Share Your Vision

PTZOptics Move SE Quick Start Guide

Please check www.ptzoptics.com for the most up to date version of this document.

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Preface

Congratulations on receiving your new PTZOptics Move SE Camera. This manual is intended to to help you use your new PTZOptics camera how you want, as quickly as possible. If you have any questions or issues with this process, please get in touch with our support team using one of the methods below:

- https://community.ptzoptics.com
- 833-888-9706

Precautions

This product can only be used in the specified conditions in order to avoid any damage to the unit itself.

- Don't subject the camera to rain or moisture.
- Don't remove the cover. Removal of the cover may result in an electric shock in addition to voiding the warranty. In case of abnormal operation, contact contact support@ptzoptics.com or https://community.ptzoptics.com
- Never operate outside of the specified operating temperature range, humidity, or with any other power supply than the one originally provided with the unit.
- Please use a soft dry cloth to clean the unit. If the unit is very dirty, clean it with diluted neutral detergent; do not use any type of solvents which may damage the surface.

Warning

- Electrical Safety
  Installation must be in accordance with national and local electric safety standards. Do not use any power supply other than the one originally supplied with this camera.
- Polarity of Power Supply
  The power supply output for this product is 12V DC with a maximum current supply of 2A. Polarity of the power supply plug is critical and is as follows:

- Handling
  - Avoid any stress, vibration, or moisture during transportation, storage, installation, and operation.
  - Do not lift or move the camera by grasping the camera head. Do not turn the camera head by hand. Doing so may result in mechanical damage.
  - Do not expose the camera to any corrosive solid, liquid, or gas to avoid damage to the cover which is made of a plastic material.
  - Ensure that there are no obstacles in the pan or tilt ranges of the camera lens.
  - After installation is complete and secure, power on the camera.

• Do not dismantle the camera – PTZOptics is not responsible for any unauthorized modification or dismantling.

Connecting Your Camera for the First Time

Your new camera has many options for connecting, powering, controlling, and streaming. This Quick Start Guide will help you understand how to use each of these different options.

1. Refer to the Table of Contents on page 2 to find the various options available for your camera.
2. Read the instructions for the specific aspect of your camera that you want to use.
3. Refer to the illustration on page 6 showing the back plate of your camera to help determine which aspect of the camera you would like to use.

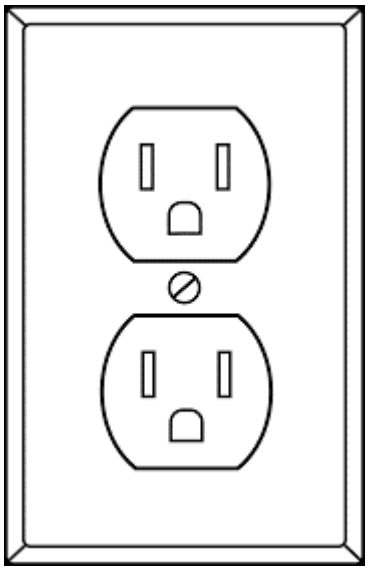
We have created videos to help you set up and use your camera. Scan the QR code below or type in the URL to get started! Click the links to view:

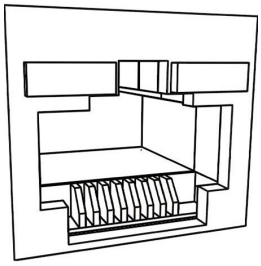
Getting Started

https://ptzoptics.com/get-started/

Power Your Camera

Your camera can be powered through DC power (with the included adapter) or Power over Ethernet (with a switch or router rated for 802.3af).



