datavideo
RRMMCC-2P
Camera
Controller

datavideo RRMMCC-2P Camera Controller Instruction Manual

Contents

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FAQs

- **Q: How do I clean the Camera Controller?**
  - A: Unplug the unit from the wall outlet before cleaning. Avoid using liquid or aerosol cleaners; instead, use a damp cloth for cleaning.
- **Q: Can the Camera Controller be used near water?**
  - A: It is advised not to use the unit in or near water to prevent damage.

Product Overview

The Datavideo RMC-2P serves as an uncomplicated yet versatile camera controller designed specifically for managing Datavideo PTZ series cameras through the DVIP protocol. It supports up to 4 preset positions for each connected camera. The preset buttons give you direct access to the pre-saved camera positions. Additionally, the joystick facilitates the PTZ camera panning, tilting,g and zooming, offering a comprehensive and intuitive user experience. To further enhance user control, the RMC-2P incorporates FAST, MI,D and SLOW buttons so that you can change the camera's PTZ speed by simply pressing one of these buttons.

Features

- The RMC-2P is compatible with the TPC-700 or iCAST MINI through an adapter cable connected to its USB interface.
- It can be controlled using the DVIP Protocol.
- Supports PoE (PD) IEEE 802.3 af Power over Ethernet Standard.
- Capable of controlling up to 3 cameras.
- Supports up to 4 preset positions for each connected camera.
- Features a 3-axis joystick designed for controlling PTZ (Pan, Tilt, and Zoom) camera positions.

Connections and Controls

Control Panel

Joystick

Push the three-axis joystick right/left and up/down to respectively pan and tilt the PTZ camera. Rotate or twist the joystick right or left to zoom in or out on an image.

Camera Selection Buttons (CAM 1/2/3)

The RMC-2P allows you to control up to 3 cameras. Press the CAM1, CAM2, or CAM3 buttons to select one of the connected cameras. The buttons should illuminate in red when pushed. Steps to assign cameras to the CAM buttons are outlined as follows:

Scan the network for connected cameras (CAM1 + FAST)

Simultaneously press and hold the CAM1 and FAST buttons and while holding these buttons, connect power via the USB Type C interface to start the RMC2P in camera scan mode. When in camera scan mode, the CAM 1/2/3 buttons should all illuminate and you must then set the maximum number of cameras to be scanned within 5 seconds. Press CAM 1/2/3 to set the maximum number of cameras to 1, 2, and 3 respectively. The default is 4. The camera scan process will time out after approximately 1 minute and 30 seconds. After the camera scan process is completed successfully, if the number of cameras found exceeds one, the CAM buttons will then fast flash and you can press the PST 1/2/3/4 buttons to select the cameras. The tally light of the corresponding camera should light up in red. Now, press the CAM1, CAM2, or CAM3 buttons to assign the selected camera to one of the CAM buttons.

Note: If your video production environment changes, you will have to execute the above steps again to reconfigure the CAM buttons.

Speed Buttons (FAST/MID/SLOW)

Use the speed buttons, FAST, MID, and SLOW, to select the speed of PTZ movement. The buttons should illuminate in red when pushed.

Preset Buttons (PST 1/2/3/4)

For the selected camera, press the preset buttons, PST 1/2/3/4, to recall the PTZ preset positions saved in presets 1 to 4 on iCAST MINI or TPC-700. The buttons should illuminate in red when pushed. Press and hold the PST buttons to save the camera's current PTZ settings.

Activating Firmware Upgrade Mode (PST 1 + PST 4)

If your device is installed with the firmware version at V1.0.4.8 or later, the DVIP is enabled. Before performing a firmware upgrade, first press and hold PST 1 and 4 simultaneously to activate the device's firmware upgrade mode. The PST 1/2/3/4 should then light up in steady red.

Ergonomic anti-slip wrist support pad

Rest the wrist on the ergonomic anti-slip wrist support pad while using the RMC-2P.

Rear Panel

DVIP Port

Via the DVIP port, you can connect the RMC-2P to the network to which the cameras are connected. You are allowed to control up to three PTZ cameras. The device can function as a DHCP server or client. Follow the steps outlined below to set the RMC-2P to the DHCP server or client:

Setting DHCP Server/Client (CAM3 + SLOW)

Simultaneously press and hold the CAM3 and SLOW buttons and while holding these buttons, use a USB Type C to Type A cable and a power adapter to connect power to the USB Type C port to enable/disable the DHCP server. If the FAST button lights up in red, the DHCP server is enabled. Conversely, if the FAST button is off, the device then functions as a DHCP client. See 3. Network
Connection for example connections of these two settings. Note: If you are using non-PoE Ethernet cables, please

use the USB Type C interface to power your RMC-2P.

