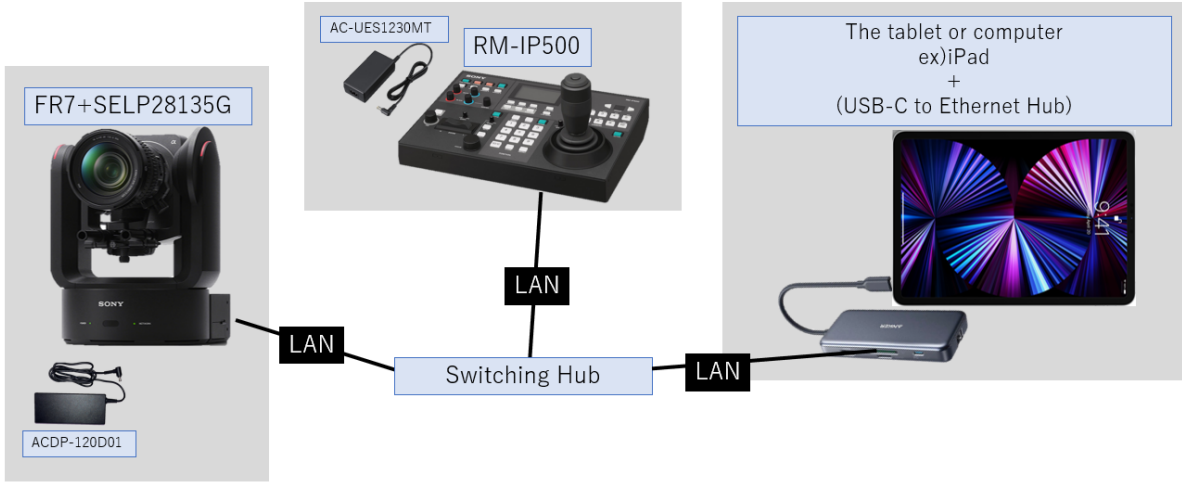


Figure 2 Hardware Connection Configuration Diagram

2.2. Flowchart

The following is a flowchart of the connection procedure. First connect your tablet or computer to the network in order to login the Web App in camera. Next, connect the camera to the network, and finally connect the remote controller to the network. It is recommended to initialize the camera and remote controller before making the connection.



