Telycam TLC-50TC Joystick Remote Control Keyboard User Manual

Contents

Telycam TLC-50TC Joystick Remote Control Keyboard

- Product Name: IP&Serial Joystick Remote Control Keyboard
- User Manual Version: V1.2
- Catalog Number: J.BC.0205.0157
- Product Usage Instructions

Security Guidance
Cautions

- Before using the product, please read this safety instruction carefully, operate strictly in accordance with the instruction manual, and keep this manual properly for future reference.
- The standard power supply voltage is DC 12V and the rated current is 1A. It is recommended to use the power adapter that comes with the product.
- Please place the power cable and control cable in a place where they will not be trampled on, and protect the cable, especially the connection part must be firm.
- Please use this product within the allowable temperature and humidity range. Operating temperature: -10~50°C, humidity: 80%.
- Do not spill liquids, especially corrosive liquids, on this product to prevent danger.
- Please don’t put heavy pressure, violent vibration, and immersion during transportation, storage, and installation to avoid damaging the product.
- Please do not disassemble this product without permission. There are no parts inside the machine that can be repaired by the user.
- Please leave the work to qualified maintenance personnel.

Check Before Using
Packing List
Ensure that all the following items are included in the package

- [List of items]

The Wiring
Follow the provided wiring diagram (refer to section 5) to correctly connect the keyboard to the required devices.

Bottom Dialing Switch

Refer to the user manual for instructions on how to use the bottom dialing switch.

Keyboard Description
Refer to the user manual for a detailed description of the keyboard’s features and functions.

Menu Setting
Operating Instructions
Refer to the user manual for step-by-step instructions on how to navigate and use the menu settings.

Menu options
Refer to the user manual for a list and description of available menu options.

Wiring diagram
Refer to the provided wiring diagram (located in section 5) for proper connection of the keyboard to other devices.

WEB Configuration
Refer to section 6 of the user manual for instructions on how to Perform WEB configuration for the keyboard.

Frequently Asked Questions
Refer to section 7 of the user manual for answers to commonly asked questions about the product.

Security Guidance

Cautions

- Before using the product, please read this safety instruction carefully, operate strictly in accordance with the instruction manual, and keep this manual properly for future reference.
- The standard power supply voltage is DC 12V and the rated current is 1A. It is recommended to use the power adapter that comes with the product.
- Please place the power cable and control cable in a place where they will not be trampled on, and protect the cable, especially the connection part must be firm.
- Please use this product within the allowable temperature and humidity range. Operating temperature: 10℃~ 50℃, humidity ≤ 80%.
- Do not spill liquids, especially corrosive liquids, on this product to prevent danger.
- Please don’t put heavy pressure, violent vibration, and immersion during transportation, storage, and installation to avoid damaging the product.
- Please do not disassemble this product without permission, there are no parts inside the machine that can be repaired by the user, please leave the work to qualified maintenance personnel.

Power supply polarity

Notice

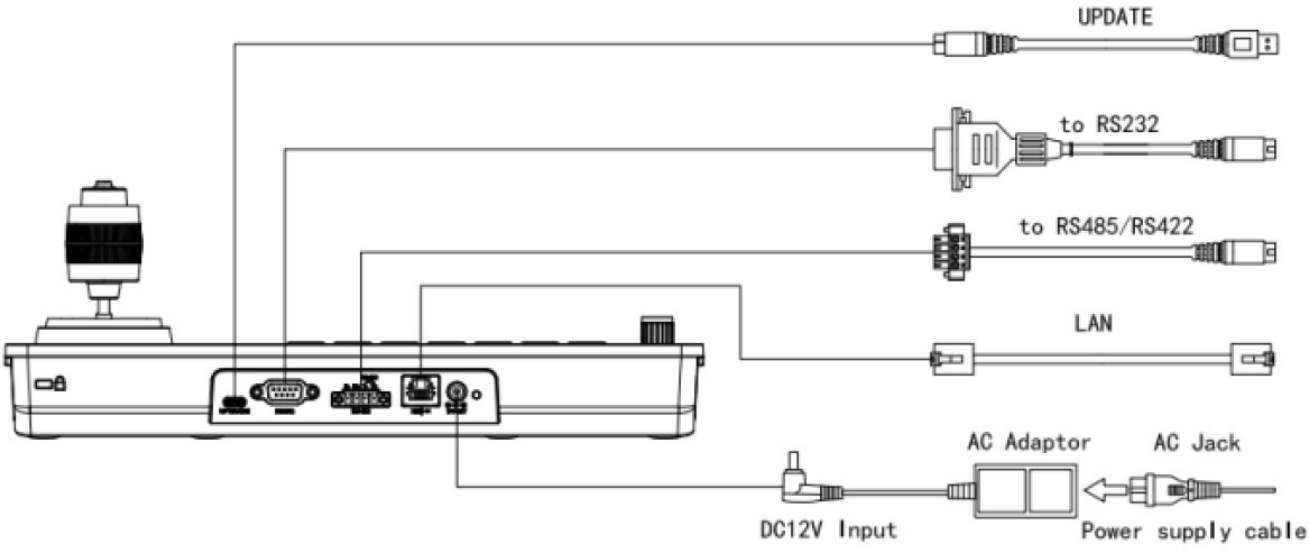
- Please refer to the actual product, the user manual is for reference only.
- Please contact our Customer Service Department for the latest procedures and additional documentation.
- In case of doubt or dispute in the user manual, the final interpretation of the company shall prevail.