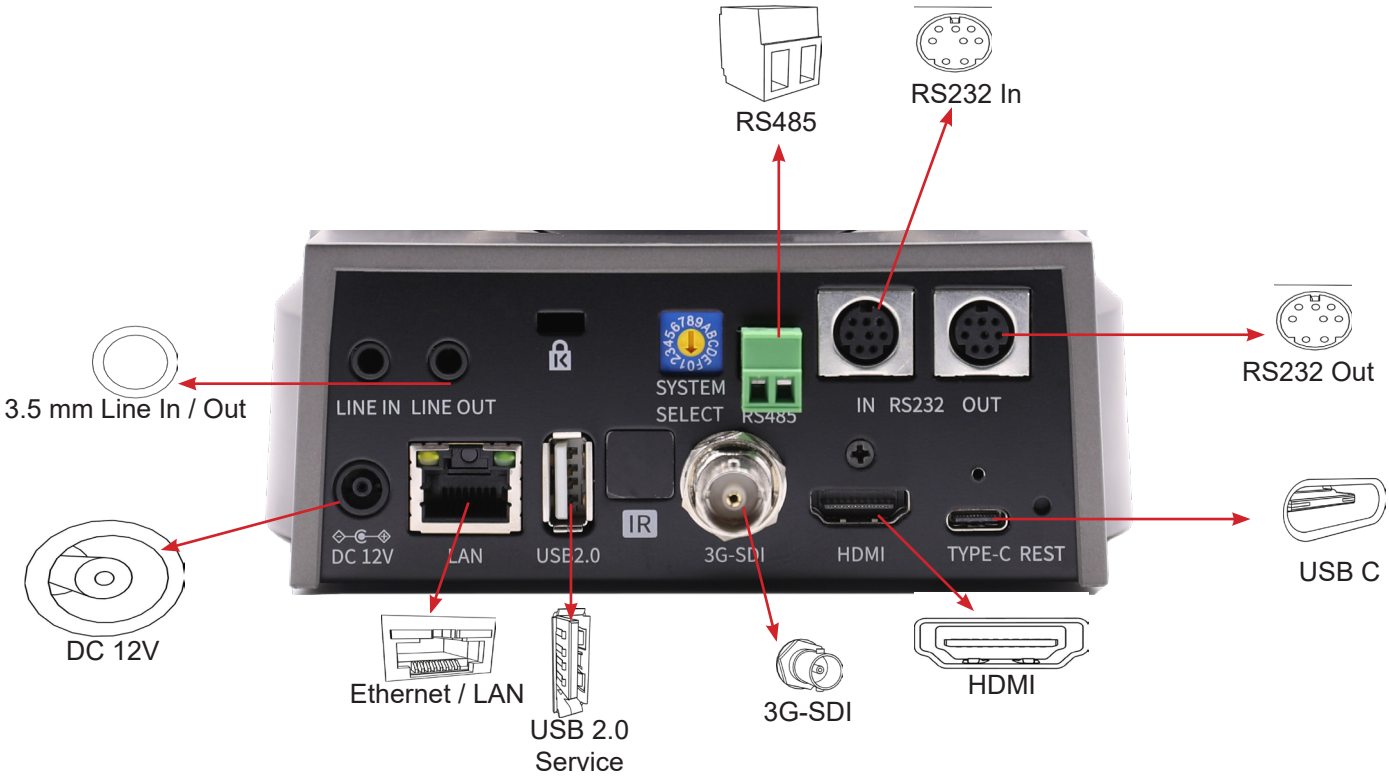


Connections

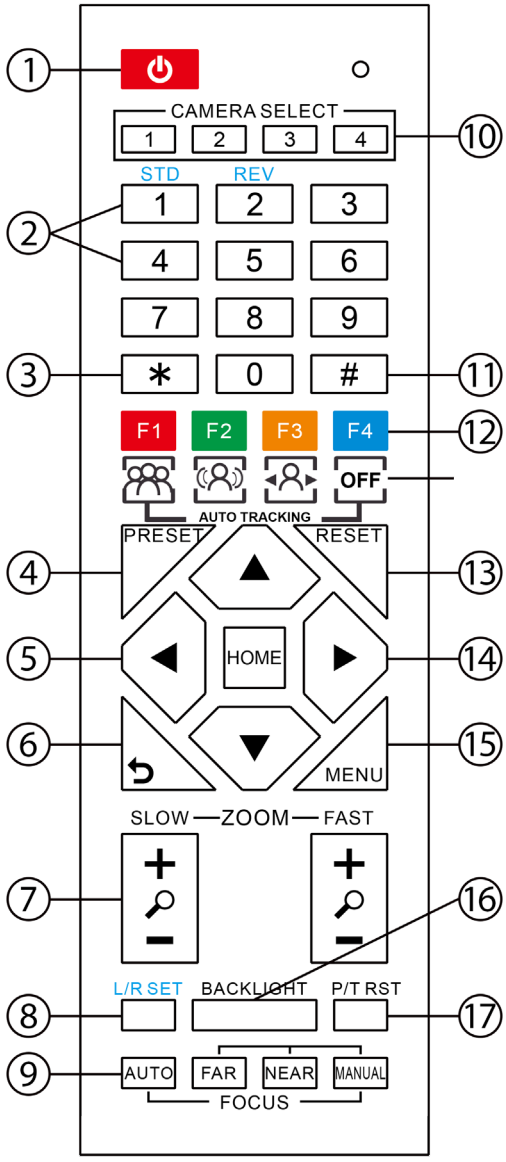
Move SE

12X

20X, 30X



IR Remote Controller Guide



1. **Standby Button**
   Press this button to enter standby mode. Press it again to enter normal mode.
   Note: Power consumption in standby mode is approximately half of the normal mode.

2. **Position Buttons**
   To set or call preset position.

3. * Button
For multiple functions. Typically used when calling shortcuts.

4 & 13. Set / Clear Preset Buttons
Set Preset: Store a preset position
[PRESET] + Numeric button (0-9): Setting a corresponding numeric key preset position.
Clear Preset: Erase a preset position.
[RESET] + Numeric button (0-9) or; [*] + [#] + [RESET]: Erase all presets

5 & 14. Pan / Tilt Control Buttons
Press the arrow buttons to perform panning and tilting. Press the [HOME] button to face the camera back to the front. (PTZ Cameras Only)

6. Return Button
Press the [RETURN] button to go back a previous menu within the OSD menu.

7. Zoom Buttons
Zoom+: Zoom In (Slow and fast speed).
Zoom-: Zoom Out (Slow and fast speed).

8. L / R Set Buttons
Set the Left & Right direction of the remote control.
[L/R SET] + [1]: Normal direction
[L/R SET] + [2]: Left and right directions will be reversed.
