AViPAS

Model: AV-3104
3D Keyboard Controller

User Manual

**Please Read this User
Manual throughout before using**.

www.avipas.com

Thanks very much for choosing our products, please contact us anytime if you have any questions or requirements.

This manual may contain technical inaccuracy, product function inconsistent with operation or literal error. The content of this manual will be updated with the enhancement of the products function and the product will also be improved or updated termly, the updated content will be added to the new version of the manual without notice.

Catalog

Chapter 1 Brief Introduction

1.1   Appearance

   1.2   Function Explanation

1.1   Appearance

1.2   Function Explanation

1.2.1   Main features

●   Can control the rotate, zoom, iris, focus and camera parameter setting of the camera or pan& tilt.

●   Protocol: PELCO P/D , VISCA protocol

●   LCD display both Chinese/English menu, with voice prompt when pressing buttons

●   3-axis joystick, easy to operate

●   2 dimension button control, can accurate to the speed of every state

●   Press button to choose to define usual special functions

●   Band rate: 2400/ 4800/ 9600BIT/S

●   Adopting RS-485,RS422 and RS232 multi-interfaces, maximally connect 256 pcs integrated high speed dome and camera

●   Maximal Communication distance: 1200M (0.5MM twisted-pair)

Chapter 2 Speed Dome Installation

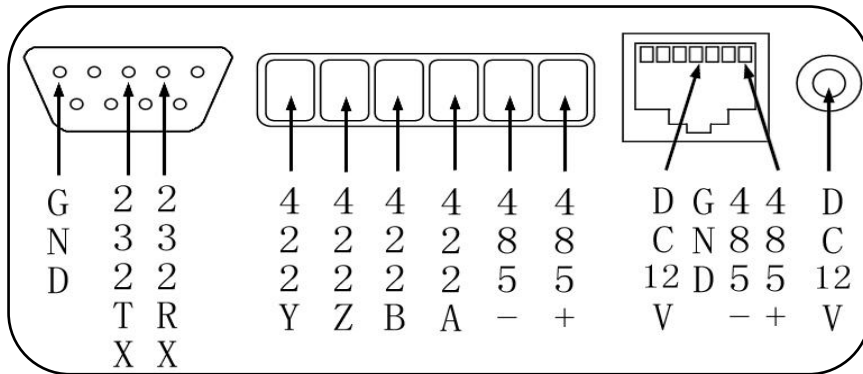   **2.1   Equipments Check**

   2.2   Installation
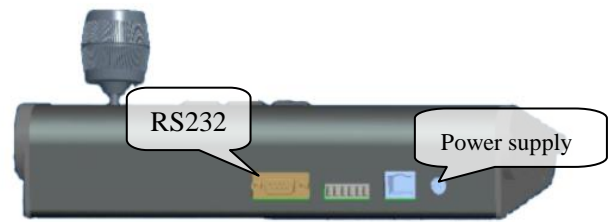
2.1 Equipments Check

  Please check the equipments in the packing case to see if they are in good condition and all parts are ready.

  Three-axis control keyboard………………..1

  8 cores Flat data cable………………………1

  KBD KIT…………………………………………1

  DC12V Power Supply…………………………1

  Manual……………………………………….....1

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2.2 Installation

- Power Supply Interface: connect DC12V/500mA Power Supply
- RJ45 Interface;1 pin: RS485+; 2 pin: RS485-; 3 pin: GND ; 4 pin : DC12V+.
- RS485、422 interfaces from right to left are: 485+、485-、422A、422B、422Z、422Y
- RS232 adopts the standard wiring.

G N D	2 3 2 T X	2 3 2 R X	4 2 2 Y	4 2 2 Z	4 2 2 B	4 2 2 A	4 8 5 −	4 8 5 +	D C 12 V	G N D	4 8 5 −	4 8 5 +	D C 12 V

Chapter 3 Technical Specification

3.1 Basic Index

- Key: constant open key
- Joystick: 3-axis joystick, home position automatically;
- Digital display: 12864 LCD display
- Temperature: $-7^0 \sim 49^0$C
- Humidity: 10 ~ 90%;
- Dimension: Length (34) x width (18) x height (5) CM
- Weight: 1.5kg

3.2 Electrical parameter

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

3.3 Controlling Mode

- Directly control PELCO-P/PELCO-D/VISCA protocol
- Control interfaces: RJ-45，422、485 connection ports、DB9
- Baud rate: 1200、2400、4800、9600
- Parameter: 8 byte, 1 stop bit, NO parity

