

**UV900-KBD ROCKER KEYBOARD
INSTALLATION & OPERATION MANUAL
(English Version)**



MINRRAY INDUSTRY CO., LTD

1. SAFEGUARD AND WARNING

To avoid the keyboard and related connecting accessories to be damaged and to use the machine in a safe and correct way, please review all the instruction items before installation:

- Only the related technical person can carry out installation and repairing.
- It must not be installed where exposed to rain and moisture and it can not be used in unqualified temperature, humidity and power supply.
- Only use replacement parts recommended by Minrray.
- To avoid unexpected short circuit or turnoff, please test with the multi-meter after replacing or maintaining the circuit unit.
- Do not make the collision between the joystick and keyboard.
- Do not use the keyboard in the moist condition

2. FUNCTION AND PARAMETER

- Can control the rotate, zoom, iris, focus and camera parameter setting of the camera or pan& tilt.
- Data connection: RS-485 interface, maximum connect 128 pcs integrated high speed dome and camera
- Protocol: PELCO P/D protocol
- LCD display menu, 3-axis joystick, DVR and alarm control.
- Band rate: 2400/ 4800/ 9600/ 9200 BIT/S
- Communication distance: 1200M (0.5MM twisted-pair)

3. KEYBOARD INSTALLATION INSTRUCTION

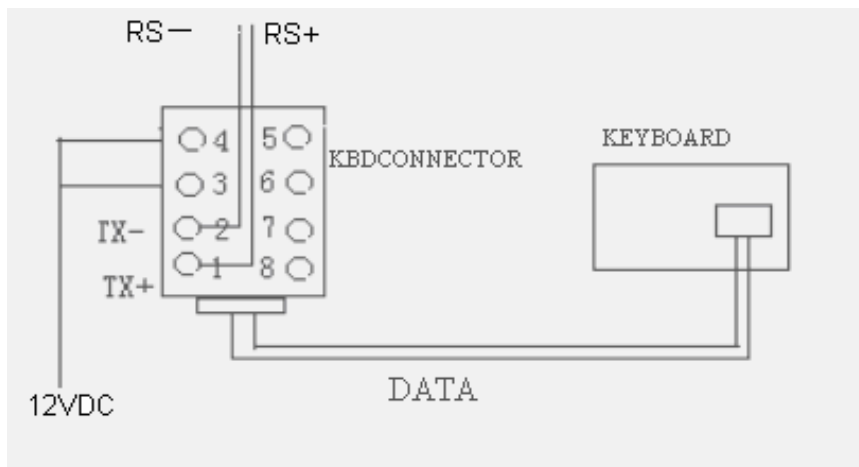
Transportation and storage:

● Be careful in the process of the keyboard transportation to avoid rolling collision and falling off.

● The storage place should be ventilated, without acid and alkaline.

Temperature: -10⁰ - +50⁰C, humidity below 90%.

