RDMC-800

Professional Hybrid Controller

Anodized Aluminum Integrated Case

Large 3.2 Inch Graphical LCD

3D-AXIS Accurate Joystick

Full Function with 37 Buttons & 9 Rotary

Special Features with PGU

Supports Various Protocols & Interfaces

Contents

RDMC-800 User Manual

This documentation describes how to use Radicson RDMC-800 device.

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Safety Notices

Before using RDMC-800 device, please ensure that you read and understand the safety precautions below:

- Do not attempt to open the case of RDMC-800 or modify it in any way, as this will void the warranty.
- Keep the RDMC-800 away from water and other liquids, as this may cause the unit to malfunction.
- RDMC-800 may become warm during use. This does not indicate malfunction.

Contact Us

- If you encounter any problem when using our products, please contact us by support@radicson.com and we will serve you with utmost satisfaction.
- We'll offer a satisfying discount on batch purchase and affiliate program. If you are interested, please contact us by info@radicson.com email address.

Features

- Controls up to 8 Cameras via RS-232 / RS-422 / RS-485 Interface
- Supports Sony Visca, Pelco-D, Pelco-P and Panasonic Protocols
- Pan, Tilt and Zoom Controlling with speed definition for P/T/Z separately
- All camera settings can be accessed through the OSD menu from joystick
- Adjusment camera settings (Focus, IRIS, WB and etc.) via specific keys
- 16 Presets directly call and supports up to 255 presets
- Large and ergonomic joystick for accurate and convenient camera control
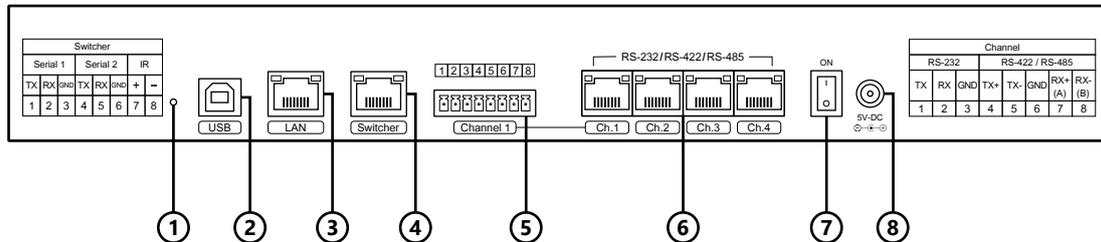- Controls External/GPU video switcher simultaneously
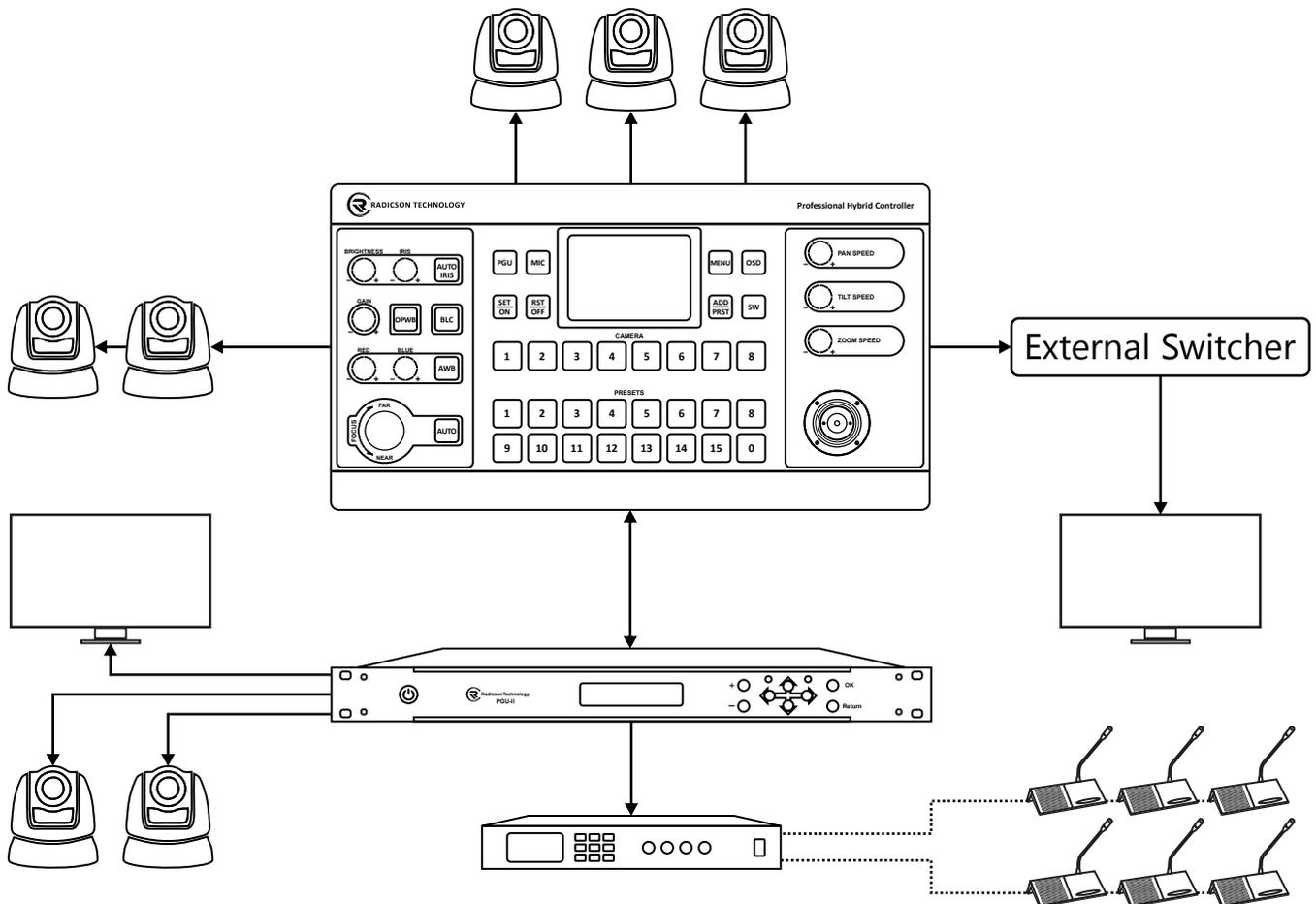
Specification
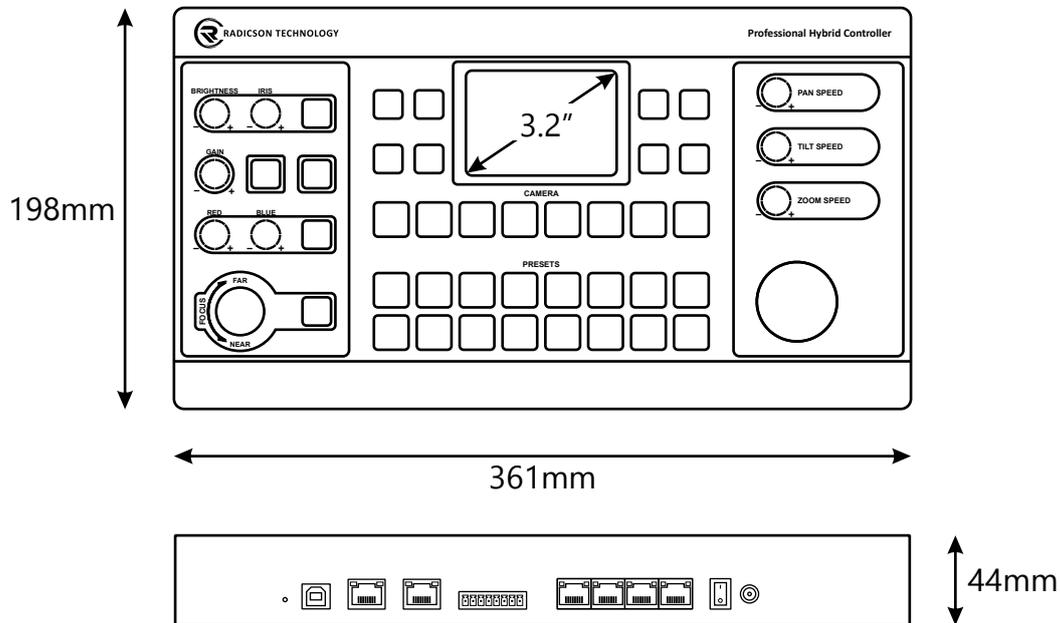
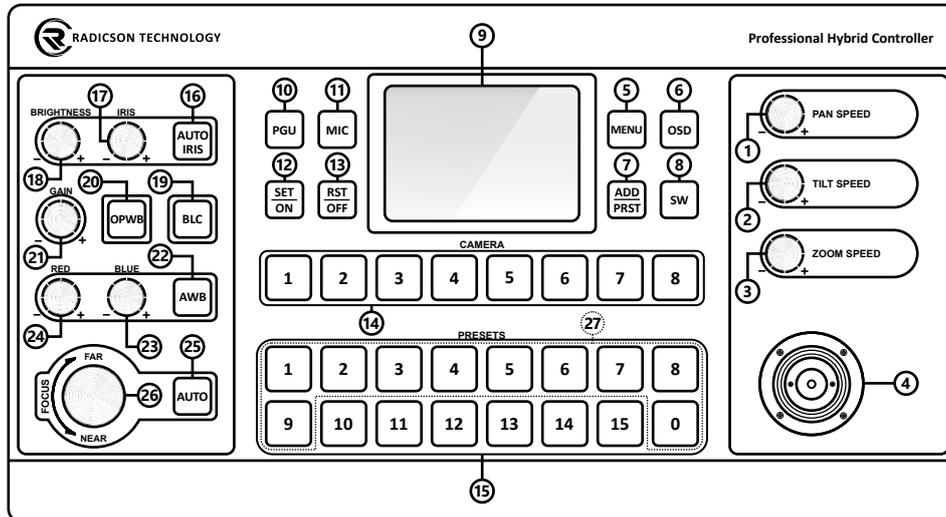| Interface	4x RJ-45 RS-232/422/485 1x RJ-45 Ethernet (LAN) 1x RJ-45 External Video Switcher 1x Phoenix 8-Pin RS-232/422/485
Protocol	Visca, Pelco-D, Pelco-P, Panasonic
Number of Camera	Up to 8 Camera
Number of Preset	16 Direct Button, 255 Preset Per Cam
Joystick	3D-AXIS (Pan/Tilt/Zoom)
Display	3.2" Graphical Color LCD
Adjustment Function	Auto/Manual Focus with Gain Pan/Tilt/Zoom Speed Gain Brightness, IRIS, Red/Blue Gain White Balance (Auto, OnePush)
Body	Anodized Aluminum