Check Before Using

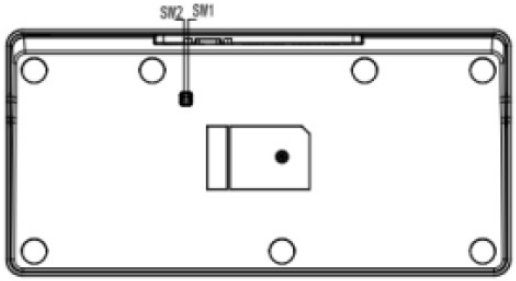
Packing List
When opening the package, please check and confirm all the accessories that should be provided.

- Control keyboard ····· ····· ····· 1PCS
- Power Adapter ····· ····· ····· 1PCS
- Power Cord ····· ····· ····· 1PCS
- RS232 Cord ····· ····· ····· 1PCS
- User Manual ····· ····· ····· 1PCS
- Certificate of Conformity ····· ····· 1PCS
- Warranty Card ····· ····· ····· 1PCS
- Quick Guide ····· ····· ····· 1PCS

The Wiring



Bottom Dialing Switch



Bottom dial control			
Mode	SW-1	SW-2	Description
1	*	OFF	ARM Upgrade Mode
2	*	ON	Normal Working Mode
SW-1 is reserved, no function defined			

Keyboard Description

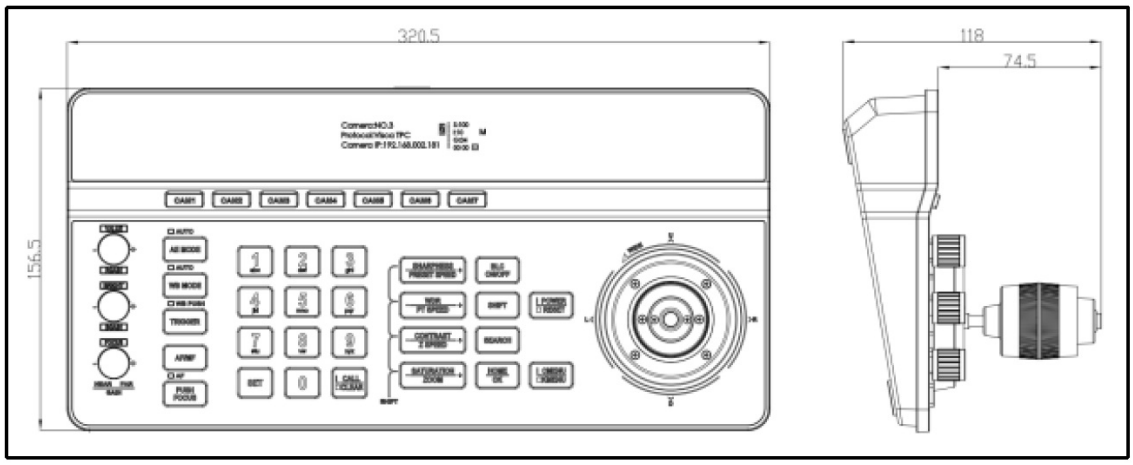
Functional Features

- Support network interface, RS232 interface, RS422 interface, and RS485 interface for control.
- Supports VISCA Serial, Pelco P, Pelco D, VISCA over IP, VISCA TCP, VISCA UDP, ONVIF, and NDI protocols for control. (NDI protocol is optional.)
- With seven camera shortcut control buttons, to improve the speed of multiple cameras control switching, convenient and fast.
- Support setting different protocols to control multiple cameras with different protocols.
- Support one keyboard to control multiple cameras, and also support multiple keyboards to control a camera through the network interface.
- Adapts a four-dimensional joystick to enable the control of the video camera PTZ movement smoothly and flexibly.
- Support to set different levels of operation permission via the OSD menu.
- Support button keys backlight, enable users to choose automatic backlight in low light or dark environments.
- Support set, call, and clear preset.
- Support camera PT speed and zoom speed adjustment, while supporting preset position PT speed and zoom speed adjustment.
- Support daisy chain function. (Max 7 cameras are available)
- Support camera OSD menu setting.
- Supports standard POE (Power Over Ethe).
- Support 10M, 100M adaptive network RJ45 connection.
- Support both Chinese and English menu interface