Press buttons simultaneously.

9. Focus Buttons
Used for focus adjustment.
[AUTO]: Automatically focus image on the center object.
[MANUAL]: Allow for manual control of focus. Make adjustments using [FAR] (focus on far object) and [NEAR] (focus on near object).

10. Camera Address Select Buttons
Press the camera select button corresponding to the camera in which you want to operate.

11. # Button

For multiple functions. Typically used when calling shortcuts

12. Multiple Function Buttons

- **Function 1. Auto Tracking Control**

  [F1]: Enable video-based auto framing (nonfunctional)

  [F2]: Enable audio-based auto tracking (nonfunctional)

  [F3]: Enable video-based auto tracking

  [F4]: Disable auto tracking

- **Function 2: For Settings camera IR address.**

  Press 3 keys in sequence to set the camera IR address as follows:

  [*] > [#] > [F1]: Address 1
  [*] > [#] > [F2]: Address 2
  [*] > [#] > [F3]: Address 3
  [*] > [#] > [F4]: Address 4

- **Function 3: Image Freeze**

  [#] > [*] > [F4]: Freezes the video feed Repeat to unfreeze.

15. Menu Settings

For adjusting the camera On Screen Display (OSD) Menu settings

[MENU]: Open or close the On Screen Display menu

16. Backlight Button

Use to enable or disable backlight compensation.

