# Precision intelligent shooting control system KIND KD-C50R5H Instruction manual





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# — KIND precision intelligent shooting control system use precautions

- When clean equipment with dry cloth gently wipe the casing and panel, if the device is very dirty, then soaked in a small amount of neutral detergent cloth to wipe, and then dried. Do not use alcohol, thinners, pesticides, and other volatile solvents, as doing so can deform the casing or damage the surface
- transportation when the equipment installed in the original packaging box, or similar cases, can reduce equipment received strong vibrations
- thank you very much for using our company's precision intelligent control system, to reduce fire or shock hazard, do not let this equipment rain or be affected with damp be affected with damp, do not remove the chassis, maintenance matters should only by qualified maintenance personnel for repair. To avoid misoperation
- According to the provisions of the copyright law, the copyright owner's permission, she didn't get the recording video or audio must not be used to appreciate each individual application. Note that for live performances, shows, and exhibitions, even your

personal entertainment may be limited

- Before use, please read this manual carefully, and please take the retention of instruction
- Do not use the product near water
- avoid placing products on the bed, sofa, blankets and other objects, do not place the product in near the fire source, heating furnace, or hot mouth, only if there is proper vents
- this product by use of the power supply, please according to the power converter on the label
- using extension, please confirm the total quantity/total Ann used multiple, shall not be sung extension cord total load by Ann multiples
  - if you have the following situations occurs, please send the product out plug, and inquire to qualified technical personnel
  - ①The power cord or plug is damaged or peeled
  - ②There is liquid leaking into the product
  - ③If this product has been rained on or splashed with water
- transportation when the equipment installed in the original packaging box, or similar cases, can reduce equipment received strong vibrations

### **Product and service disclaimer**

The information provided in this manual is intended as a guide only and KIND has always strived to provide correct, complete and appropriate information. However, KIND cannot exclude that some information in this manual may be incorrect or incomplete and that this manual may contain typos, omissions of information or incorrect. KIND recommends that you reconfirm the accuracy of the information in this document and that KIND is not liable for any omissions or errors, or for loss or damage caused at any time by the information contained in this Manual. Further information about the contents of this Manual or the products may be obtained by contacting local offices or KIND headquarters.

### 二、Product overview



Precision Intelligent shooting control system is a set of manual and automatic control, adjusting camera parameters as one of the wireless controller.

The system has high stability and industrial grade wireless data transmission station. Lora spread spectrum transmission, RS232 and RS485 interfaces are adopted. Using efficient cyclic error correction algorithm, high coding efficiency, strong error correction ability, greatly improve the anti-interference and high stability of the radio.

dimension: (L\*W\*H) 325mm\*198mm\*64mm

Power supply: 12V

**application:** 4K video shooting, studio, media live, multi-camera shooting

Camera control: It can control camera push, pull, roll, tilt, tilt, and camera Settings, such as white balance, automatic white balance, one-button white balance, manual focus, shutter manual adjustment, aperture manual adjustment and menu operation, and can control camera zoom, focus, aperture, recording and other functions.

**Rail car control:** control rail car forward, backward, acceleration and deceleration, track cruise, preset position, start and stop soft and smooth.

Lift control: Control lift rise and fall, as well as speed and direction.

Preset trajectory: The lifting system, the sliding track pulley system and the camera PTZ system control constitute a set of integrated multi-axis synchronous automatic shooting system, which can realize the multi-axis repeated track shooting. And adjustable speed and direction change; It can realize multi-axis synchronous automatic control of the head, rail car and lifting system. The built-in encoder of the servo motor can accurately record the running position of the rail car. Based on this, two virtual starting and ending points can be set for the rail car on the control platform. No matter acceleration and deceleration, constant speed cruise or course switching, the rail car can operate within a safe

range between the two points to realize automatic cruise shooting.

# 三、Precision intelligent shooting control system interface description



- (1): (AB) terminal The 485 port is used to connect to the camera and control the camera independently.
- (2): (TRG) terminal 232 interface, TR send and receive respectively, G is grounded, can be connected to the camera through 232 interface, achieve independent control of the camera.
- (3): Type B USB interface connected to the virtual recording and broadcasting device, you can view the real-time track of the rail car on the software.

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- (4): Connect the 12V power port to the DC.
- (5): The 2.4G antenna can enhance the control signal of the rail car.
- (6): The 433M antenna can enhance the camera's control signal.