Chapter 4 OSD Operation

4.1 Operation Introduction

● **PAN/TILT** Control

Operate joystick to control the directions of the speed dome camera; the rotation of the joystick is for controlling the zoom of the lens, clockwise rotation for zooming in and counter-clockwise for zooming out; the lens control are achieved by the following keys: WIDE、 TELE、 CLOSE 、OPEN 、FAR 、NEAR

● **ZOOM, FOCUS, IRIS**

OPEN ：Open Iris
CLOSE：Close Iris
FAR： Far Focus
NEAR： Near Focus
TELE： Tele Zoom
WIDE： Wide Zoom

● **Input number keys**

Input the needed numbers"0"to"9"descendingly, input range 0~1000, press the"0"continuously to clear the inputs

● **Set the speed dome address**

"Number Key"+"CAM"

● **Set the presets**

"Number Key"+"Press Preset for 2 seconds"

● **Run the presets**

"Number Key"+"Preset"

● **Function Key F**

Open service position "Number Key"+"F"

Close service position "Number Key"+"F"

Pattern scan: 1"+"F"to record the pattern, 1"+"F"to preserve the pattern, 1"+"F"to run the patternn,

Absolute position operation: Press "F" to enter into operating interface of absolute position , refer to keyboard menu function for more details

Zoom operation: Press "F" to enter into operating interface of zoom, refer to keyboard menu function for more details

Speed dome menu: Press "F" to open the speed dome menu

Speed dome return to virtual position: Press "F" then speed dome return to tilt virtual position

180 degrees flip: Press "F" then speed dome flip vertically

Direction Keys: 2D keys operation, UP"2", DOWN"8", LEFT"4", RIGHT"6", Left-Up "1", Left-Down "7", Right-Up "3", Right-Down "9", quicken up the pan/tilt speed by "CAM"/ "0", slowdown the pan/tilt speed by "PRESET"/ "5"

Clear the presets: "Number Key"+"Preset"

Nonuse: Keys are not working

*Note: The corresponding F key function can be defined in the keyboard menu, F1 default to open the

service position、F2 default to close the service position、F3 default to pattern scan function、F4 default to speed dome return to virtual position、F5 default to 180° flip、F6 default to direction keys
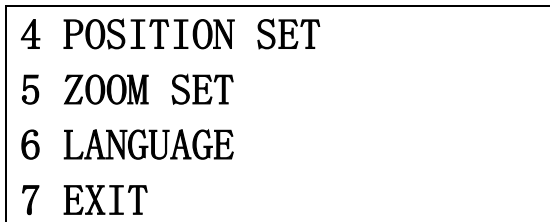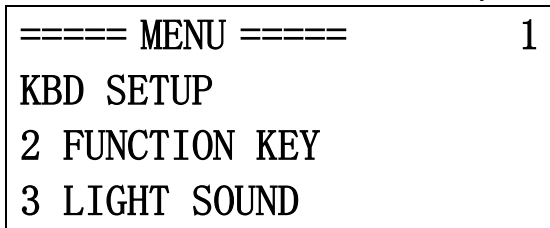
4.2　Main Menu

4.2.1　Main Control Interface

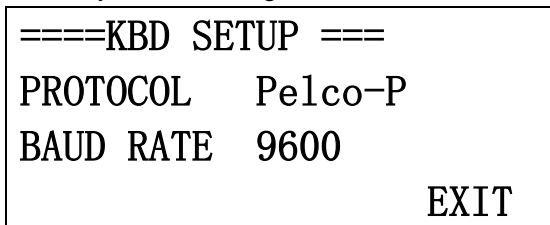As picture shows Pelco-D P，baud rate 9600，Speed dome address 1，60 degrees speed left，37 degrees speed up，zoom in

4.2.2　Keyboard Menu

"1000"＋"PRESET" to enter into Keyboard Menu

```
===== MENU =====        1
KBD SETUP
2 FUNCTION KEY
3 LIGHT SOUND
```

```
4 POSITION SET
5 ZOOM SET
6 LANGUAGE
7 EXIT
```

"PAN/TILT"is to operate the cursor position，"OPEN"is to confirm the choice and parameter adding while "CLOSE"to confirm the choice and parameter decreasing，"NEAR"is to return to previous menu, number keys "0" to "9" to input data

4.2.2.1　Keyboard Setting

```
====KBD SETUP ===
PROTOCOL   Pelco-P
BAUD RATE  9600
                    EXIT
```

Protocol：
There are Pelco-P、Pelco-D、VISCA protocols
Baud Rate：
Baud Rate 1200、2400、4800、9600 BIT/S

4.2.2.2　Function Key Setting

```
== FUNCTION KEY ==
KEY NO.        F1
FUN            AUX OPEN
                    EXIT
```

Function key

There are function keys of F1、F2、F3、F4、F5、F6

Function:

open service position、close service position、pattern scan、absolute position operation、zoom operation、speed dome menu、speed dome return to virtual position、180 degrees flip、direction keys、clear the presets、nonuse.