Note: Only effective in auto exposure mode.
Note: If there is light behind the subject, they may appear darker. In this case, use Backlight Compensation to enhance image.

17. P / T RST Button

Perform camera self-calibrate pan and tilt movement (PTZ Cameras Only)

IR Shortcut Functions

[*] > [#] > [1]: Display OSD menu in English

[*] > [#] > [3]: Display OSD menu in Chinese

[*] > [#] > [4]: Show IP address

[*] > [#] > [6]: Quickly restore the default settings

[*] > [#] > [8]: Show the camera version

[*] > [#] > [9]: Quickly set mount mode (flip / normal)

[*] > [#] > [MANUAL]: Resets IP information to default

[#] > [*] > [4]: Enable Dynamic IP address

[#] > [*] > [#] > [1]: Sets IP address to 192.168.100.81

[#] > [*] > [#] > [2]: Sets IP address to 192.168.100.82

[#] > [*] > [#] > [3]: Sets IP address to 192.168.100.83

[#] > [*] > [#] > [4]: Sets IP address to 192.168.100.84

[#] > [*] > [#] > [5]: Sets IP address to 192.168.100.85

[#] > [*] > [#] > [6]: Sets IP address to 192.168.100.86

[#] > [*] > [#] > [7]: Sets IP address to 192.168.100.87

[#] > [*] > [#] > [8]: Sets IP address to 192.168.100.88

[#] > [*] > [#] > [9]: Sets IP address to 192.168.100.89

[#] > [*] > [#] > [0]: Sets IP address to 192.168.100.80

[#] > [*] > [7]: OnePush White Balance Trigger (Camera must be in OnePush White Balance)

[*] > [#] > [AUTO] Performs the “Startup Dance” on repeat

IP Connection

The camera will automatically acquire an IP address when connected to the network. If the network cannot assign an IP address, the camera will default to “192.168.100.88”. If you don’t know the camera IP, please do one of the following:

- **Method 1**: Use an Internet browser and type in “http://ptzoptics.com/local” to reach the camera’s web interface. The default username and password for the camera is “admin.” Once you are logged in you can navigate to the “Network Settings” page to view your camera’s Network Settings. Here you can see the IP address your camera has and choose if you want it to keep the DHCP address or set a unique IP address with the Static option.

    - **Note #1**: If you are setting up multiple cameras, you should do so one at a time. It is recommended to give each camera a different Device ID. To do this you can navigate to the “Device Info” tab and type in a unique name in the Device ID text box. This will allow you to set up unique addresses that you can bookmark to connect to each camera. Example, “http://camera1.local/” and “http://camera2.local/”

- **Method 2**: Use the IR remote shortcut [*] > [#] > [4] to display the camera’s IP address at the top of any live video from the camera.

    - **Note #2:** In Device Info, you should click the “Check Firmware Version” button to make sure you have the latest firmware. If there is a new firmware version you should follow the instructions to update your camera.

Tip: To control multipe cameras with a single IR remote, you can give each camera a unique IR remote control selection in System Settings.

To quickly assign an IP address using the IR Remote

[*] > [#] > [MANUAL]: Resets IP information to default
[#] > [*] > [4]: Enable Dynamic IP address
[#] > [*] > [#] > [1]: Sets IP address to 192.168.100.81
[#] > [*] > [#] > [2]: Sets IP address to 192.168.100.82
[#] > [*] > [#] > [3]: Sets IP address to 192.168.100.83
[#] > [*] > [#] > [4]: Sets IP address to 192.168.100.84
[#] > [*] > [#] > [5]: Sets IP address to 192.168.100.85
[#] > [*] > [#] > [6]: Sets IP address to 192.168.100.86
[#] > [*] > [#] > [7]: Sets IP address to 192.168.100.87
[#] > [*] > [#] > [8]: Sets IP address to 192.168.100.88
[#] > [*] > [#] > [9]: Sets IP address to 192.168.100.89
[#] > [*] > [#] > [0]: Sets IP address to 192.168.100.80