Figure 3 Summary of connection order

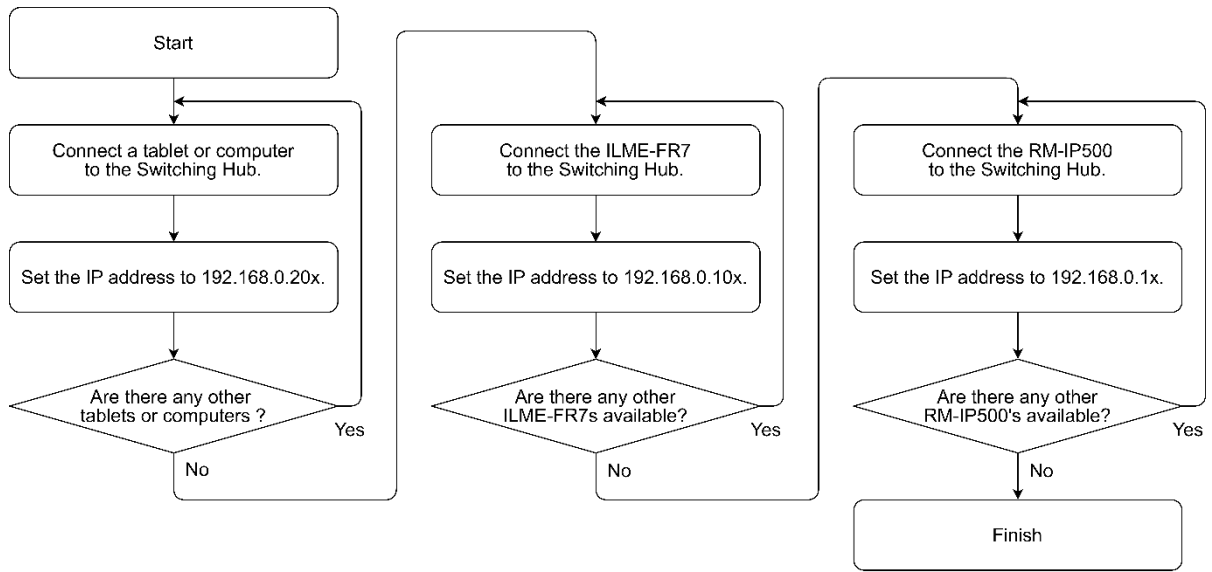


Figure 4 Connection Flowchart

3. Preconfiguring

Check the network environment before connecting a tablet or computer, ILME-FR7, or RM-IP500.

3.1. Preparing the network

To ensure the quality of communication between the tablet or computer and ILME-FR7 and RM-IP500, it is recommended that they be operated in independent local networks. The switching hub to be used must be 1000BASE-T (Gigabit Ethernet) compliant and the LAN cable must be Category 5e or higher.

3.2. Precautions when connecting to the network

We recommend that you run the setup separately for each device when connecting to the network. All devices connecting to the network should be set up so that each device has a different IP address. If multiple devices have the same IP address, they will not be able to connect to each other. See the manual for each device for detailed IP addressing procedures.

3.3. Order of network connections

When connecting to the network, connect the tablet or computer, ILME-FR7, and RM-IP500 in that order. For details on how to connect, please refer to Chapter 4.

4. Connecting the device

The actual connection procedure is shown below.

4.1. Connecting LAN cable and charging cable to iPad

4.1.1. Connecting the LAN cable and power cable to iPad

The following is an explanation of the connection method using an iPad as an example. First, connect the USB-C hub to iPad as shown below.



Figure 5 Connecting the USB-C HUB to iPad

Next, connect the LAN cable to the USB-C hub. The connection points are as follows.



Figure 6 Connecting the LAN cable

Connect the charging cable. Use a charger with a power of 30 W or more. Using a charger with low power output may cause the tablet not to charge and operations to be interrupted.



Figure 7 Connecting the Charging Cable

4.1.2. Change network settings on iPad

After connecting the tablet or computer to the network via a wired connection, set the IP address from the Settings screen. The following is an example of how to set an IP address when iPad is wired to the network.

•Connect iPad to the wired connection. If it is already connected to Wi-Fi, disconnect it.

•[Settings] → [Ethernet] → [USB 10/100/1000 LAN]→ [IPv4 Address] → [Configure IP] Automatic → Manual