4.2.2.3   Light Sound Setting

```
== LIGHT SOUND ==
LIGHT TIME     10M
SOUND          ON
                    EXIT
```
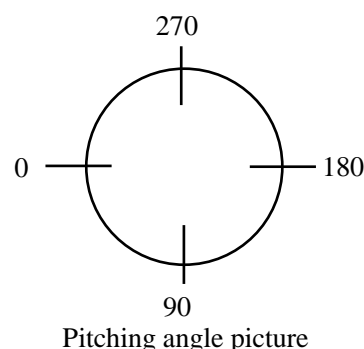
Backlight time

10 minutes, 5 minutes, Normal On, Close

*Note: "10 min""5 min" means no operation, backlight will be closed when time is up and will only open when operating.

4.2.2. Absolute position operation

```
== POSITION SET ==
P  156.12      SET
T  30.51       QUERY
                    EXIT
```


Pitching angle picture

   The picture shows speed dome present position is 156.12° for pan and 30.51° for tilt

   Pan P Range 0~359.99   *Note: Press "OPEN""CLOSE" when the cursor is at this position, and the speed dome will rotate to this pan position.

   Tilt T Range 0~359.99   *Note: Press "OPEN""CLOSE" when the cursor is at this position, and the speed dome will rotate to this tilt position.

   Setting: The speed dome rotate to the corresponding pan/tilt position

   Query: Query the present position of speed dome and display it after P、T.

4.2.2.5   Zoom Setting

```
=== ZOOM SET ====
 LIMIT 18      SET
 Z 15.23       QUERY
                    EXIT
```

   The picture shows the present zoom of the speed dome is 15.23, and the maximum optical zoom of the

lens is 18 times.

Total multiple range 0~99 *Note: "Total multiple" must be corresponding to the maximum optical zoom of the lens, or setting, query will not be accurate.

4.2.2.6、 Language Setting

```
====LANGUAGE====

  LANG   ENGLISH

                   EXIT
```

Language
Chinese、English

Note: All operations above mentioned are based on the on the assumption that of using Pelco-P、Pelco-D protocol, as others protocol has their own standards for functions, so there will be tiny difference of operating the "Function definition" 、 "Absolute position operation" 、 "Zoom operation"

5. Maintenance service terms

1. Range of warranty

- The product will be maintained free for one year.
- The product will be obtained the free maintenance service if the same malfunction appears again within three months.
- Malfunction of products caused by force majeure (such as war, earthquake, lightning strike and so on), abuse, non-standard operation, change of construction, non-normal wear or accident are non-free of warranty.
- Please prevent from the damage which is caused by heavy pressure , the fierce vibration and soaks in the process of transportation and storage,   which does not belong to the free maintenance scope.
- Please adopt the way of fission package or original package to transport   because the product damage does not belong to the free maintenance scope if you use the whole packing way, not the original packing way.
- The maintenance services will not be   free when the pan/tilt module is disassembled or serviced by the user voluntarily.
- Our company implements the lifetime payable service if   the product in malfunction has surpassed the warranty period.
- To the products with defect :if it's in the period of warranty, please fill in the form of warranty information correctly, describe the   trouble in details ,   and provide the trouble in details , and provide original sales invoice or its copy.
- For the damage and loss which was caused by the user's specifically application, factory won't bear any risk and responsibility. The factory compensation made by breach of faith, negligence or tortuous won't exceed the amount of the products. The factory won't bear any responsibility for the special, unexpected and continue damage caused by any other reasons.

- Our company has the final right of explanation for the above terms.

2. Warranty terms

- If the products are within the warranty time, the buyer should send back with the products.

3. Shipping

- If the product needs repaired , you can return it to the manufacturer through the supplier or directly. If you choose the later, please contact us in order to speed up the process.
- And our company only undertake the one-way freight from manufacturer to customer after maintenance.

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