Button	8x Setting Push-Button 8x Camera Push-Button 5x Image Push-Button 16x Preset Push-Button
Rotary	1x Manual Focus Adjust 3x Pan/Tilt/Zoom Speed 1x Brightness Level 1x Iris Adjust 1x White Balance Adjust 2x Red/Blue Amount
Input Voltage	DC 5V - 2A
Power	8W (Max)
Temperature	-20C ~ 50C
Weight	1.84 Kg
Size	361mm x 198mm x 44mm

Port Pinout

①	Reset Button	Reset all setting and load factory default setting	Micro Push Button
②	USB Port	Use for upgrade and install / change firmware	USB 2.0 Type A
③	Ethernet (LAN)	Ethernet port connect to network switch or connect to Rdicson PGU (Auto Tracking System) directly	RJ45 Standard Network Port (thernet\LAN)
④	Ext. Switcher Port	RJ45 port to connect and controll external video switcher / matrix /mixer through Serial or IR signal	
⑤	Camera Port Channel 1 (Phoenix-8Pin)	Connect to camera and control it through RS-232 / RS-422 / RS-485 signal by Visca / Pelco-D / Pelco-P / Panasonic Protocols. (Channel 1 Phoenix port internally connected to Channel 1 RJ45 port)	
⑥	Camera Port Channel 1 to 4 (RJ45)	Connect to camera and control it through RS-232 / RS-422 / RS-485 signal by Visca / Pelco-D / Pelco-P / Panasonic Protocols. (Channel 1 Phoenix port internally connected to Channel 1 RJ45 port)	
⑦	Power ON/OFF Button	Power ON and OFF device	2-Step Button
⑧	Power Input Jack	DC Input Jack 5V - 2A	Power Jack