USB Type C Interface

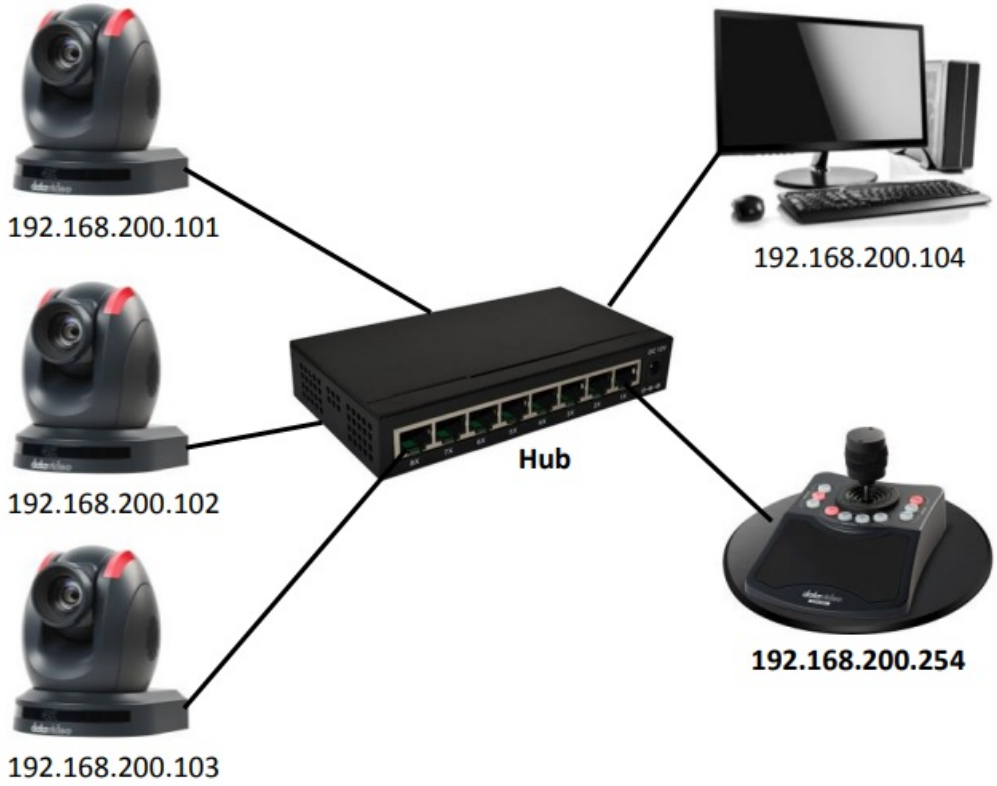
If you are using a non-PoE Ethernet cable for remote control of cameras via an Ethernet network or DVIP is disabled, please power your device by connecting the power to the USB Type C interface using a USB Type C to USB Type A cable and a power adapter. Alternatively, you can also connect the RMC-2P to an external controller which will also serve as a power source. If the RMC-2P is connected to a PoE device via a PoE Ethernet cable, the USB Type C interface can be utilized to connect the RMC-2P to iCAST MINI or TPC700 via a USB type C to USB type A adapter cable for remote control of cameras. See 3. Set up with Datavideo Devices for details. Please note that if the RMC-2P and the controller (iCAST MINI or TPC-700) connect to the same network, the DVIP port will take priority over the USB Type C interface.

Network Connection

The RMC-2P can either work as a DHCP server or client. See the DVIP port descriptions for switching between the DHCP server/client.

DHCP Server

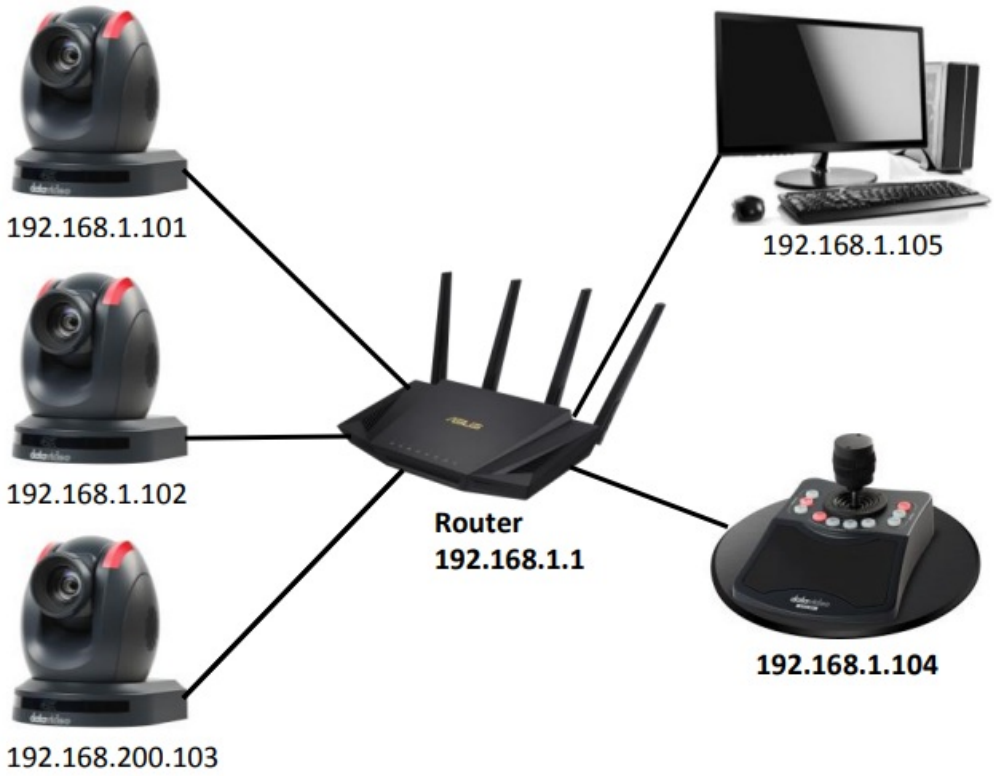
When the DHCP Server is enabled, the RMC-2P functions like a router, which is able to network multiple cameras via a network hub. An example network configuration is shown in the diagram below.



- **RMC-2P**: DHCP server with an IP address of 192.168.200.254.
- **Cameras:** DHCP mode on with IP addresses assigned within the range 192.168.200.2 to 192.168.200.253 by RMC-2P.

