



152 Robbins Rd, Downingtown, PA, 19335, USA - HuddleCamHD.com | 1 800 - 486-5276

HuddleCamHD RS-232 Joystick Controller

Model Number: HC-JOY

JOYSTICK KEYBOARD INSTALLATION & OPERATION MANUAL





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Easy pan, tilt & zoom controls for any RS-232 VISCA protocol camera!

Controls pan & tilt with variable speed.

Use 2 & 3 dimensional joystick with “twist” control of zoom.

Key Product Features

- Metal housing.
- VISCA, PELCO-D and PELCO-P protocol support.
- English / Chinese LCD display.
- Key-press “BEEP” confirmation.
- Variable speed control of pan, tilt & zoom.
- Speed step control adjustments.
- Pan, tilt, rotation, zoom, iris, focus and camera settings.
- Preset tour, pattern, absolute position, zoom operation, AUX operation.
- Real time display of the current status.
- Short circuit & overcurrent protection.
- Automatic recovery program for the communication port(s).

Key Technical Specifications

- RS-485 semi duplex, RS-422 full-duplex, RS232 full-duplex.
- Baud Rate 1200/2400/4800/9600bps.
- Interfaces
 - RJ45: RS485,
 - Screw Terminal: RS485/RS422, RS232, DB9.
- Maximum communication distance:
3,937ft (1200m) using 24 gauge twisted pair cabling.
- Can control a maximum 256 cameras.
- Voltage: 12VDC.
- Power: 5W.
- Display: LCD.
- Working Temperature: 14°F ~ 122°F (-10° ~ +50° C).
- Working Humidity: 10 ~ 90% (non-condensation).
- Weight 2.32 lbs.
- Dimensions:
10.69”(L)X 7.5”(W)X 4.06(H) [271mm(L)X 191mm(W)X 103.2mm(H)].



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In the Box

- Three-axis control keyboard with joystick.
- RS232 cable.
- 12VDC Power Supply.
- Manual.

Installation

- Power Supply Interface:
12VDC / 500mA power supply.
- RJ45 Interface:
Pin1 RS485+, Pin2 RS485-, Pin3 GND, Pin4 DC12V.
- RS485/422 interface [right to left]:
485+, 485-, 422Rx+, 422Rx-, 422Tx-, 422Tx+.
- RS232 adopts the standard wiring using pins 2-Rx, 3-Tx, 5-GND.

Hardware Features

- Key(s): momentary push buttons.
- Joystick: 3-axis joystick.
- Digital display: LCD display.
- Storage temperature: -4° ~ 140°F (-20°~60°C).
- Humidity: 10~90%.
- Dimension(s):
10.69" length x 7.5" depth x 4.06" height [271.5mm x 190.5 x 103.2].
- Weight: 2.32lbs / 1.05kg.

Electrical Parameters

- Input voltage: 12VDC.
- Rated power: 5W.



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Control Mode

- VISCA, PELCO-P and PELCO-D protocol support.
- Control interfaces:
 - RJ45 (RS485).
 - Screw Terminal (RS422/RS485).
 - DB9 (RS232).
- Baud rate: 1200, 2400, 4800, 9600.
- Parameters: **8** bits, **1** stop bit, **No** parity.

OSD Operation

- **Pan & Tilt Control**
 - Joystick movement controls the pan and tilt of the camera.
 - Rotation of the joystick controls the zoom of the lens.
 - Clockwise rotation of the zooms in.
 - Counter-clockwise rotation zooms out.
 - Control can also be achieved using the following keys: WIDE, TELE, CLOSE, OPEN, FAR, NEAR.
- **Zoom, Focus & Iris**
 - OPEN: Open Iris (if available on camera).
 - CLOSE: Close Iris (if available on camera).
 - FAR: Far Focus (For manual focus).
 - NEAR: Near Focus. (For manual focus).
 - TELE: Tele Zoom.
 - WIDE: Wide Zoom.
- **Input Number Keys**
 - For entering numbers “0” to “9”.
 - Input range 0-65535.
 - Press the “0” continuously to clear the inputs.
- **Set the Camera ID to be controlled by joystick**
 - Number Key + “CAM”.
- **Set a Preset**
 - Number Key + Press and hold “Preset” for 2 seconds.
- **Select a Preset**
 - Number Key + “Preset”.



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Main Menu

- **Keyboard Menu**
 - To enter the keyboard menu press “1”, “0”, “0”, “0” + “Preset”.
 - Move joystick “up” and “down” to operate the cursor position of the menu.
 - Use “open” to confirm the choice.
 - Also use “open” to select next parameter setting.
 - Use “close” to select previous parameter setting.
 - Select “Exit” from the menu or press “near” button to return to previous menu.
 - Use number keys “0” to “9” to input data.
- **Keyboard Setup Menu**
 - Protocol: Choose from Pelco-P, Pelco-D, VISCA protocols.
 - Baud Rate: 1200, 2400, 4800, 9600bps.
- **Function Key Setting**
 - Keys: F1, F2, F3, F4, F5, F6 may be programmed with shortcuts.
 - The functions available are:
 - Arrow Key, Reset Demo, Camera SW, Goto Zero, Zoom Set, Position, Camera BL, Manual Focus, Auto Focus, Disable & Clear Preset(s).
- **Light & Sound Setting(s)**
 - Backlight timing for LCD:
 - 10 minutes, 5 minutes, On or Off.
 - Sound:
 - Key press beep: on or off.
- **Absolute Position Setting**

Allows precision setting of pan + tilt positions.

 - Set: the camera will rotate to the corresponding pan & tilt position entered.
 - Query: Query the present position of camera and display it after pan & tilt.
- **Absolute Zoom Setting**

Allows precision setting of the zoom position.
The maximum optical zoom control is 18 times.
- **Language Setting (English or Chinese)**

Note: All operations above are based on the assumption that you are using Pelco-P or Pelco-D protocol. Other protocols have their own standards for functions, so there will be minor differences when operating functions such as Absolute Position setting and Absolute Zoom setting.



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Different cameras will use different absolute position values for pan, tilt and zoom. Run your camera to its limits and query the values for limits and home position.

For example, below are shown the values for a PTZ Optics camera.

PAN

Protocol	Left	Home	Right
Pelco P + D	∅	276	552
*VISCA	63088	65533	2443

TILT

Protocol	Down	Home	Up
Pelco P + D	∅	35.48	142
*VISCA	65104	65535	1295

ZOOM

Protocol	Out	Home	In
Pelco P + D	∅	∅	.74
*VISCA	∅	∅	16384

*Note: Left pan ranges from 63088 to 65532
Right pan ranges from ∅ to 2443
Down tilt ranges from 65104 to 65534
Up tilt ranges from ∅ to 1295