Ext. Switcher (RJ45)

1	2	3	4	5	6	7	8
Serial 1			Sertial 2			IR	
TX	RX	GND	TX	RX	GND	+	-

Camera Channel 1 (Phoenix-8Pin)

1	2	3	4	5	6	7	8
RS-232			RS-422 / RS-485				
TX	RX	GND	TX+	TX-	RX+	RX-	GND
					A+	B-	

Camera Channel 1 - 4 (RJ45)

1	2	3	4	5	6	7	8
RS-232			RS-422 / RS-485				
TX	RX	GND	TX+	TX-	GND	RX+	RX-
						A+	B-

Buttons Function

① PAN SPEED	Camera horizontal movement speed (1 ~ 10)
② TILT SPEED	Camera vertical movement speed (1 ~ 10)
③ ZOOM SPEED	Camera zoom movement speed (1 ~ 10)
④ JOYSTICK	3D-Axis Joystick, push left/right for pan move, up/down for tilt move, turn right/left for zoom in/out, push button for call camera home position. * in joystick menu, up/down for move across items, right for goto submenu (enter), left as back, turn left/right for change item value
⑤ MENU Button	Enter joystick menu and show items in lcd
⑥ OSD Button	Enable/disable camera menu on output dispaly * when enabled, you can move across menu item through joystick (4)
⑦ ADD/PRST Button	ADD Function: when the number of cameras is more than 8, for select camera number > 8, press ADD button and use number 0 to 9 from preset buttons (27) as camera number (you can input 2-digit number) PRST Function: when PGU is connected to joystick, call camera position of specific microphone directly without turning it on, use number 0 to 9 from preset buttons (27) as microphone number (you can input 3-digit number)
⑧ SW Button	When external switcher is connected to joystick, select switcher video input source through camera number buttons (14) as switcher input number.
⑨ LCD	3.2 inch graphical TFT LCD display

⑩ PGU Button	When connected to PGU (Auto Tracking System) through ethernet (LAN) port, take the PGU to Auto/Manual mode * in manual mode, auto track is disabled and you can control all cameras that connected to PGU directly from joystick
⑪ MIC Button	When PGU connected, turn on and off microphones from joystick directly through number 0 to 9 from preset buttons (27) (can input 3-digit number) * Some microphone models not supported
⑫ SET/ON Button	<u>SET Function</u>: set current position of selected camera for direct call through preset buttons (15) <u>ON Function</u>: when PGU connected and mic button activated (11), turn on selected microphone number (through number 0 to 9 from presets buttons)
⑬ RST/OFF Button	<u>RST Function</u>: Reset selected direct call preset button (15) for selected camera <u>ON Function</u>: when PGU connected and mic button activated (11), turn off selected microphone number (through number 0 to 9 from presets buttons)
⑭ CAMERA Buttons	Select camera number to control
⑮ PRESET Buttons	16 buttons to set and call camera preset directly for each camera * 0 to 9 buttons use for enter number in some functions (27)
⑯ AUTO IRIS Button	Active auto iris mode on selected camera for automatically adjusts the iris (aperture) in order to regulate and optimize the amount of light camera receives
⑰ IRIS Rotary	Adjustment iris (aperture) of selected camera manually
⑱ BRIGHTNESS Rotary	Adjustment brightness of selected camera manually
⑲ BLC Button	Enable/Disable Backlight compensation (BLC) of selected camera
⑳ OPWB Button	One-push white balance, Fill the camera frame with what you know to be a white object, This is saved as the camera's "white" reference (used in conditions where AWB (22) is unable to detect white balance correctly)
㉑ GAIN Rotary	Adjustment gain of selected camera manually
㉒ AWB Button	Adjustment white balance of selected camera automatically
㉓ BLUE Rotary	Adjustment blue color amount of selected camera manually
㉔ RED Rotary	Adjustment red color amount of selected camera manually
㉕ AUTO Focus Button	Adjustment correct focus of selected camera automatically
㉖ FOCUS Rotary	Adjustment focus near/far of selected camera manually
㉗ Input Number Buttons	Button 0 to 9 of preset buttons used for input the number in some functions * can input 1-digit/2-digit/3-digit number depending on the condition