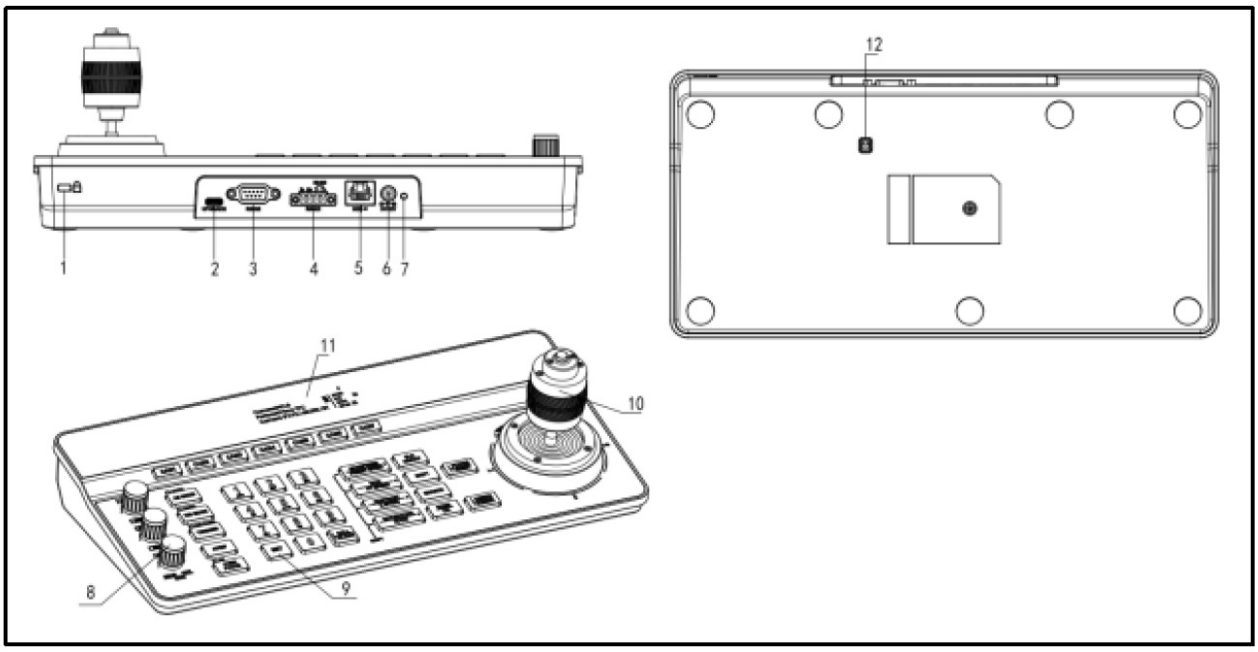
Technical Specifications

Parameters	Indicators
Control Interface	RJ45,RS232,RS422,RS485
RJ45	Ethernet port POE IEEE802.3af
RS232	DB9 male connector
RS422	3.81 spacing terminal T T R R
RS485	3.81 spacing terminal T T
Support Protocols	VISCA Serial, Pelco-P, Pelco-D, VISCA over IP, VISCA TCP, VISCA UDP, ONVIF, NDI(optional)
Upgrade Interface	Type-C
Display Screen	3.12″ OLED screen, blue light, 256×64 pixels
Working power	12V 1A
Working Temperature	-10℃~50℃
Working Humidity	≤80%
Storage Temperature	-20℃~60℃
Storage Humidity	≤90%
Size	320.5mm×156.5mm×118mm
Weight	1.05kg