DHCP Client

When the RMC-2P functions as a DHCP client, please use a router to establish connections between the RMC-2P and all cameras. An example network configuration is shown in the diagram below.



RMC-2P: The DHCP server is off so the IP address is assigned by the router.
Cameras: DHCP mode on with IP addresses assigned by the router. If necessary, you can also connect a PC installed with the DVIP configuration tool to the same network to modify the network settings of all connected devices. See the section below for descriptions of the tool.

DVIP

DVIP is an Ethernet-based protocol designed by Datavideo to connect a network of Datavideo devices. DVIP Configuration Tool is a special network configuration software tool designed for DVIP device search on the same network and configuring device network settings such as Hostname, DHCP mode, IP address, subnet mask, gateway IP, and primary and secondary DNS. Depending on your operating system, download the DVIP Configuration Tool from the respective sites listed as follows:

PC: **https://www.microsoft.com/en-us/p/dvip-networkconfig/9p6gtz839k6s?activetab=pivot%3Aoverviewtab**

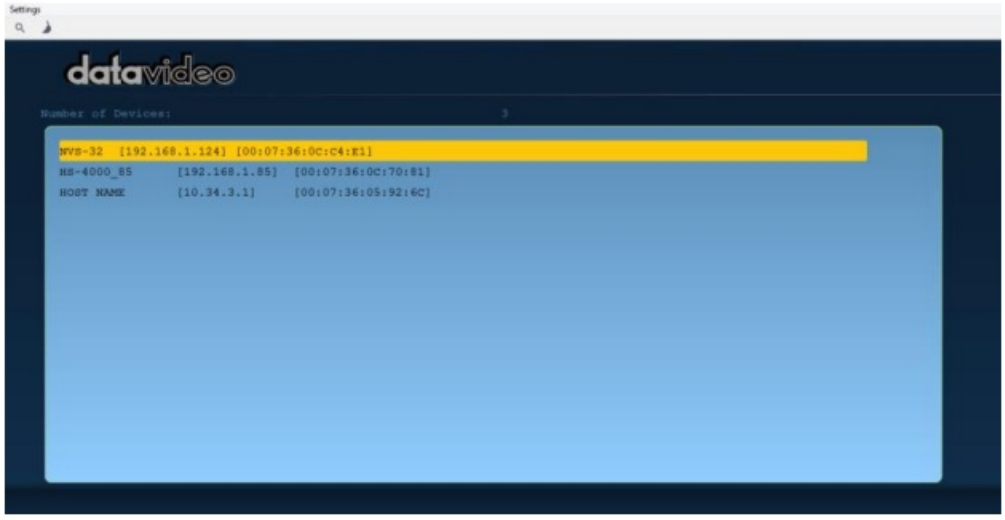
Android:

https://play.google.com/store/apps/details?id=com.datavideo.dvipnetconfig &hl=en_US
iOS: **https://itunes.apple.com/tw/app/dvip-networkconfig/id1177895983?mt=8**

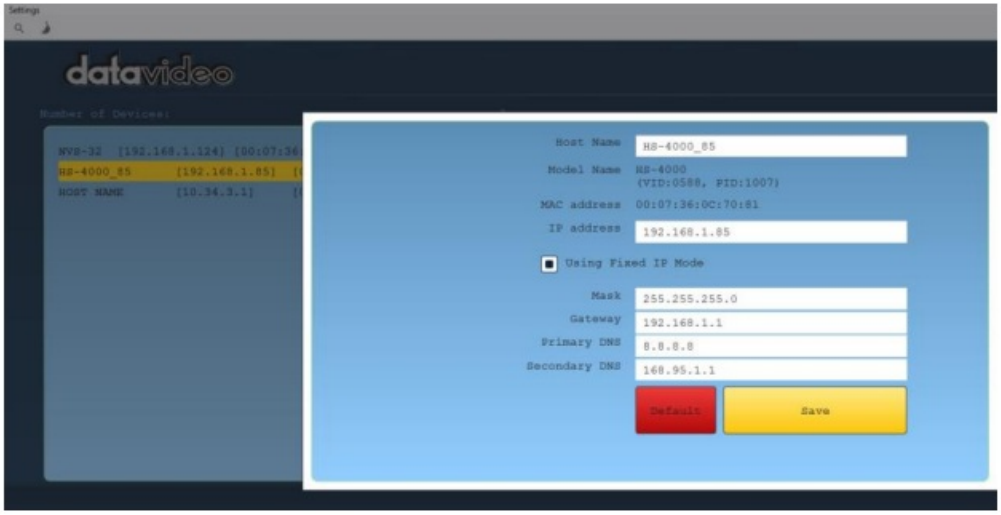
After you've installed the DVIP Network Configuration Tool, follow the steps outlined below to scan for online DVIP devices and configure their corresponding settings.

- **Step 1**: Open the DVIP Network Configuration Tool then select your PC or laptop's network interface card from the drop-down menu as shown in the diagram below.