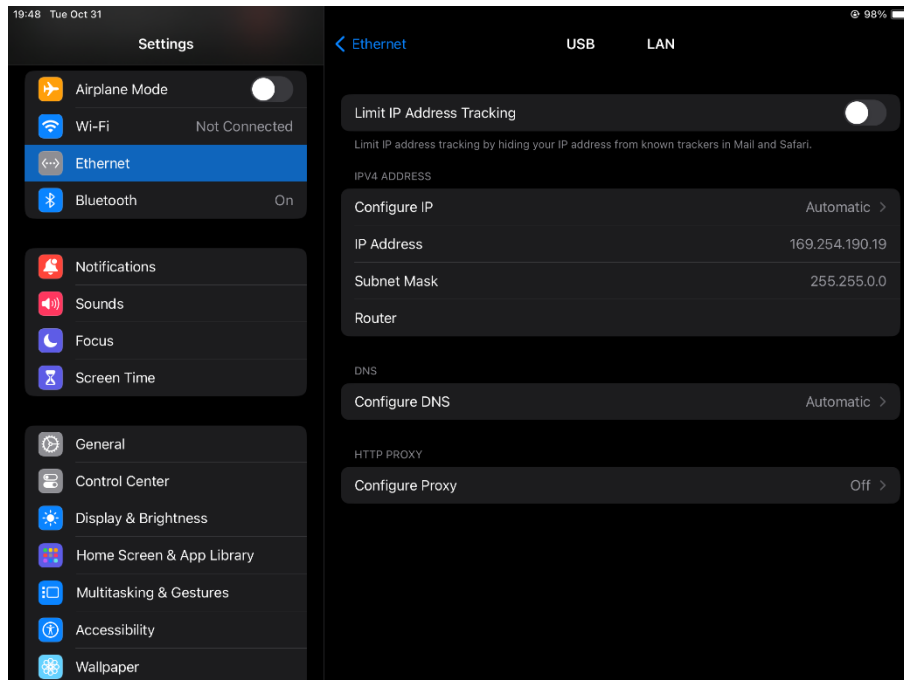


Figure 8 iPad network settings screen

•Set the displayed [MANUAL IP] to the following.

- IP Address: 192.168.0.201
- Subnet Mask: 255.255.255.0
- Router: 192.168.0.254

•After entering the information, click [Save] in the upper right corner of the screen.