Product Size

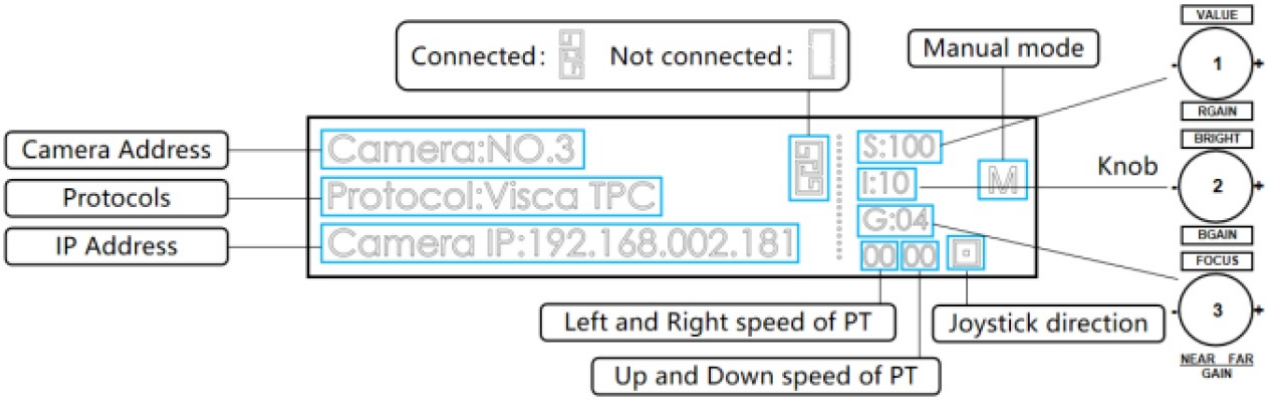


Interface Description

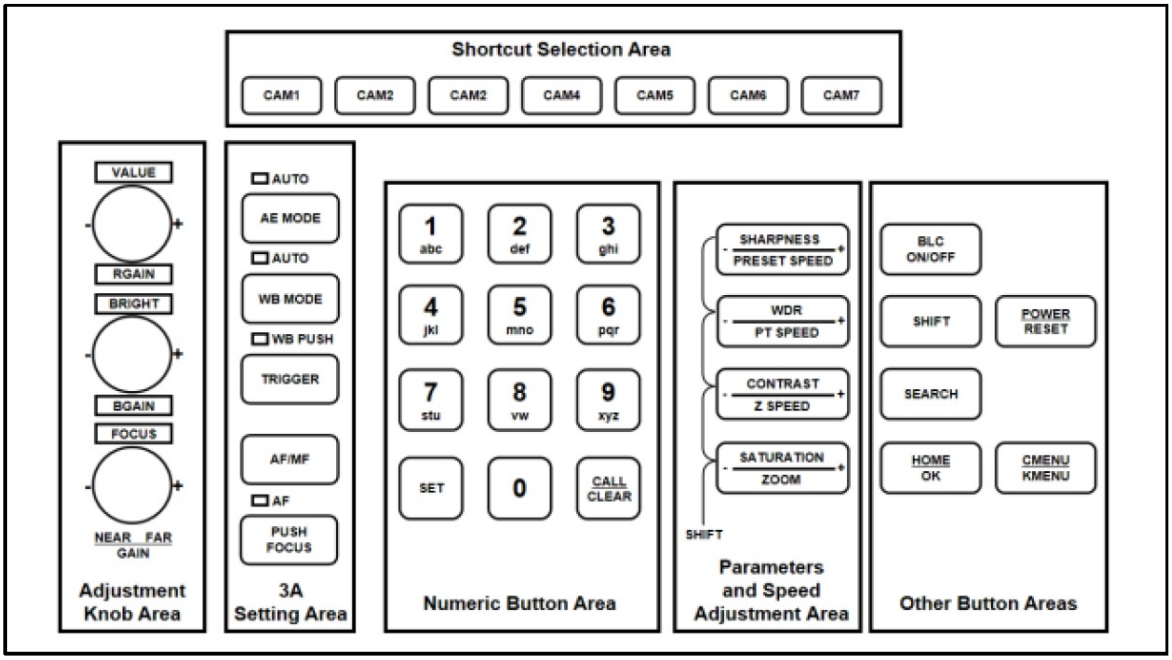


1. Lock hole
2. Network interface
3. Button
4. Upgrade interface
5. Power interface
6. Joystick
7. RS232 interface
8. Indicator light
9. Display screen
10. RS485 interface
11. Adjusting knob
12. Dial switch

Display Screen Content



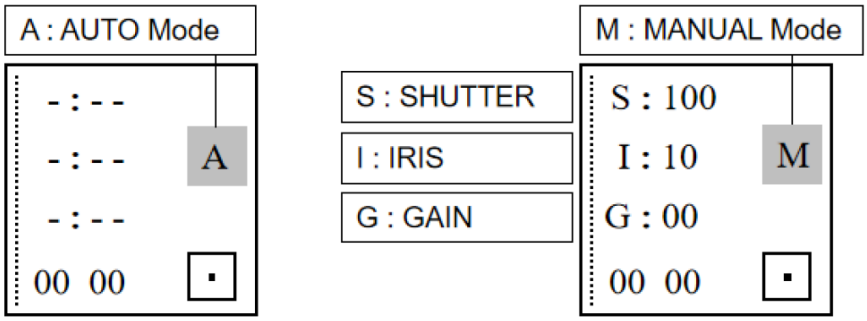
Button Function



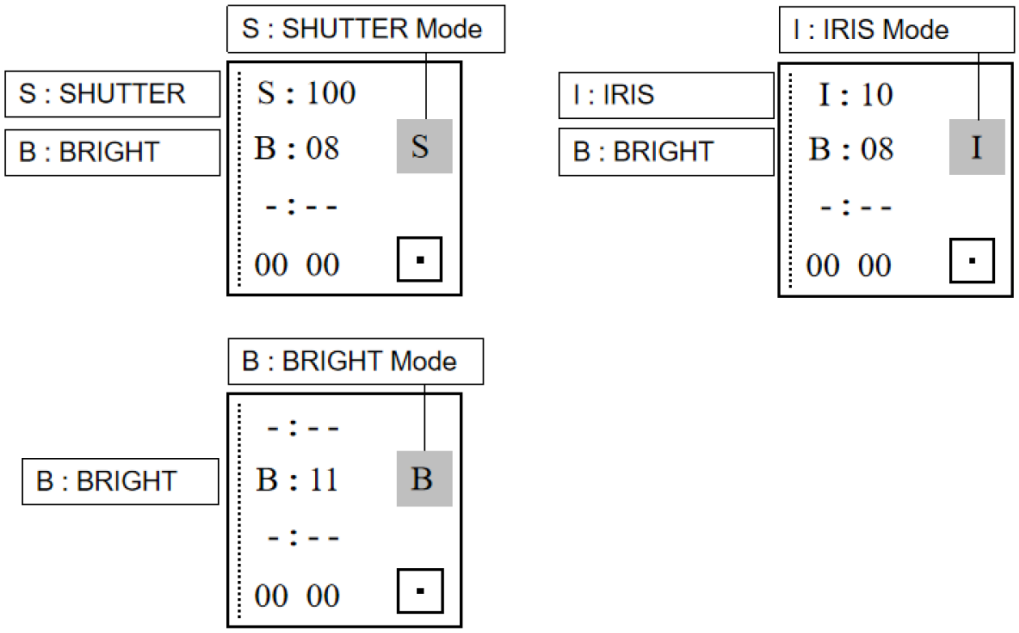
Shortcut Selection Area

CAM1 ~ CAM7 Select the corresponding camera.