Display Summary
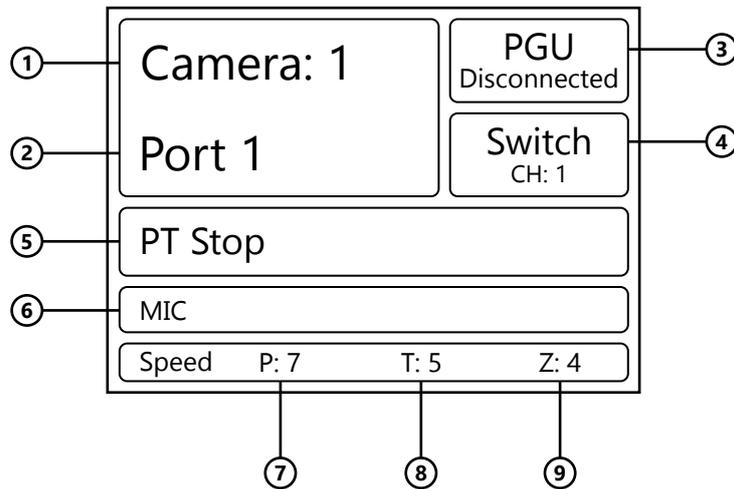
①	Camera Number	The number of selected camera	Camera 1 to 8
②	Camera Port	The connection port of selected camera	Port 1 to 4 / PGU
③	PGU Status	The status of connection to PGU	Connected / Disconnected
④	Ext. Switcher Channel	The channel number of external switcher / matrix (if connected to joystick)	Channel 1 to ... (dependent on switcher model)
⑤	Current Function	Display current function (last function disappear after 4s)	Joystick function (P,T,Z) Each Button & Rotary Function
⑥	Microphone Queue	When connected to PGU, Display the queue of activated microphones	The IDs of activated microphones
⑦	Pan Speed	Camera horizontal movement speed	1 to 10
⑧	Tilt Speed	Camera vertical movement speed	1 to 10
⑨	Zoom Speed	Camera zoom movement speed	1 to 10

Setting Items

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│  │      C.C.J | Setting       │  │
│  ├───────────────────────────┤  │
│  │  Cameras Setting           │  │
│  ├───────────────────────────┤  │
│  │  Ports Setting             │  │
│  ├───────────────────────────┤  │
│  │  LAN Setting               │  │
│  ├───────────────────────────┤  │
│  │  Video Switch Setting      │  │
│  ├───────────────────────────┤  │
│  │  Device Setting            │  │
│  └───────────────────────────┘  │
└─────────────────────────────────┘
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Cameras Setting	Camera 1 to 8 Setting	Connection: Port 1 to Port 4 / PGU Protocol: Visca Preset / Visca Position Pelco-D / Panasonic ID Number: ID-1 to ID-8 Video Switch: SW-1 to SW-8
Ports Setting	Port 1 to 4 Setting	(for port 1 to port 4 separately) Connection: RS-232 / RS-422 / RS-485 Baud Rate: 300, 600, 1200, 2400, 4800, 9600, 14400, 19200, 38400, 56000, 57600, 115200
LAN Setting	Ethernet LAN Configuration	IP Add: xxx.xxx.xxx.xxx Subnet: xxx.xxx.xxx.xxx Gateway: xxx.xxx.xxx.xxx PGU IP: xxx.xxx.xxx.xxx
Video Switch Setting	External Switcher/Mixer Model	Select from supported models (supported models will be updated over time)
Device Setting	Device 1 Setting / Device 2 Setting	(Reserve)
	Hardware Setting	Buzzer Status: ON/OFF LCD Backlight: --------o-------- (bar)
	Reset Factory	Reset device to factory setting
	About Device	Software and Hardware Version Serial Number