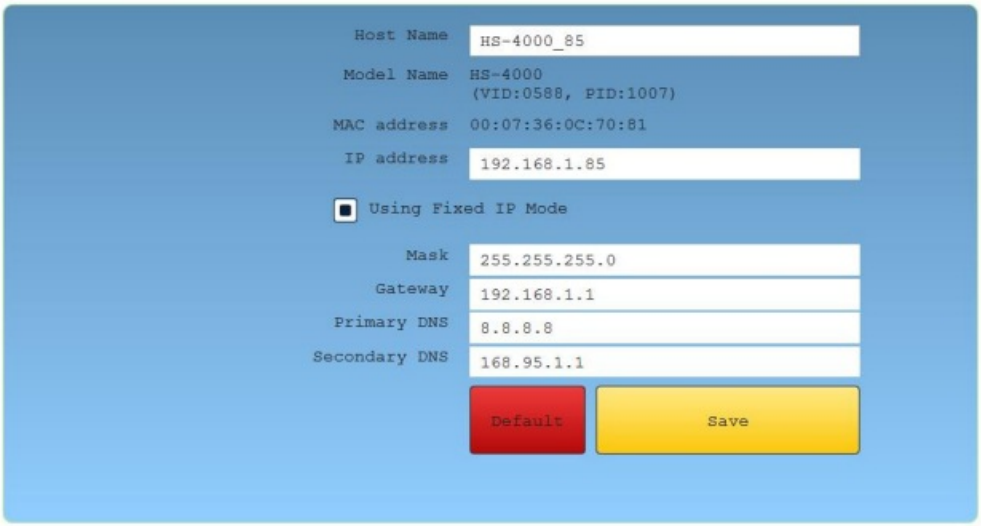
- **Step 2**: The DVIP Network Configuration Tool interface is shown below and you should see a list of the connected devices.



- **Step 3**: Click one of the connected devices to show its information and network settings in the pop-up window shown in the diagram below.



- **Step 4**: You are allowed to change the device name in the Host Name field and modify the device's network settings accordingly. Click the Save button to confirm the change. To reset, simply click the Default button.

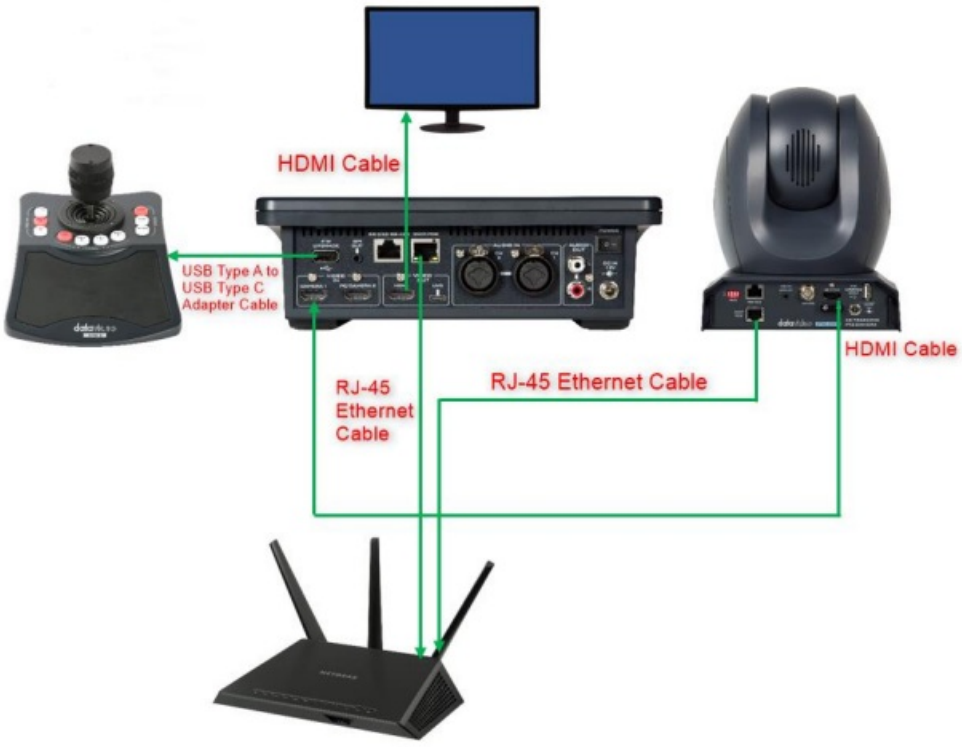


Setup with Datavideo Devices

Use the RMC-2P with other Datavideo controllers such as iCAST MINI and TPC700.

iCAST MINI 4K Dual Channel Presentation Switcher

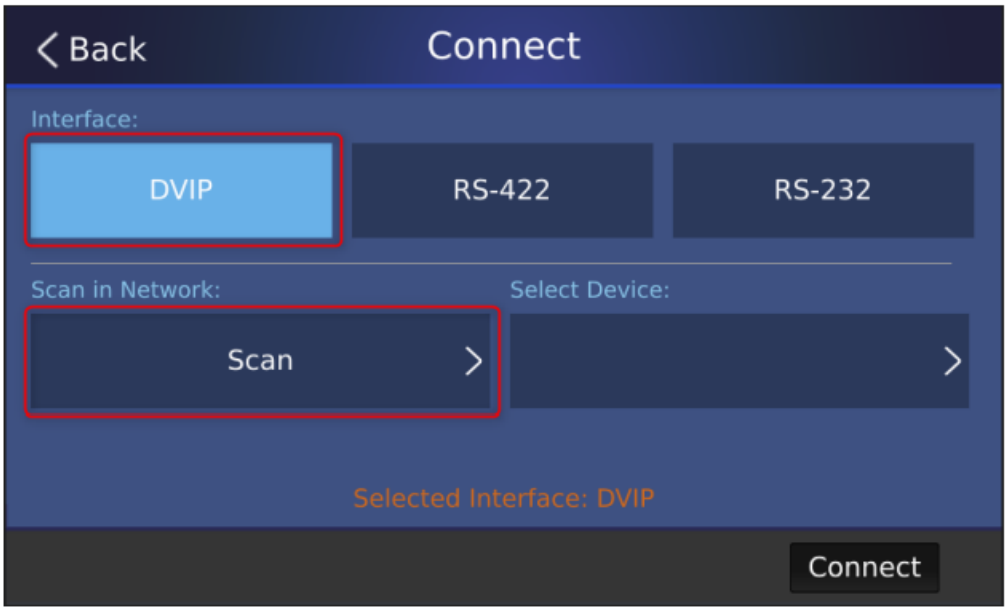
iCAST MINI is designed for single-operator applications. Set up the iCAST MINI video production system according to the system diagram shown below.