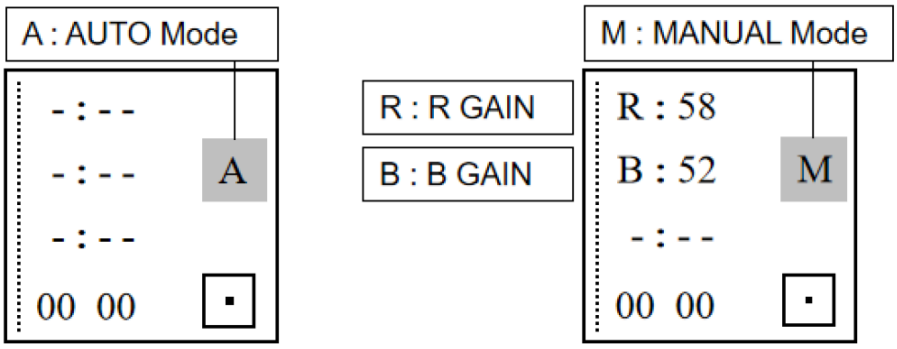
Adjustment Knob Area, 3A Setting Area AE MODE There is the word “AUTO” next to the button AE MODE. When the “AUTO” light is on, automatic exposure mode is triggered; when the “AUTO” light is OFF, the other modes manual exposure, shutter priority, iris priority, and bright priority can be selected, and at this time, the three knobs on the left side of the keyboard can adjust the shutter, iris, gain, bright and other parameters.



Keyboard Description



WB MODE There is the word “AUTO” next to the button WB MODE. when the “AUTO” light is on, it is AUTO and ATW mode; when the “AUTO” light is off, the manual, indoor and outdoor, Sodium lamps, and fluorescent lamps modes can be selected, then the camera red gain and blue gain can be adjusted through the first two knobs on the left side of the keyboard



TRIGGER
In Onepush mode (the “WB PUSH” light is on), the automatic white balance is triggered once.

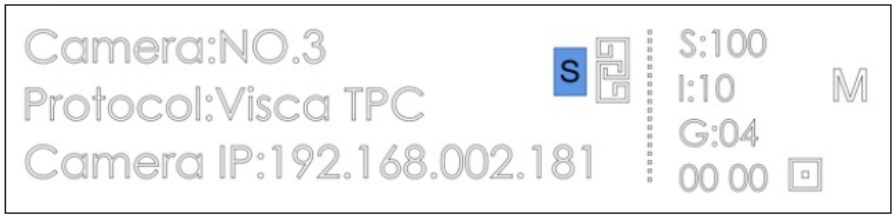
AF/MF There is the word “AF” next to the button AF/MF. When the “AF” light is on, it is the automatic focus mode; when the “AF” light is off, it is the manual focus mode, which can be adjusted by the third knob on the left side of the keyboard.
Note: When the exposure mode and focus mode are both manual, the 3rd knob gives priority to adjusting the focus.
PUSH FOCUS Triggers autofocus once.

Numeric Button Area
0~9 + SET Set the presets.
0~9 + Short press CALL/CLEAR Call the presets.
0~9 + Long press CALL/CLEAR Clear the Presets.
Note: Up to 128 presets can be set and recalled.

Parameters and Speed Adjustment Area
SHARPNESS PRESET SPEED Adjust the sharpness. / Adjust the preset speed.
WDR PT SPEED Adjust the WDR. / Adjust the camera PT speed.

CONTRAST Z SPEED Adjust the contrast. / Adjust the camera zoom speed.
SATURATION ZOOM Adjust the saturation. / Adjust the camera lens zoom.

Note: Press the SHIFT button to switch between parameter setting mode and speed setting mode, and the display will show “S”. When “S” is shown on the display, these 4 buttons can be used for parameter setting. When the display does not show “S”, these 4 keys can be used for speed setting and zooming.



Other Button Areas
BLC ON/OFF Backlight compensation on / off.
SHIFT Switch between parameter adjustment mode and speed adjustment mode.
SEARCH Search for IP addresses.
HOME/OK Return to the original position of the camera.
POWER/RESET Short press to control the camera power, and long press to reset the camera.
CMENU/KMENU Short press to open the camera menu, and long press to open the keyboard menu.

Joystick Control
Up Down Left Right Offset the joystick to control the camera in 4 directions.
Zoom Turn the joystick clockwise to zoom in.
Zoom Turn the joystick counterclockwise to zoom out.
Lock When controlling the camera, press the “lock” button, The camera keeps rotating in the previous control direction until the set lock time is exceeded or the camera rotates to the limit position.