System Select Resolution Dial

Resolution Dial			
HDMI		SDI	
0	1080p60	8	1080p30
1	1080p50	9	1080p30
2	1080p30	A	1080p59.94
3	1080p30	B	1080p30
4	720p60	C	1080p29.97
5	720p50	D	1080p30
6	1080p30	E	1080p30
7	1080p25	F	1080p30

Web UI

To access the Web UI:

1. Enter “http://ptzoptics.local/” or the camera’s IP address into a web browser.

2. Enter the username and password into the login fields. Both the username and password are “admin” by default. You can change the login credentials on the System Settings page.

- The **Navigation panel** allows you to quickly and easily select the various control options for the camera. It can be collapsed to make more room on the user interface.

- The **Camera Settings** page gives you access to the **Camera’s Video Feed**, **PTZ Control**, **OSD Menu**, **Preset Control**, **Speed Settings**, **Image Settings** & **Control Settings**.

- The **Audio & Video Settings** page gives you access to the **Video Encoding Settings, IP Video Stream 1 / Stream 2 Encoding Settings & Audio Encoding Settings** sections of the network video feeds.

- The **Streaming Settings** page gives you access to the **RTMP(S) Settings, SRT Settings, RTSP Settings, Multicast Settings** & **ONVIF Settings** sections.

- The **Profile Settings** page gives you access to the **Logo Upload**, **Profile Configuration**, **Quick Profiles**, **Custom CSS** & **Tutorial Mode** sections.

- The **Network Settings** page grants access to the **LAN Settings** & **NTP Settings** sections.

- The **NDI Config Settings** page prompts unlicensed cameras to purchase an NDI license, or gives access to NDI licensed cameras NDI settings.

- The **MIDI Control** page grants access to the PTZOptics **MIDI Control**, **Control Mapping**, **Mass Command Edit** & **Information** sections. The MIDI Control page can be reached by accessing the HTTPS version of the camera’s web interface. (*https://[Camera IP]/)*. The page must remain open for MIDI Control to function.

- The **Device Information** page gives access to the Device Information section.

- The **System Settings** page gives access to the **HTTPS Settings**, **IR Remote Channel Selection**, **Access Settings**, **Firmware Check**, **Restore Default** & **Firmware Upload** sections.

For complete information regarding the Web UI, please refer to the User Manual found at https://ptzoptics.com/documentation/

Using Auto Tracking

- The PTZOptics Move SE Cameras feature built-in auto-tracking capabilities. You can turn on Auto-Tracking by pressing the auto-track button on the IR remote control (F3) or via the web-interface, as shown below. Pressing F4 will also disable auto Tracking.

- The Move SE's auto-tracking can lock onto a specific person, even while other people are in frame. Once tracking is enabled, a green box will appear around a subject. You can change between subjects using the left and right arrows on the IR remote controller. Once the desired subject has been found, press the Home button on the IR remote to confirm your selection. A red box will appear temporarily, displaying a target has been confirmed.

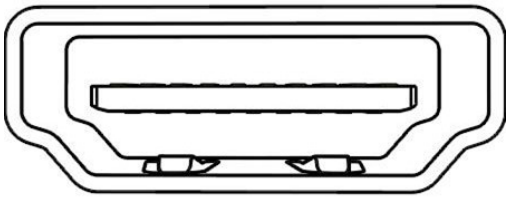
- Auto Tracking Distance Limitations:

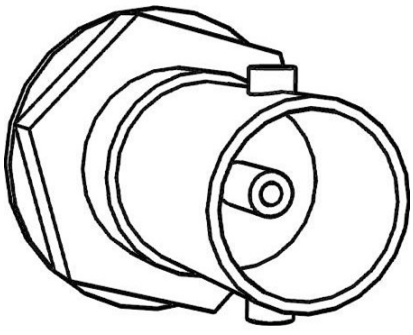
Camera Model	Auto-Tracking Distance Limitation
12X Move SE	200 feet (60 Meters)
20X Move SE	250 feet (76 Meters)
30X Move SE	300 feet (91 Meters)