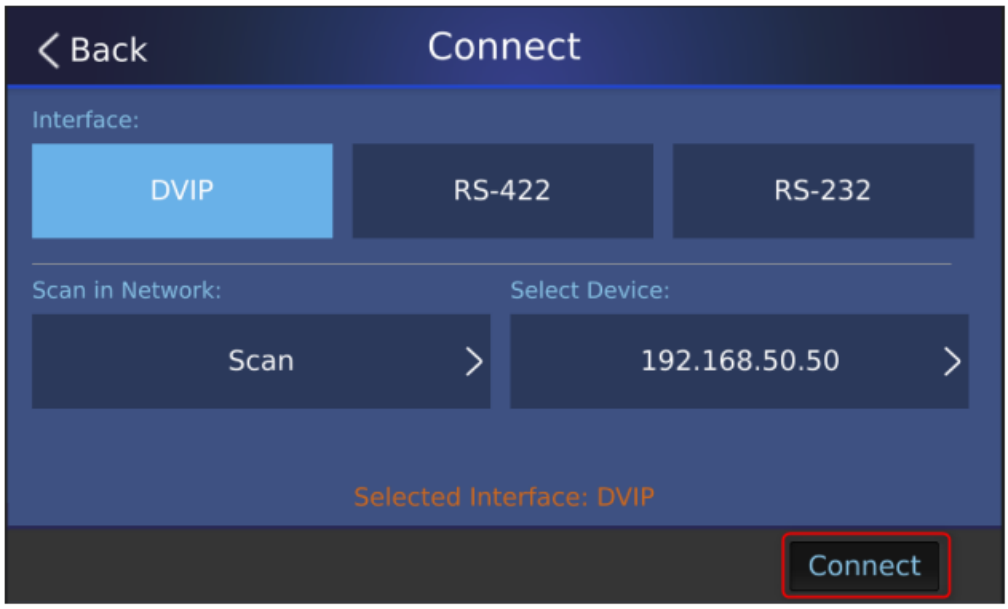
Follow the steps outlined below to set up RMC-2P in the iCAST MINI video production system:

1. Connect the RMC-2P and a monitor to iCAST MINI using a USB type C to USB type A adapter cable and an HDMI cable respectively
2. With Ethernet cables, connect your cameras and the iCAST MINI to a router. Please note that iCAST MINI and PTZ cameras should connect in DHCP mode by default.
3. Power on all devices.
4. On the iCAST MINI's UI, locate and tap the camera icon at the top right corner.

5. Tap “DVIP → Scan” to search for all cameras connected to the same network.



6. Tap the “Select Device” drop-down menu to view a list of cameras found. Select the camera that you would like to control then tap the Connect button.
    - Please note that you can only control one camera at a time with iCAST MINI.



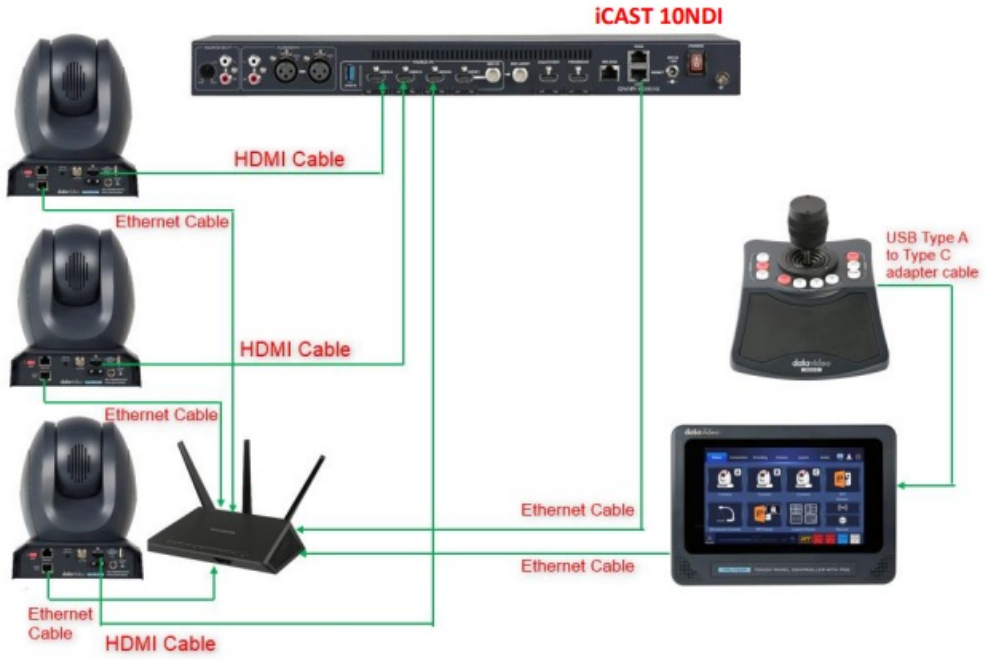
7. You’ve established a connection with the camera successfully after the camera icon at the top right corner of

the UI Home transitions to the enabled state.