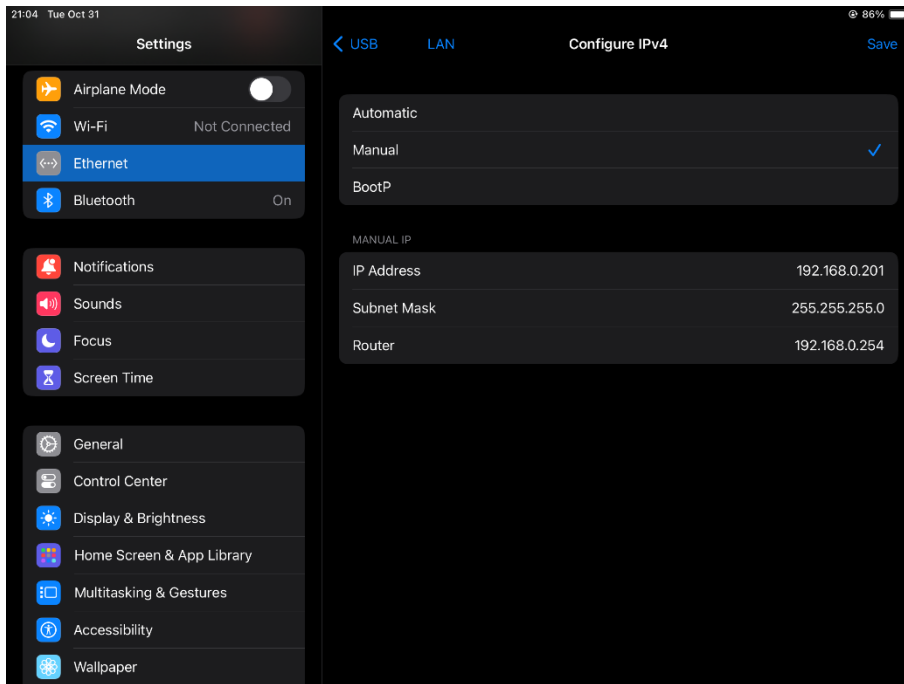


Figure 9 iPad IP network settings screen

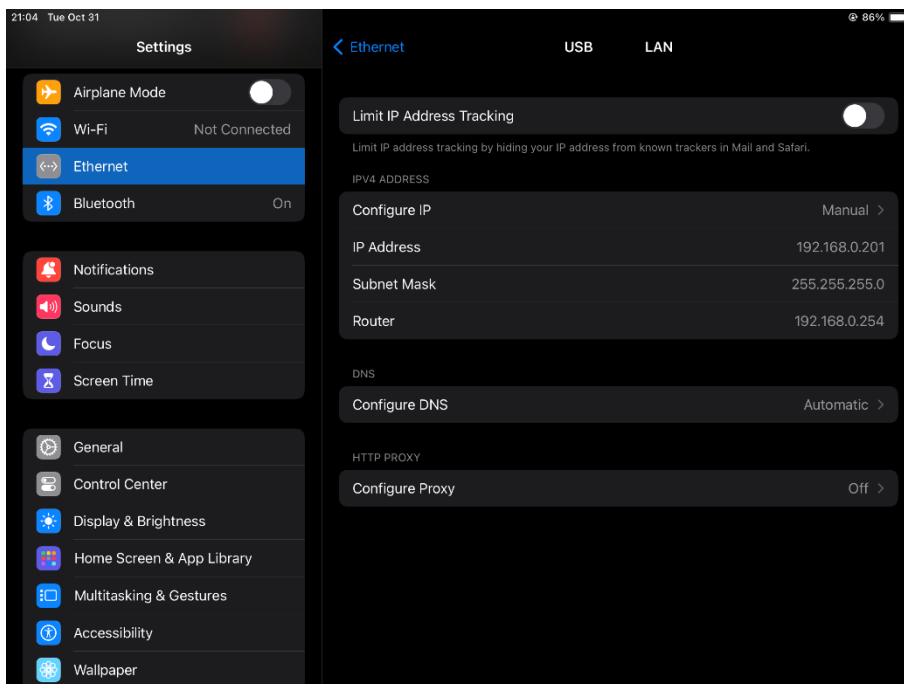


Figure 10 iPad network settings screen

- Follow the same procedure for Tablet B and set the IP address as follows.
 - IP Address: 192.168.0.202
 - Subnet Mask: 255.255.255.0
 - Router: 192.168.0.254

4.2. Connecting the Camera

4.2.1. Enabling VISCA over IP communication

Set the VISCA over IP communication to "Enable" by turning on the number 3 of the SETUP switch of the camera.

The switch should be set before turning on the camera.

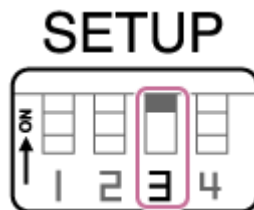


Figure 11 SETUP switch on rear panel

4.2.2. Connecting the LAN and Power Cables to ILME-FR7

Connect the camera to the network via a wired connection and set the IP address from the configuration screen according to the following procedure.

Refer to the figure below for the power supply and LAN cable connection to the camera.



Figure 12 Cable connection diagram on the back of ILME-FR7

4.2.3. Access the Web App and change the camera's IP address.

Access the camera's Web App either by using mDNS or by using a link-local address starting with 169.254... for the IP address.

Hint

Please refer to the following to access the camera.

• When accessing by method using mDNS

1. Scan the 2D code (QR code) printed on the back of the media lid on the side of the camera using a camera app on the tablet.

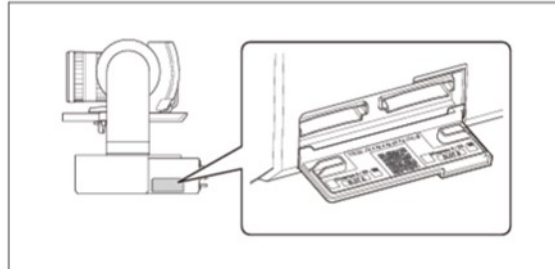


Figure 13 QR code location of the camera

2. By opening the link displayed on the tablet, the web browser will open on the tablet and you can access the Web App.

* If you cannot access the back of the media lid on the side of the camera, please enter the following directly into the URL field of your browser to access the Web App.

**" [http://ilme-fr7-
< camera serial number >.local/](http://ilme-fr7-
< camera serial number >.local/) "**

* Depending on your network environment, you may not be able to access the Web App using the mDNS method. Please try the method using the local address linked below.

• When accessing by method using a link-local address

* You need to change the IP address setting of the iPad. Refer to subsection 4.1.2 and set the IP address of the tablet below. **Also, please remember to return to the IP address setting described in subsection 4.1.2 after completing the IP address setting for the camera.**

- IP Address: 169.254.100.100
- Subnet Mask: 255.255.0.0
- Router: 0.0.0.0

1. Connect the camera's HDMI port to an external monitor so that you can check the camera menu.
2. Open the camera menu from the IR remote control. You can access the camera menu from the MENU button in the figure below.

