iControl J20

IP Camera Controller with Screen

Datasheetl V1.1

1. OVERVIEW

The iControl J20 control keyboard is an advanced control device specifically designed for conference camera control. Its innovative appearance and precise structure offer users a friendly operating experience while ensuring high reliability and stability. The control keyboard is equipped with newly designed 2D/3D joysticks and multiple knob sets to achieve precise control over various conference camera parameters. Additionally, it supports decoding functionality, enabling broader application scenarios and device compatibility.

2. FEATURES

- With a 3.49 inch preview screen
- Supports network IP and RS-232/RS-422/RS-485 serial connections.
- With a 2D/3D joystick for PTZ control.
- Multiple knobs for focus, aperture, zoom, white balance, backlight, exposure, presets recall, IRIS/Shutter, and R/B configuration.
- Supports max. 255pcs camera connections.
- Supports ONVIF, VISCA, or NDI auto scan connected cameras.
- Supports PoE (Power over Ethernet).
- Supports ONVIF, VISCA over IP (UDP or TCP), Sony VISCA, NDI, PELCO-D, PELCO-P.
- Supports Web GUI control

3. FUNCTIONS

- IP control allows for the automatic discovery of all supported IP cameras within the network.
- Multiple controllers can run simultaneously on the same network, with each device supporting up to 255 cameras.
- Equipped with a compact four-dimensional joystick, reducing the size by 50% while maintaining full functionality.
- Supports PoE (Power over Ethernet).
- Precise control of various camera parameters, including aperture, exposure, white balance, and focus adjustments.
- Web interface compatibility with mainstream browsers like Chrome and Edge, facilitating device information and camera list configuration directly through the web interface.
- Offers multiple control modes, including network decoding and analog control, without the need to switch between modes. Network control allows seamless

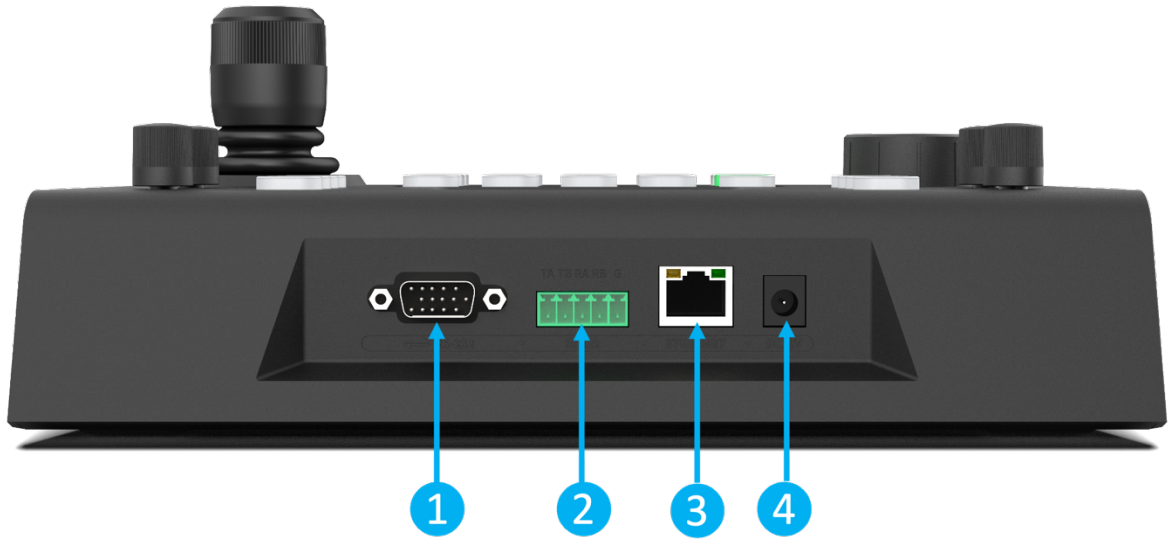
integration and management of cameras via IP, while analog control offers robust integration with traditional analog cameras, ensuring comprehensive coverage and usability in various scenarios.

4. CONTROL PROTOCOLS

The keyboard controller supports network protocols including ONVIF, VISCA Over IP (UDP/TCP), Sony VISCA, and NDI, as well as analog protocols such as VISCA, PELCO-D, and PELCO-P.

It offers serial control capabilities, allowing for the independent control of both network and analog cameras without the need to switch device modes.

5. HARDWARE



NO.	Ports
1	RS232 Interface
2	RS-422/485 Interface
3	RJ45 Network
4	DC12V IN

6. DATASHEET

Model	**iControl J20**
Name	**IP PTZ Camera Controller with Screen**
LCD display size	3.49 inch
Operating system	GNU/Linux
Connection interface	Ethernet (RJ45), RS485 (Ta Tb GND), RS422 (Ta Tb Ra Rb GND), RS232 (DB9)
Network protocol	Visca over IP, Sony Visca, ONVIF v2.42, NDI v5.5
Analog protocol	Visca, Pelco-D, Pelco-P
Control function	Camera PTZ, Preset position, Camera focus, White balance & Exposure
Component Functions	Numeric Keys (Camera Shortcut Keys) Shuttle Knob (Camera Lens Zoom) Joystick (PT Movement) Infinity Knob (Exposure & White Balance Adjustment) Camera OSD Menu Mode
Key Performance	Translucent silicone + micro-activated buttons White and green dual-color button lighting
Max. connected cameras	255pcs
White balance cycle	Indoor / Outdoor / One Touch / Manual / Auto White Balance
Exposure cycle	Brightness/ Shutter/ Aperture priority; Manual / Auto exposure
Decoding capability	TFT LCD 640×480
Screen Backlight Brightness	3000 cd/m²
Screen interface	MIPI
Beep	Key Sound Alert On/Off
Power supply	DC12V-2A (internal positive + external negative -), or PoE
Working temperature	-10℃~55℃ / 14°F~131°F
Working humidity	20%~80% Non-condensing
Storage temperature	-10℃~55℃ / 14°F~131°F
Storage humidity	0%~90% Non-condensing

7. DIAGRAM

Before setup over the **iControl J20** keyboard, user shall connect the hardware right to make sure both cameras and J20 are under the same LAN subnet. Please see below diagram.