8. Start using the RMC-2P to control the camera.

TPC-700 Touch Panel Controller

With ZR-1 installed, the TPC-700 will be able to provide you with a total solution for hybrid video production. Set up the ZR-1 video production system according to the system diagram shown below.



Follow the steps outlined below to set up RMC-2P in the ZR-1 video production system:

1. Connect the RMC-2P to TPC-700 using a USB type C to USB type A adapter cable.
2. Connect three PTZ cameras to iCAST 10NDI using three HDMI cables.
3. With Ethernet cables, connect the three cameras, TPC-700 and iCAST 10NDI to a router. Please note that PTZ cameras should connect in DHCP mode by default. You should manually enable DHCP mode for iCAST 10NDI and TPC-700.
4. Power on all devices.
5. Start using the RMC-2P to control the cameras. Please note that pressing CAM 1/2/3 buttons respectively

selects the cameras connected to HDMI input ports 1/2/3 of iCAST 10NDI.

Firmware Update

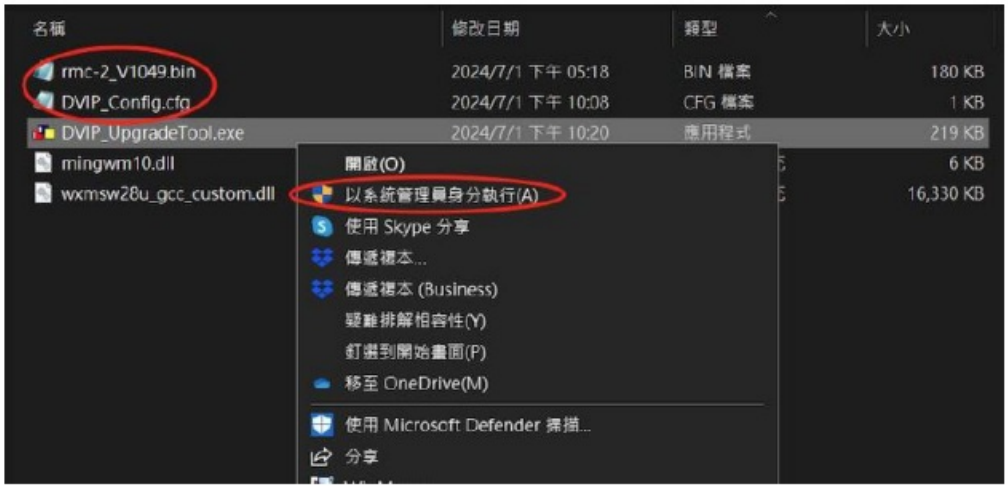
Datavideo usually releases new firmware containing new features or reported bug fixes from time to time. Customers can either download the firmware as they wish or contact their local dealer or reseller for assistance. This section outlines the firmware upgrade process which should take approximately a few minutes to complete. The existing settings should persist through the firmware upgrade process, which should not be interrupted once started as this could result in a nonresponsive unit.

Requirements

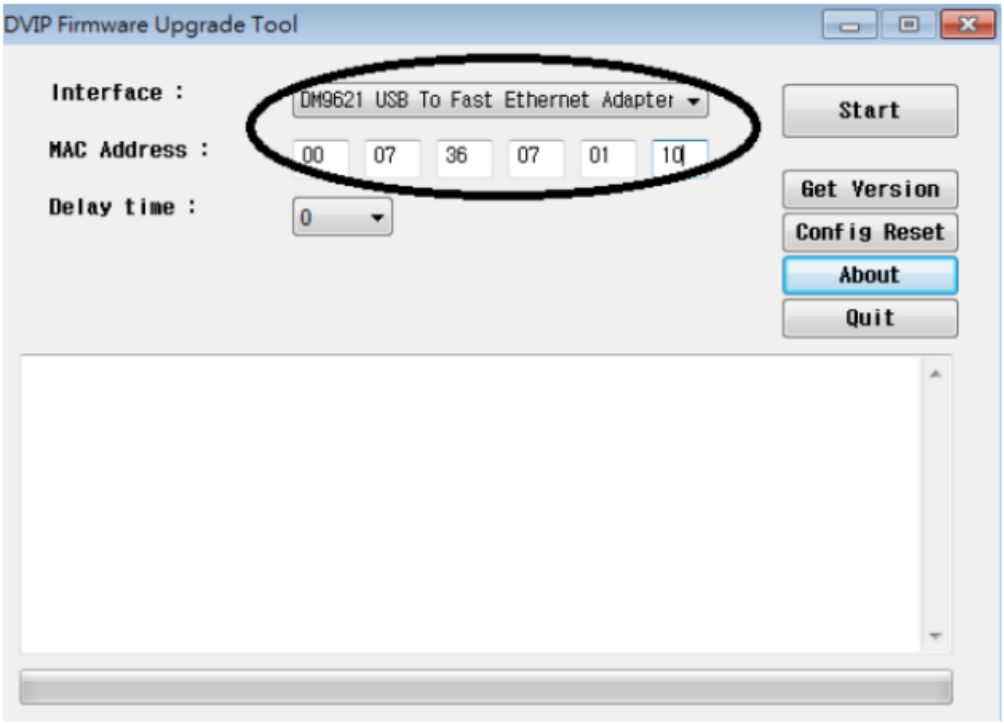
- A Windows computer
- Latest firmware file
- DVIP Upgrade Utility (DVIP_UpgradeTool.exe)
- An RMC-2P device