Menu Setting
Operating Instructions: 1. Long press CMENU/KMENU to open the keyboard menu; Adjust the joystick Up and Down to view the menu options; Right to enter the next option; Left to return to the previous option, short press CMENU/KMENU can also return to the previous option; numeric keys 0~9 can set the corresponding parameters in some options. In the keyboard menu, you need to set the corresponding protocol and address in order to control the camera properly.

Menu options

System setting	**Language**	Chinese/English
	Brightness	1~15
	BackLight	AUTO/ON/OFF
	Screen Prt	10s~180s
	DHCP	OFF/ON
	Locol IP	192.168.001.180 Can be set
	Mask	255.255.255.000
	Gateway	192.168.001.001

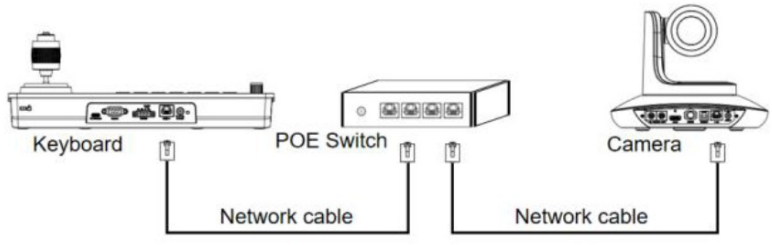
Camera setting	**Camera**	The keyboard can be set with 7 addresses: CAM1~CAM7
	Protocol	VISCA Serial, Pelco-P, Pelco-D, VISCA over IP, VISCA TCP, VISCA UDP, ONVIF, NDI(optional)
	IP Addr / Address	Set the camera IP address or camera address.
	Port / Baundrate	Set the port or baud rate. Default port numbers for each IP protocol: ONVIF: 8000, NDI: 5961, VISCA: 52381
	Username	Username setting, default: admin
	Password	Password setting, default: admin

PTZ setting	**Pan Reverse**	The left and right direction of the keyboard control can be switched.
	Tilt Reverse	The up and down direction of the keyboard control can be switched.
	Preset PT Spd	Set preset PT speed: 5~24
	Preset Z Spd	Set preset Zoom speed: 1~7
	Foucs Speed	Set focus sensitivity: 0~7
	Lock Time	Set of lock time: 2~20(s)

Password setting	**New PSD**	Set a new password to access the keyboard menu
	Confirm	Reconfirm the new password to access the keyboard menu
	Enable	Password switch to access the keyboard menu
	Version	Keyboard program version number and update date

Connection in network mode

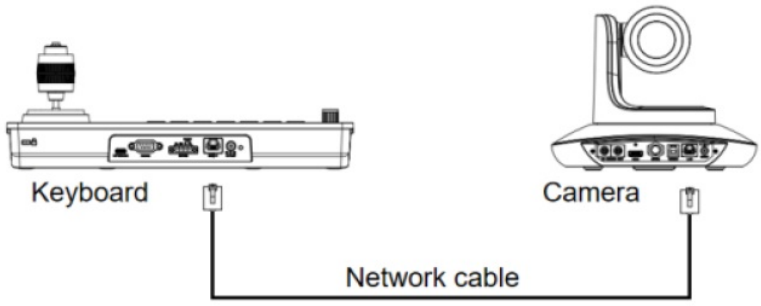
The keyboard is on the same LAN as the camera: The keyboard connects to the switch through the network cable, and the camera connects to the switch through the network cable. In the same LAN, set the same network segment, and set the corresponding protocol, IP address, and port number, you can control the camera through the keyboard The keyboard is directly connected to the camera: The keyboard is connected to the camera through the network cable, set the same network segment, and set the corresponding protocol, IP address, and port number, you can control the camera through the keyboard.



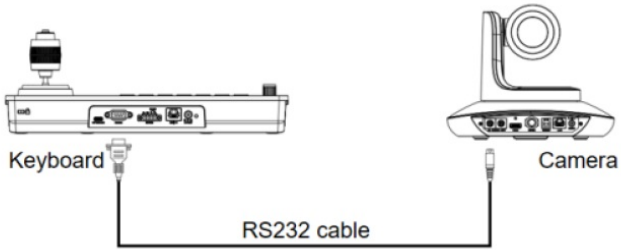
Connection in RS232 mode

The keyboard connects to the camera via an RS232 cable, set the corresponding protocol, address, and baud rate, and you can control the camera via the keyboard. Line Sequence Using the RS232 connection, pin 1 RXD of

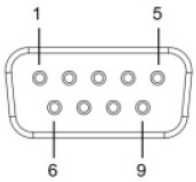
the keypad is connected to the camera input interface TXD, pin 2 TXD of the keypad is connected to the camera RXD, and pin 3 of the keypad is connected to the camera GND. (It is also possible to use the standard RS232 interface of the control keypad to connect to the camera.