# 四、 Precision intelligent control system function description

#### 1.Menu introduction



- ①: Record the track of the rail car and camera. The indicator light is on to start recording, and the indicator light is off to stop recording.
- 2: Play and record the track of the rail car and camera. When the indicator light is

- on, play begins. When the indicator light is off, play is finished.
- 3: Start or stop all camera recording.
- 4: The current camera is recording.
- ⑤: Stop recording the current camera.
- ⑥: The location of the camera can be connected to 10 groups of cameras simultaneously.
- ⑦: Control rail car forward, backward and lift functions.
- **®**: The display displays the status and memory capacity of the NDI camera.
- The preset bits of the camera can be used to quickly return the camera to the preset position. There are 9 sets available.
- (SET) Confirm key of the camera preset point. After adjusting the camera position, press this key to confirm the setting.
- ①: (FAST/SLOW) Adjust the speed of the camera and the rail car. The indicator is on at fast speed and the indicator is off at slow speed.
- (1): (FOCUS AUTO) The indicator light can automatically adjust the focal length of the camera.
- (IRIS PRI) Indicator light, aperture priority.
- (4): (SHUTTER PRI) Indicator light, shutter priority.
- (b): (WB AUTO) Indicator light, automatically adjust the white balance.
- (b): (ONE PUSH) One key adjustment white balance.
- ①: (IRIS) Manually adjust the aperture by turning the knob to adjust the aperture.

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- (B): (SHUTTER) Adjust the shutter manually. You can adjust the shutter through the knob.
- (FOCUS) Manually adjust the focus, you can use the knob to adjust the focus.
- ②D: PTZ controls the left, right, altitude, and elevation of the camera as well as the focal length of the camera (the focal length of the camera can be adjusted by rotating the rocker).

Note: ① ③ ④ ① ® s automatic and manual respectively, in automatic mode, manual knob cannot be used.

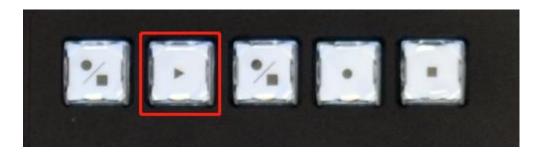
### 2 .Usage of the recording function



#### **Record/Stop track button**

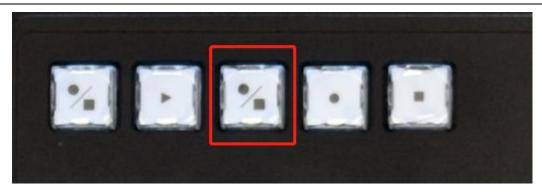
- 1 Track recording using rail cars (using the first set of preset points as an example):
- (1). First click the first set of preset points (if the indicator is on, the selection is successful).
- (2). Move the rail to the starting point (the starting point can be arbitrarily moved as needed).
- (3). After the trolley moves to the starting point, click the "Record" button (①) to start recording (the indicator light is recording).

- (4).the recording begins by ② and ② to move the car direction, focal length, height, and adjust the camera position, controlled by a handle ③rail cars moving backward, rocker to control the rise and fall of the rail cars up and down, up and down through the joystick (②) to control the direction of the camera, the left-right rotating joystick to control the focal length of the camera.
- (5). After the recording is complete, press the ① key to turn off the indicator.



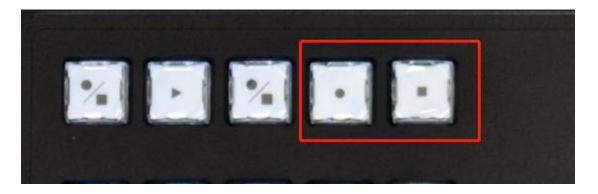
Play track button recorded by rail car

- ② Using rail cars to play recorded tracks (using the first set of preset points as an example):
- (1). First press the first set of preset points to return the rail car and camera to the starting position before recording.
- (2). After returning to the starting point, press the play button (2), and the indicator will light up and start playing.
- (3). During playback, the rail car will follow the previously recorded trajectory
- (4) .After the playback is complete, the indicator of the playback button automatically turns off.



**Stop button for recording on all stations** 

3 Press 3 for all cameras to start recording at the same time. If the indicator is on, it indicates that recording is underway. Hold down the indicator for 3 seconds to off and stop recording.



#### Single bit recording and stop button

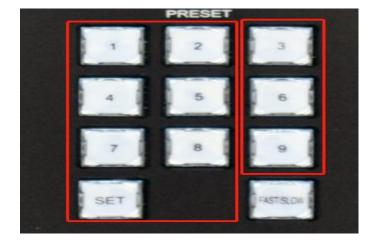
- f 4 The keyboard f (4) and f (5) are used together.  $\bf (4)$  is the recording button, and
- (⑤) is to stop recording. (Take camera location 1 and 2 as an example.
- (1). First, select camera position 2 (the indicator light of camera position 2 is on).
- (2). Press ④ to start recording. At this time, only the camera in position 2 is recording.
- (3). Then select camera 1 and press the ④ key to start recording. Video is being recorded in camera 1.