Procedure

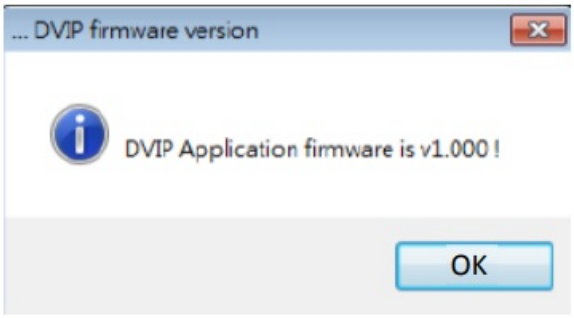
1. Download the latest firmware file from the product page to a Windows PC. Unzip the file, and make sure the folder contains the config file, application firmware, and the DVIP upgrade utility (DVIP_UpgradeTool.exe).
2. Enable the DHCP server for the RMC-2P, then establish a point-to-point connection with your Windows PC.
3. If your device is installed with the firmware version V1.0.4.8 or before, you can skip this step and proceed to step 4. If the device's firmware version is later than V1.0.4.8 (not inclusive), press and hold PST 1 and 4 simultaneously to activate the firmware upgrade mode before performing\ a firmware upgrade.
    - **Note**: The PST 1/2/3/4 should light up in steady red after the firmware upgrade mode is activated.
4. Run the DVIP Upgrade Utility as an administrator.



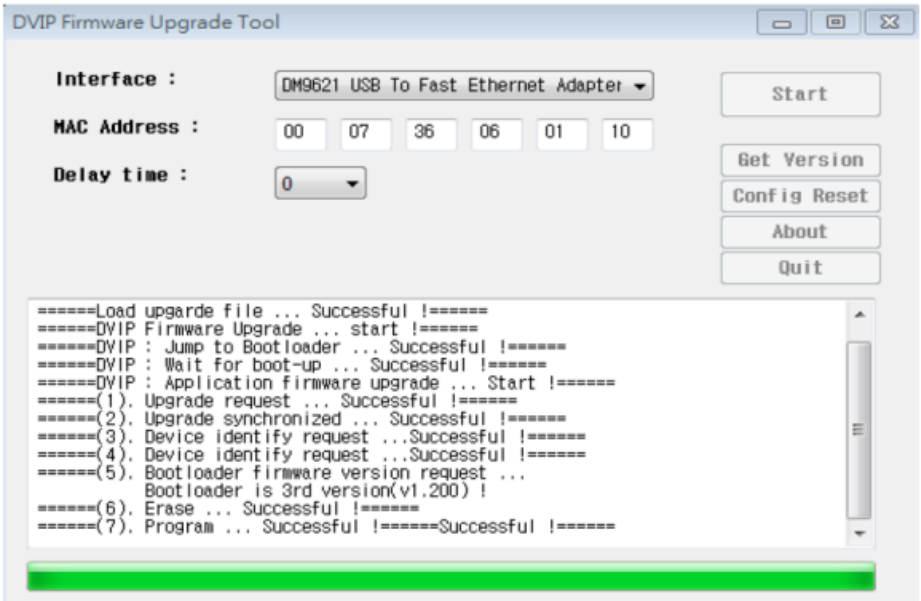
5. Select a network interface card that has established a connection with the RMC-2P and enter the RMC-2P's MAC address.
    - **Note**: Please do not click the Config Reset button as it will erase the RMC-2P's MAC address.



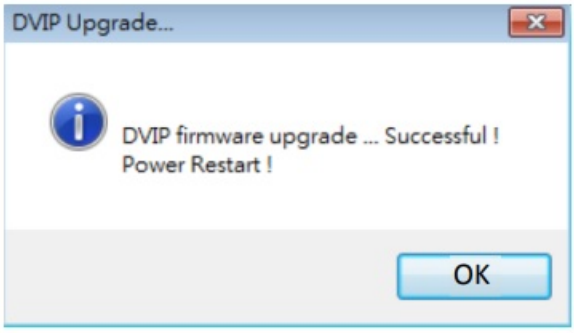
6. Click Get Version to display the RMC-2P's firmware version.



7. Click Start to begin the firmware upgrade process.



8. After the firmware upgrade process is finished, you will see the following pop-up dialogue box. Click OK to shut down the tool then reboot the RMC2P to complete the firmware upgrade.