Connection in RS422 mode



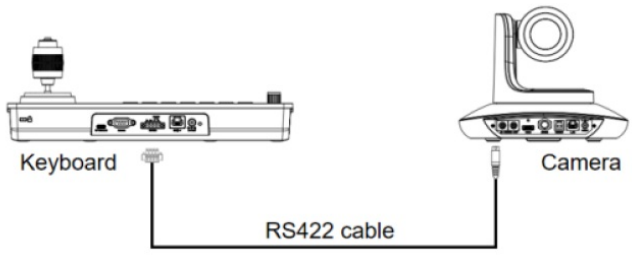
The keyboard connects to the camera via an RS422 cable, set the corresponding protocol, address and baud rate, and you can control the camera via the keyboard Line Sequence Using the RS422 bus connection, the keyboard pin 1 TXD + connects to the camera's RXD-, the keyboard pin 2 TXD – connects to the camera's RXD +, the keyboard pin 3 RXD + connects to the camera's TXD -, the keyboard pin 4 RXD – connects to the camera's TXD+.
Note: Some cameras do not support RS422 control.



Keyboard		Camera
RXD	<---------->	TXD
TXD	<---------->	RXD
GND	<---------->	GND

DB9 Male (Pin type)	**Pin Number**	2	3	5	1,4,6	7,8
	Signal Definition	RXD	TXD	GND	Internal connection	Internal connection

Connection in RS485 mode
The keyboard connects to the camera via an RS485 cable, sets the corresponding protocol, address, and baud rate, and you can control the camera via the keyboard Line Sequence Using the RS485 bus connection, the keyboard pin 1 TXD + is connected to the camera RXD-, and the keyboard pin 2 TXD- is connected to the camera RXD +.

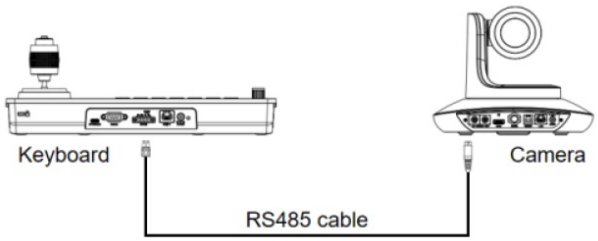


Cascade in RS232, RS422, RS485 mode

The keyboard connects the RS232-IN port of camera No. 1 through RS232, RS422, RS485 lines, and then connects the RS232-IN port of camera No. 2 through the RS232-OUT port of camera No. 1 with a cascade line, and finally sets the corresponding protocol, address, and baud rate on the keyboard to control camera No. 1 or camera No. 2 through the keyboard. Line Sequence Using the RS232 cascade connection, the output of the keyboard is connected to the input of camera No. 1, the output of camera No. 1 is connected to the input of camera No. 2, and so on. The connection method using RS422 and RS485 cascade is roughly the same as that of RS232

Keyboard		Camera
TXD+	<---------->	RXD+
TXD—	<---------->	RXD—
RXD+	<---------->	TXD+
RXD—	<---------->	TXD—

WEB Configuration



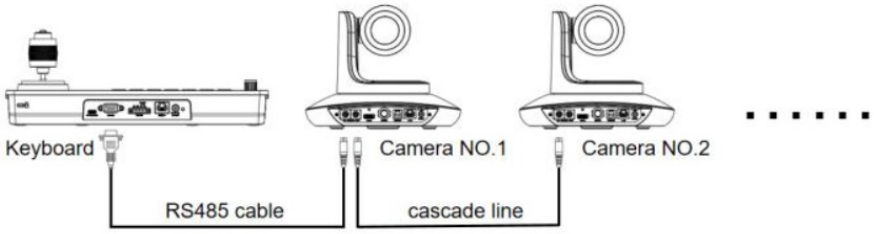
Login WEB

The keyboard and computer are connected to the same LAN, Open the browser, enter the IP address (default IP address is 192.168.1.188), enter the login interface, you can choose the language (Chinese or English), enter the username and password to log in, as shown on the right.

Keyboard		Camera
TXD+	<---------->	RXD+
TXD—	<---------->	RXD—

(Default username: admin Default password: admin)

After successful login, you will be taken directly to the system configuration screen, as shown below.



Device Control

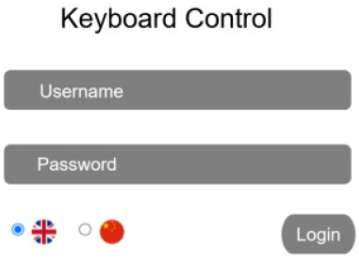
Device Search

Search for IP addresses and protocols of cameras on the same LAN and add them to the keyboard configuration; you can also add camera IP addresses and protocols manually.

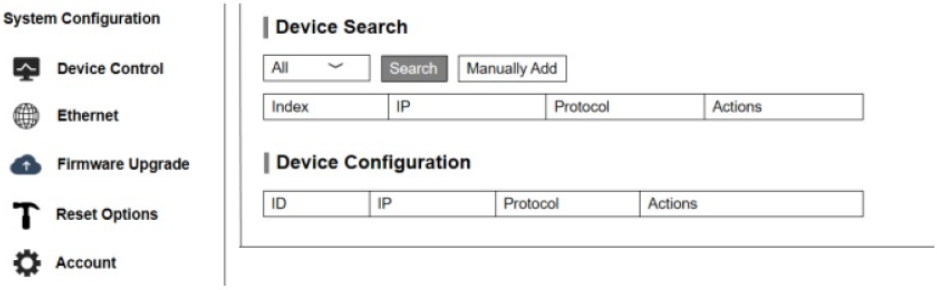
Keyboard		Camera NO.1		Camera NO.2	Camera NO.3
RXD	<---------->	TXD IN		RXD OUT	
TXD	<---------->	RXD IN		TXD OUT	
		TXD OUT	<---------->	RXD IN	.....
		RXD OUT	<---------->	TXD IN	
GND	<---------->	GND	<---------->	GND	