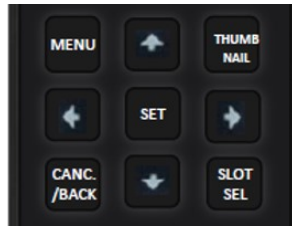


Figure 14 IR remote control menu button

3. Operate the IR remote control and select [Network] → [Wired LAN] → [Detail Settings] → [IP Address]. to check the IP address of the camera.

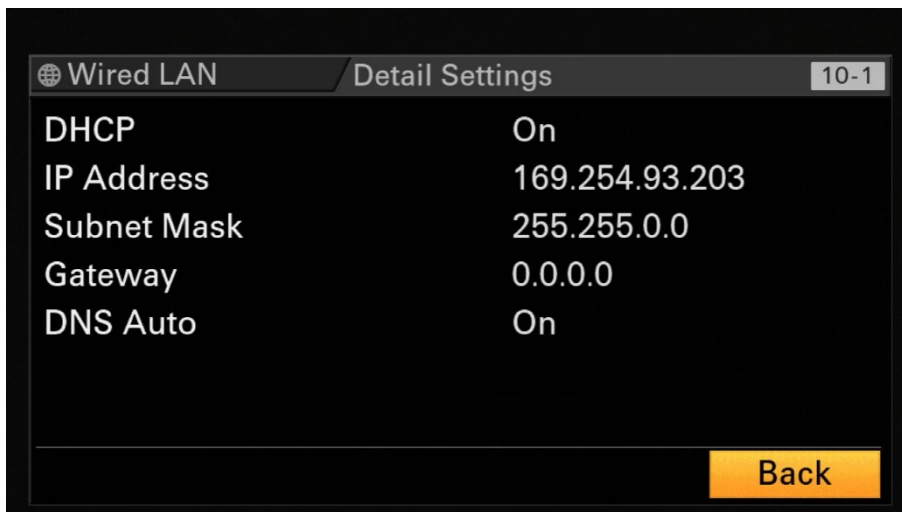


Figure 15 Camera IP address confirmation screen

4. Enter the confirmed IP address directly into the URL field of your tablet's web browser.
5. The Web App screen appears.

From the Web App web menu, select [Network]→[Wired LAN]→ [IPv4]→[DHCP] Set to Off.

Set the displayed setting items as follows.

- IP Address: 192.168.0.101
- Subnet Mask: 255.255.255.0
- Router: 192.168.0.254

After entering, press [OK] at the bottom right of the screen.