Frequently-Asked Questions

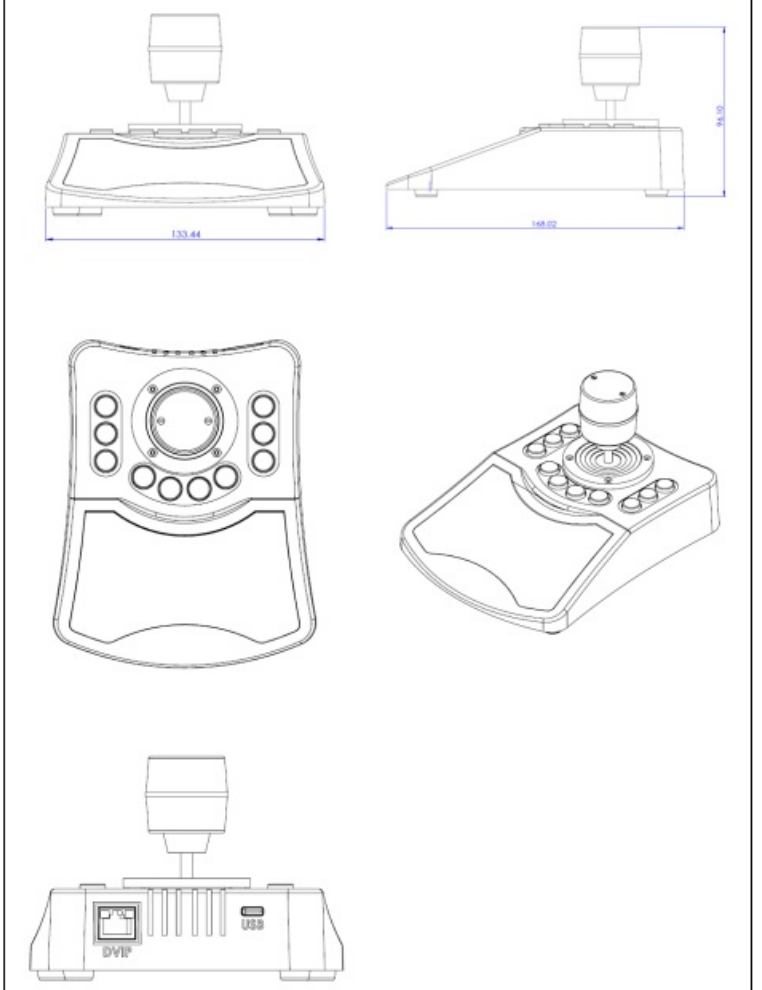
This section describes problems that you may encounter while using RMC-2P. If you have any questions, please refer tthe o related sections and follow all suggested solutionsthethe problemm still exists, please contact your distributor or the service center.

No.	Problems	Solutions
1.	The RMC-2P is unable to find auto-tracking PTZ cameras.	Please turn off the auto-tracking feature.
2.	The device fails to upgrade the firmware.	Check your device firmware version, if it is later than V1.0.4.8 (not inclusive), press and hold PST 1 and 4 simultaneously to activate the firmware upgrade mode before performing a firmware upgrade. **Note: The PST 1/2/3/4 should light up in steady red after the firmware upgrade mode is activated.**

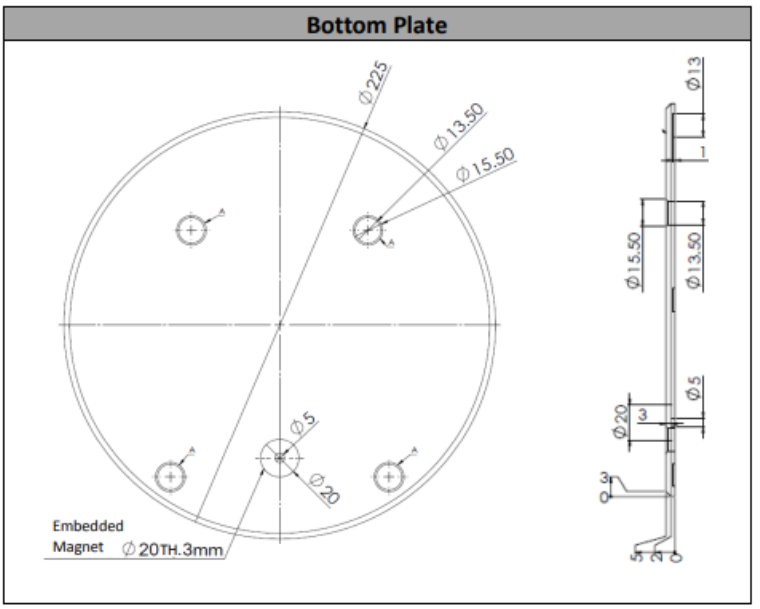
Dimensions

Unit: mm

Main Unit



Bottom Plate



Specifications

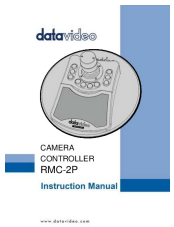
Model Name	RMC-2P
Product Name	3 Camera Controller
Main Unit	
Maximum Camera Control	3
Present (Position)	4 for each camera
Control Protocol	Datavideo DVIP
Connection to Cameras	Ethernet
Input/Output	USB 2.0 x1 10/100Mbps Ethernet (RJ-45 connector) x1
Firmware Upgrade	Via USB
Dimensions	134x169x97 mm
Weight	0.36kg
Operating Temp. Range	0°C ~ 40°C (32°F~104°F)
Storage Temperature	- 10°C ~ 60°C (14°F~140°F)
Operating Humidity	10% to 80% (non-condensing)
Power	DC 5V, 8W or IEEE 802.3af
What's in the Box	1 X RMC-2P main unit 1 X USB type C to type A cable 1 X Bottom Plate
Bottom Plate	
Material	Aluminum
Dimensions	225 x 225 x 5 (mm)
Weight	516g

Service & Support

It is our goal to make your product ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our website **www.datavideo.com** for answers to common questions, and support requests, ts or contact your local office below.

Please visit our website for the latest manual update. **www.datavideo.com/product/RMC-2P**

Documents / Resources

	datavideo RRMMCC-2P Camera Controller [pdf] Instruction Manual RRMMCC-2P Camera Controller, RRMMCC-2P, Camera Controller, Controller

References

- RMC-2P PTZ Camera Controller | Datavideo | Datavideo | Professional end-to-end solutions provider for your live video production.
- App Store DVIP Network Config
- DVIP Network Config - Free download and install on Windows | Microsoft Store
- User Manual