(4).(5) To stop recording, you can select the camera you want to stop recording. You can press (5) to stop the camera in your own camera.



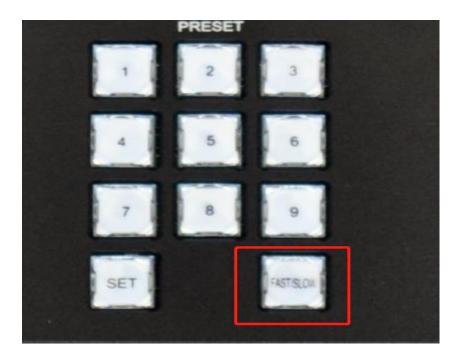
**Camera control address** 

- **6** Camera position **6** Application (Take 10 groups of cameras as an example):
- (1). There are 10 groups of camera stands, which can control 10 groups of cameras respectively.
- (2). It needs to match the address of the camera.
- (3). After finishing, press camera position 1-10 respectively. The indicator of which key will light up. You can use PTZ to control the camera of which position.



#### **Preset point setting**

- **6** Preset point Settings
- (1). There are nine groups of preset points. Nine preset points can be set at the same time (take 1 as an example).
- (2). First, press button 1 of the preset point to make its key indicator light up.
- (3). Then press SET (**(((()**) before moving the rail car and lens to the starting point. The SET key will light up to indicate that the setting has been successful.
- (4).Remove the rail car and press preset point 1. The rail car and lens will return to the starting point set earlier.



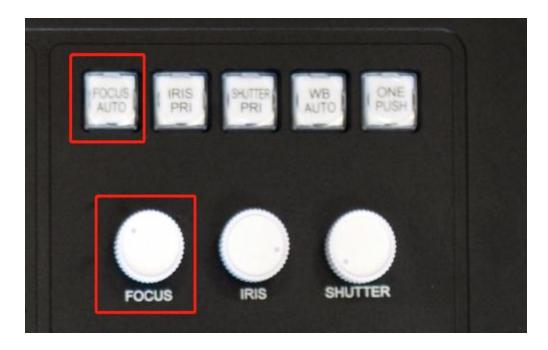
**FAST/SLOW Speed switching** 

- FAST/SLOW key: Controls the speed of the rail car and camera:
- (1). When controlling the rail car, the indicator light of the button is fast, and the speed of the control rail car and the camera will be relatively fast.

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(2). When the indicator light of the button is off, the control speed of the rail car and the camera will be slower.

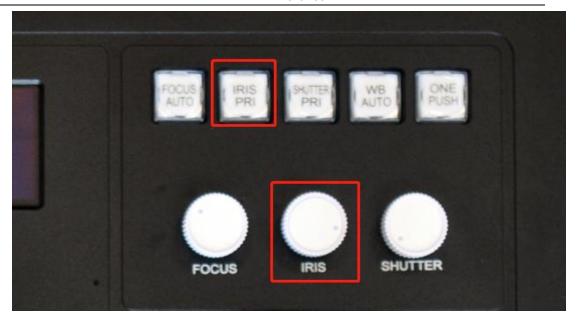
Note: When switching to fast mode, due to the inertia of the equipment, beware of the rail car rushing out of the track and damaging the equipment.



**Auto focus versus manual focus** 

- 8 How to use autofocus and manual focus:
- (1) .The FOCUS AUTO button indicator lights up to automatically focus on the camera in the current position.
- (2). The FOCUS knob can be turned left and right to focus.

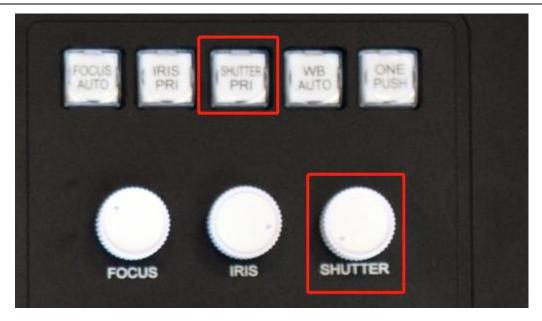
Note: Manual FOCUS cannot be used after the FOCUS AUTO indicator is on.