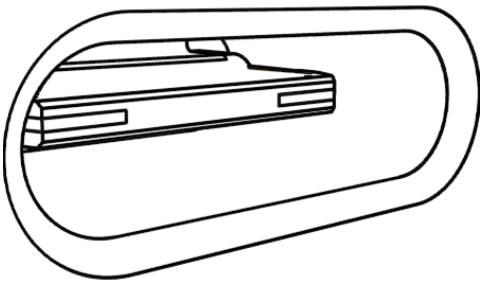
HDMI Connection, 3G-SDI Connection, USB Connection

- HDMI Connection
  - To achieve best results, we recommend using an HDMI 1.3 or better cable. HDMI cables can be run up to 49 feet (15 Meters). The HDMI output has a maximum resolution and framerate of 1920 x 1080 @ 60 FPS. The HDMI output is active and set to 1080p 30fps by default. You can adjust the resolution using the system select switch.
- 3G-SDI
  - To achieve best results, we recommend using a 3G-SDI cable or better. 3G-SDI cables can be run up to 300 feet (91 Meters). The 3G-SDI output has a maximum resolution and framerate of 1920x1080 @ 60 FPS. The SDI output is active and set to 1080p 30fps by default. You can adjust the resolution using the system select switch.

- USB Connection
  - Your camera comes with a USB connection and a USB-C to USB-A cable. The USB 3.0 output has a maximum resolution and framerate of 1920 x 1080 @ 30 FPS.





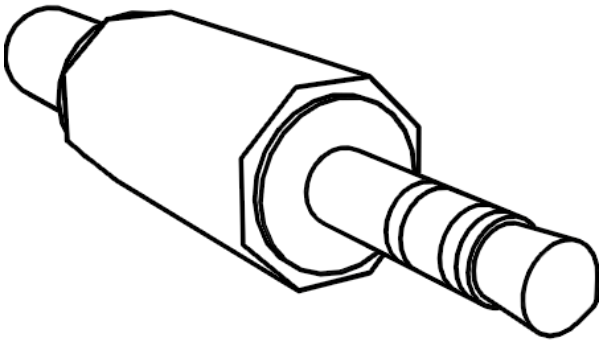


3.5 mm Audio Connection

Your camera comes with a 3.5mm audio connection which allows you to embed audio on your video stream.

1. Connect a 3.5mm audio cable (not included) to the 3.5mm audio in port of your camera.
2. Connect the other end of the cable to the device of your choice.

Note: The 3.5mm audio connection requires Line Level audio in order to function.



UVC 1.5 Control

Your camera is USB Video Class (UVC 1.5) compliant. This means that you can control your camera's pan, tilt, and zoom as well as change camera settings through your USB connection.

Most video software offers some form of UVC control.

To find software designed for your camera, please refer to the "Control Page" section of this guide.

RTSP Streaming, RTMP Streaming

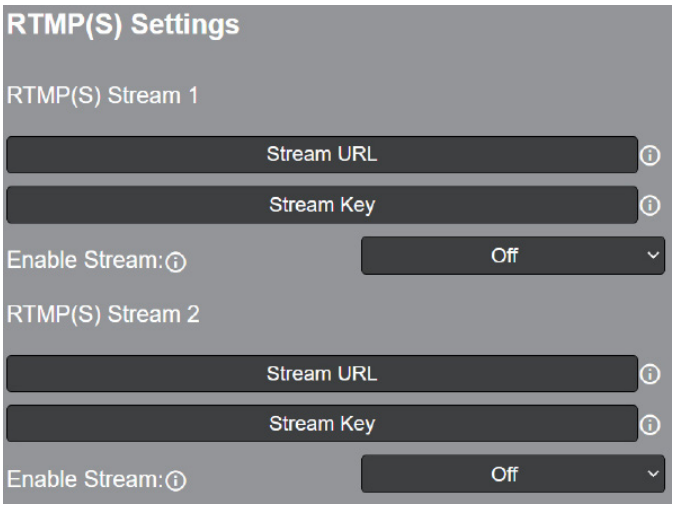
- **RTSP Streaming**
  Your camera is able to send two (2) RTSP streams for viewing video through your LAN. You can view these streams by using a video mixing software and typing in the following strings:

  - Stream 1 (HD): rtsp:///(Camera IP):554/1
  - Stream 2 (SD): rtsp:///(Camera IP):554/2

- **RTMP Streaming**
  Your camera can send two (2) RTMP(S) streams. To use your camera with an RTMP stream, you will need a Stream URL & Stream Key, which you receive from a CDN or from the social network to which you want to stream.

  Once the Stream URL & Stream Key are acquired, login to the camera's Web UI and head to the Streaming Settings page. Enter the information into the appropriate fields, then toggle the Enable Stream dropdown to On for the desired stream, and finally, click the Apply button.

  Note: Stream 1 has a maximum resolution of 1920 x 1080 @ 60 FPS. Stream 2 has a maximum resolution of 720x480 @ 60 FPS.



SRT Streaming

- Your camera can output an SRT stream. It can be set up as a Caller or Listener. You can configure the SRT settings from the Streaming Settings page of the camera's Web UI.

Control Page

PTZOptics offers a wide range of methods for controlling your cameras. Check out the list below, or visit https://ptzoptics.com/applications/ for available tools:

- **Web UI**
  The updated Web UI offers just about everything you'll need. You have access to PTZ & Preset control, video tuning, streaming settings, and much more.

- **IR Remote Controller**
  The camera includes a free IR remote controller for standard PTZ and Preset control, as well as access to numerous shortcuts to enhance your experience with the IR remote.

- **Joystick Controllers**
  Your camera supports a plethora of control protocols, allowing for use with IP & Serial joystick controllers. The PTZOptics SuperJoy offers the most synergy when it comes to controlling the PTZOptics cameras. You can find more information on the SuperJoy here: https://ptzoptics.com/superjoy/

- **iOS Apps**
  The PTZOptics Control Pro 2 iOS app offers standard PTZ & Preset control right from your iPhone! Find more information here: https://ptzoptics.com/ptzcontrol-pro-2/

- **CMP (Beta)**
  The Camera Management Platform, or CMP for short, is a computer software designed to make your life easier. It includes many tools built in for camera control, color matching, auto tracking, and more! https://ptzoptics.com/cmp/

- **OBS Plugin**
  The Dockable OBS Plugin offers intuitive control for up to 8 cameras. Give it a try! Find information here: https://ptzoptics.com/obs-plugin/

- **Control API**
  Need something we currently don't offer? We have control APIs online so you can make something of your own. You can find our control APIs here: https://ptzoptics.com/developer-portal/

- **Documentation**
  Need more information about your specific camera? Read the camera's User Manual at https://ptzoptics.com/product-documentation/

Warranty

PTZOptics includes a limited parts & labor warranty for all PTZOptics manufactured cameras. The warranty is valid only if PTZOptics receives proper notice of such defects during the warranty period. PTZOptics, at its option, will repair or replace products that prove to be defective. PTZOptics manufacturers its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. Operation is subject to the following two conditions: This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- **Warning** - This is a class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.
- **Remote Control Battery Safety Information** - Store batteries in a cool and dry place. Do not throw away used batteries in the trash. Properly dispose of used batteries through specially approved disposal methods. Remove the batteries if they are not in use for long periods of time. Battery leakage and corrosion can damage the remote control. Do not use old batteries with new batteries. Do not mix and use different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium). Do not dispose of batteries in a fire. Do not attempt to short-circuit the battery terminals.

Copyright Notice

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