Device Configuration

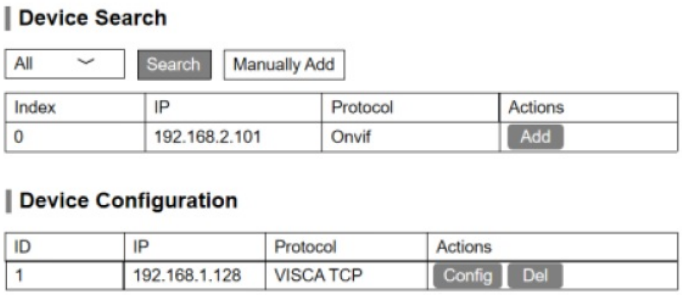
Modify and delete the IP address, protocol, and port number of the already configured camera.



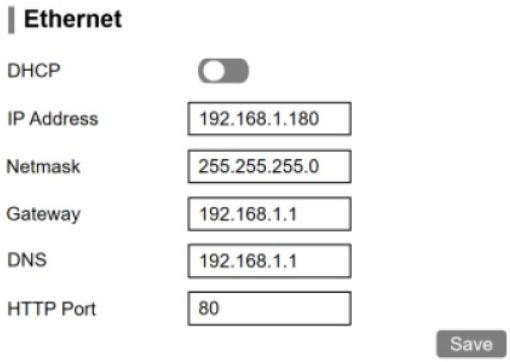
Ethernet Parameter



Set the network parameters of the keyboard, including DHCP switch, IP Address, Netmask, Gateway, DNS, and HTTP Port.

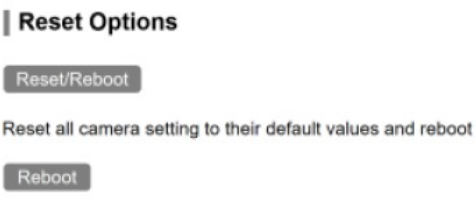


Firmware Upgrade



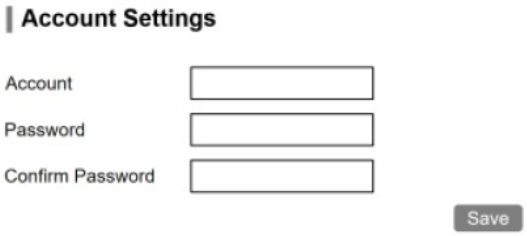
Check the keyboard device name and version information, and also, you can upload files to upgrade the keyboard system. Please do not power off during the upgrade process.

Reset Options



Perform a complete reset or reboot of the keyboard.
Reset/Reboot: Resets all parameters and reboots the device.
Reboot: Reboot the device.

Account



Set the login and password of the keyboard. First, enter the Account number that needs to be set, then enter the password that needs to be set twice (Password, Confirm Password), and then click “Save”. After setting the account number and password, please remember the account number and password, otherwise, you will not be able to log in to the WEB side interface

Frequently Asked Questions

Frequently Asked Questions	
Adverse Description	**Solution Ideas**
The keyboard cannot control the camera in network mode.	Check if the network cable is connected properly.
	Check whether the camera supports the set protocol.
	Check if the keyboard screen shows connected. The display of “” indicates a successful connection.
	Check whether the IP address, protocol and port number set on the keyboard are consistent with those of the camera.
	Check if the keyboard and the camera are on the same LAN.
	Check whether the keyboard’s local IP address and the camera’s IP address are in the same network segment.
The keyboard cannot control the camera in RS232, RS422, RS485 mode.	Check whether the RS232, RS422, RS485 cables are good and whether the interface is loose.
	Check whether T+, T-, R+, R- of RS422 are connected wrongly; check whether T+, T- of RS485 are connected backwards.

	Check that the address, protocol and baud rate set on the keyboard are consistent with those of the camera.
Some cameras can be controlled, some cameras cannot be controlled.	Check if the wiring of each part is normal.
	Check that the parameters of each address code of the keyboard are consistent with those of the respective camera.
When controlled with the keyboard, multiple cameras are controlled together.	Check that the protocols and addresses of the cameras being controlled together are consistent.

Documents / Resources

	Telycam TLC-50TC Joystick Remote Control Keyboard [pdf] User Manual TLC-50TC, TLC-50TC Joystick Remote Control Keyboard, Joystick Remote Control Keyboard, Remote Control Keyboard, Control Keyboard, Keyboard
	Telycam TLC-50TC Joystick Remote Control Keyboard [pdf] User Manual TLC-50TC, TLC-50TC Joystick Remote Control Keyboard, Joystick Remote Control Keyboard, Remote Control Keyboard, Control Keyboard, Keyboard

References

- Telycam