**Aperture priority and manual aperture** 

- **9** Aperture priority button and manual aperture use method:
- (1).IRIS PRI key indicator light is aperture priority. Is to adjust exposure to the standard aperture.
- (2).IRIS can adjust exposure manually with a knob.

Note: Manual adjustment of IRIS PRI key after the light is on cannot be used.



**Shutter priority with shutter knob** 

- **1** Shutter priority with manual shutter adjustment method:
- (1). The SHUTTER PRI indicator light is on, and the exposure is adjusted according to the shutter as the standard.
- (2). SHUTTER knob to manually adjust the exposure.

Note: Manual knobs cannot be used after the SHUTTER key indicator lights up.



Camera menu shortcut key

# 3.Use the intelligent shooting control system to debug the camera menu

- (1).Press and hold the MENU (5) key for 3 seconds. The indicator of 2.4.5.6.8 will light up, and the Camera menu page is displayed.
  - (2). Using the 2.4.6.8 Key Selection menu, press 5 to enter the OK key.
  - (3).Long press 5 again to exit the menu.



The rocker that controls the rail car

# 4. Rail car operation procedure:

- (1)First, ensure that the device is properly connected and connected to the power supply.
- (2) Move the rocker left and right up and down in the above picture to control the advance, retreat, rise and fall of the rail car.
- (3)The rocker tosses the rail car forward to the left, backward to the right, upward to lift, and downward to lift down.

# 5. Camera control operation procedure

(1) The camera is connected to the rail car and the control system.



**Camera address** 

(2) .Select the camera address through the above picture (select the camera position to be controlled).



The red box automatically adjusts the focus and exposure of the camera

The yellow box is for manually adjusting the focus and exposure of the camera

(3)Adjust camera exposure by manually turning the knob or automatic button on the above picture.



The picture shows automatic white balance and one - button white

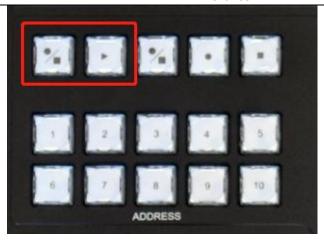
#### **balance**

(4). Adjust the camera by using the key automatic white balance and one key white balance in the pictures above.



PTZ

(5). After adjusting the camera, the left, right and focal length of the camera can be controlled by the PTZ in the above figure. The left and right azimuth of the camera can be controlled by the left and right toggle, and the pitch Angle of the camera can be controlled by turning the rocker to the left and right.



Rail car records and plays keys

# 6.Track recording and playback of rail cars

- (1). Firstly, select the camera position (there are 10 groups of camera positions in total. Select the one you want to record and control it according to the actual camera position)..
- (2) .Select preset points of rail car (9 groups of preset points can be selected according to site requirements).
- (3). The position of the railcar camera is adjusted by controlling the rocker and PTZ rocker of the railcar.
- (4). Press the SET button after the adjustment Set preset p
- (5). Select record button Start recording track, track made by rail car and camera will be recorded after the record button indicator lights up, which can be controlled by PTZ and rail car rocker.

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- (6).Press the key once The record track stops, and the indicator of the key turns off.
- (7). After recording, press the preset point of the previous recording (press 1 if the previous recording was made with the first group). The rail car will return to the starting point before recording, and when the rail car stops, click the play button

At this time, the key is on, the light is off, and the playback is finished.

Different tracks can be recorded in nine groups.

## 五、Packing list

USB-B cable \*1set

2.4G antenna \*1set

433M antenna \*1set

485/232 terminal \*1set

12V power cable \*1set

specification \*1set

### 六、After-sales service

Dear users, in order to ensure that you fully enjoy the quality of service, please

carefully read the following product service regulations.

The company provides limited warranty and lifetime repair service

- 1. The warranty period is 12 months from the date of sale. During the limited warranty period, you will enjoy free warranty service for product faults, which will be repaired by users or sent to the company (faults caused by improper use, human failure or irresistible causes are not covered by the warranty).
- 2. In more than 12 months of limited warranty period, the product failure to implement paid lifetime maintenance service.

#### Maintenance response time

- 1. From the day the user sends the product to the company, 24 hours response service, switchboard telephone:+86 010-58732647.
- 2. Before the user sends the product back to our company, please contact the relevant technical personnel of our company in advance, and then send the product back to our company. Otherwise, the maintenance is not timely, so as not to affect your use.
- 3. Address: 16C, Unit 1, Building C, Yingdu PLAZA, No. 48, ZhichunRoad, Haidian District, Beijing, China.
  - 4. Official website: WWW.KINDLIVECAST.COM