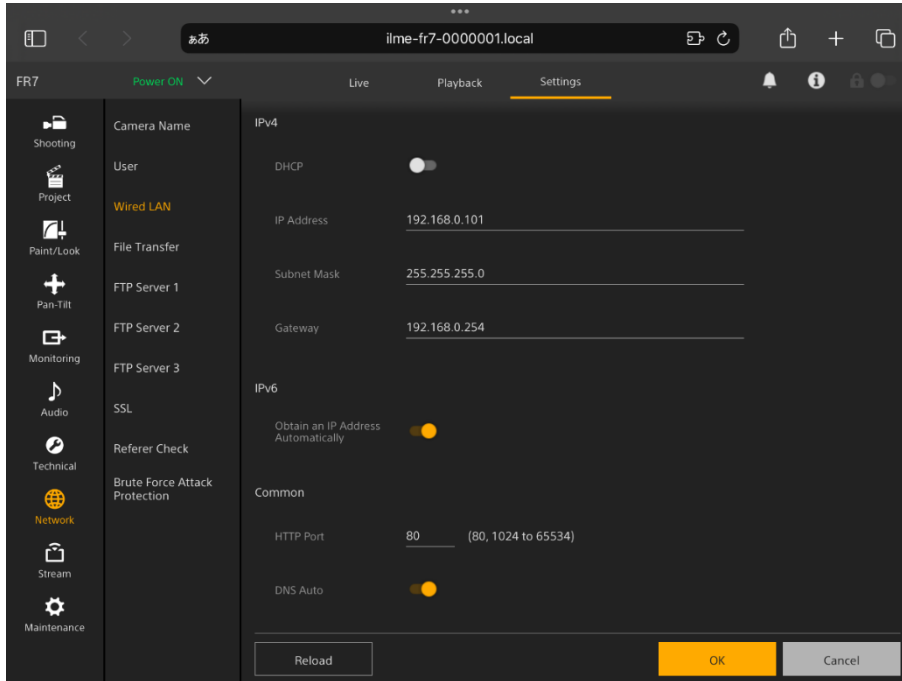


Figure 16 ILME-FR7 network settings screen

ILME-FR7 B and ILME-FR7 C follow the same procedure and set the IP address as follows.

ILME-FR7 B

- IP Address: 192.168.0.102
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.254

ILME-FR7 C

- IP Address: 192.168.0.103
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.254

Note

Whether or not you can search for cameras as shown above depends on your network environment and other factors. If a camera is not found, the following factors may be at play

- Your router or switch does not support mDNS.
- The firewall settings on your computer are preventing the device search from communicating.

4.3. Connecting the Remote Controller

4.3.1. Connecting the LAN cable and power cable to RM-IP500

For RM-IP500, connect the LAN cable and power cable as shown in the figure below.



Figure 17 RM-IP500 Cabling Diagram

4.3.2. Remote Controller Network Setup

Select [CONFIG] → [LAN] from the RM menu to move to the following screen.

```
<LAN>
IP: →192. 168.   0.  10
SM: 255. 255. 255.   0
GW:   0.   0.   0.   0
APPLY          : NOT EXEC

MAC: xx-xx-xx-xx-xx-xx
PRST: TRACE
```

Figure 18 RM-IP500 Network Settings Screen

Operate the SELECT and VALUE knobs, and set RM-IP500 A and B to the following settings.

RM-IP500 A

- IP: 192.168.0.11

- SM: 255.255.255.0
- GW: 192.168.0.254

RM-IP500 B

- IP: 192.168.0.12
- SM: 255.255.255.0
- GW: 192.168.0.254

Next, search for the camera. For details, see the section "Connecting remote controllers, cameras, and setup PC using LAN connection" in the RM-IP500 Operating Instructions.

4.3.3. Assign a camera

In order to operate a camera with a remote controller, the camera number is linked to a camera on the network. This is called "camera assignment". A list of assigned cameras is stored in the unit as a "camera table". Camera numbers are assigned by the numbers of the GROUP and CAMERA buttons in the camera selection section. Camera assignments are made in the RM menu under [AUTO IP SETUP] → [ASSIGN CAM].

```

<ASSIGN CAM>
 [FROM]
→GROUP NUM   : 01
  CAMERA NUM  : 01
  KEEP IP     : NOT EXEC

PRST : TRACE

```

Figure 19 ASSIGN CAM setting screen

1. Make sure that the camera you want to assign is connected to the network and turned on.
2. Press the RM MENU button to select (the button lights up yellow).
The top menu of the RM menu is displayed.
3. Turn the SELECT knob to move the cursor to AUTO IP SETUP.
4. Press the SELECT button.
The AUTO IP SETUP menu appears.
5. Turn the SELECT knob to select ASSIGN CAM and press the SELECT button.
6. Turn the SELECT knob to move the cursor to GROUP NUM.
Set the group number for which to begin assignment.

7. Turn the VALUE knob to set the value.
Turning clockwise increases the value, and turning counterclockwise decreases the value.
8. Turn the SELECT knob to move the cursor to CAMERA NUM.
Set the camera number for which to begin assignment.
9. Turn the VALUE knob to set the value.
Turning clockwise increases the value, and turning counterclockwise decreases the value.
10. When finished making all settings, turn the SELECT knob to move the cursor to KEEP IP.
11. Turn the VALUE knob to change NOT EXEC to EXEC, then press the VALUE button.
The message WAIT FOR A FEW SECONDS appears on the screen.
12. When the message disappears, turn the VALUE knob to switch NO to YES and press the VALUE button.

```
<CONFIRM EXECUTION>  
→CONFIRM      : YES
```

Figure 20 CONFIRM SCREEN

To add a camera

[AUTO IP SETUP] →[SETUP IP] or [AUTO IP SETUP] →[ASSIGN CAM].

It is added to the end of the assigned camera table. For other remote controller operating instructions, refer to the RM-IP500 instruction manual.

5. Troubleshooting

If the connection does not work, please refer to the following causes and solutions.

5.1.1. Tablet or computer cannot connect

- Double-check the initialization of the network settings and cables of the device that cannot be connected.
- Please refer to the procedure below to check the IP address of the camera and access the Web App.
If the IP address has been changed or cannot be set, refer to subsection 4.2.2 to set the IP address of the camera.

5.1.2. Cannot connect to the Web App.

- Make sure that you are using a Category 5e or higher LAN cable to connect.
- Make sure that the [LINK] LED on the LAN terminal is lit. [LINK] If the LED is not lit, double-check your network connection.
- Make sure that the IP addresses of other peripherals are not duplicated.
- Please refer to the steps below to perform a network reset.

Press the RESET switch with a thin tip such as a pen tip.

To restore the network settings to the factory settings, keep the SETUP switch No. 1 at OFF and press and hold the RESET switch for at least 5 seconds.

To restore all settings of this unit to the factory default state, turn on the SETUP switch number 1, and then press and hold the RESET switch for at least 5 seconds.

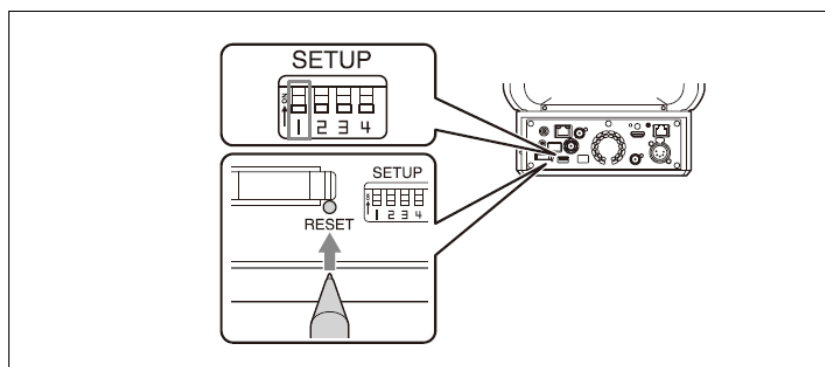


Figure 21 Network Reset Procedure

After the network reset, the camera's network settings will be set to DHCP ON.

In addition, the username and password will be changed to the factory defaults, so please

enter the following when you connect to the Web App for the first time after the reset.

Username: admin

Password: None

After entering, the screen of the camera's Web App is displayed.

5.1.3. The camera cannot be operated from the remote controller RM-IP500.

- Make sure the POWER lamp on the camera is solid green or orange.
- Check the connection between the camera and the remote controller.
- Use the Web App to complete the initial setup.
- Turn on the SETUP switch number 3 on the camera's terminal and restart it.
- Check the IP address of the camera in the [Network] → [Wired LAN] in the web menu or the camera menu

6. Trademarks

- iPad is trademarks of Apple Inc., registered in the U.S. and other countries and regions.
- Anker and the Anker logo are trademarks of Anker Innovations Limited, registered in the United States and other countries.
- QR Code is a trademark of Denso Wave Inc.
- All other company names and product names are registered trademarks or trademarks of their respective owners. Trademarked items are not indicated by [™] or ® symbols in this document.

7. Revision History

date	Revised version	substance
2023/11/28	1.00	first edition

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