4. CONNECTING THE KEYBOARD

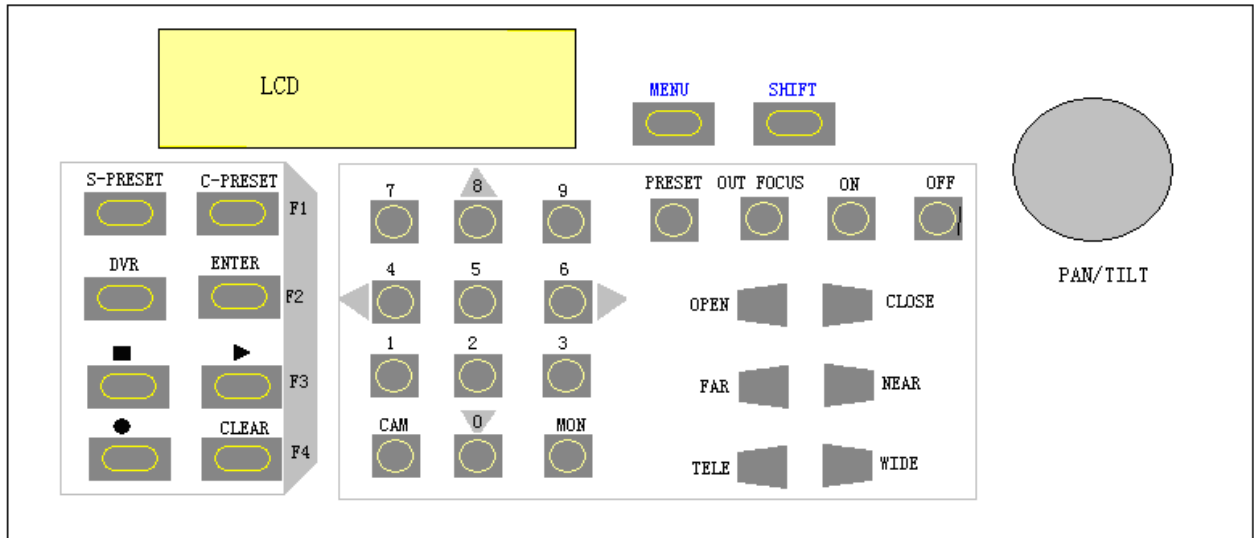


● **Power supply: DC12V/ 500MA**

● **Data interface: RS485- /RS485+ RS485, pay attention to polarity: No.1 of the KBD KIT is RS485+, No.2 is RS484-**

- NOTE:**
- ① In directly control mode, must use KBD KIT connect board that is made up of RJ-45 connector and 12VDC power supply.
 - ② Decide on a suitable location for the keyboard and KBD KIT. The keyboard must be within 8 meters of the KBD KIT. The KBD KIT must be within 2 meters of the nearest suitable electrical outlet.
 - ③ Receiver wiring should be in place before installing the keyboard. One keyboard can directly control maximum 128pcs integrated high-speed domes.
 - ④ The Communication to the keyboards is RS-485. Maximum cable distance for RS-485 communication over 24-gauge wire is (1219M). The recommends using shielded twisted pairs cable that meets or exceeds the basic requirements for EIA RS-485 applications.
 - ⑤ At the wall block wire the transformer to pins 3 and 4. Polarity is unimportant.
 - ⑥ Replace the cover on the wall block. A double-sided sticky pad is provided to mount the wall block. Secure the wall block to a suitable surface.
 - ⑦ plug the data cable of the keyboard

5. KEYBOARD OPERATION



(1) Key press instruction:

MENU: press “menu”, LCD will display “MENU M”. 8, 2, 4, 6 in the number section= up, down, left, and right, which adjust the direction of the menu. Close the menu after operation, so that the number section will be workable

S-PRESET: set preset, “number” + “S-Preset”

C-PRESET: clear preset, “number” + “C-Preset”

PRESET: run preset, “number” + “Preset”

- **Pattern Scanning- Recording start:** In DVR control mode is “recording” key;
- **Pattern Scanning- Recording stop:** In DVR control mode is “stopping” key
- ▶ **Pattern scanning-Recording playback:** In DVR control mode is “playback” key

ON: open AUX. switch, “number” + “ON”

OFF: close AUX switch, “number” + “OFF”

CLEAR/F4: clear out/function key F4; under SHIFT menu, press F4 can REST CAM

MON: Monitor shift key, “number” + “MON”

CAM: camera shift key, “number” + “CAM”

SHIFT: call F1~F4

AUTO FOCUS: open/close auto focus

OPEN: open iris

CLOSE: close iris

FAR: focus far

NEAR: focus near

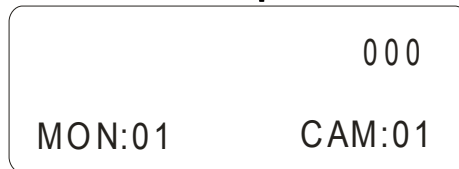
TELE: zoom in

WIDE: zoom out

(2) ENTER: (confirm key) is available in anytime. "Number + ENTER"

(3) Monitor shift: To press "number"+" Mon".

(4) Camera shift: To press "number+ cam"



(5) PT control: Joystick can control the direction of the dome and zoom in/out, go in clockwise way means zoom in, otherwise it is zoom out. To control the lens should use the following keys:

OPEN/CLOSE/WIDE/TELE/FAR/NEAR.

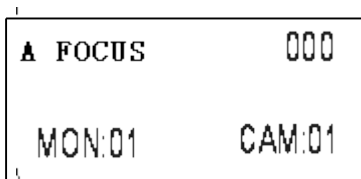
(6) Setting preset:

- Adjust the camera to one request position;
- Press "NUMBER"+ S-Preset"

(7) To call preset: "NUMBER" + "PRESET"

(8) Clear preset: "NUMBER"+ "C- PRESET"

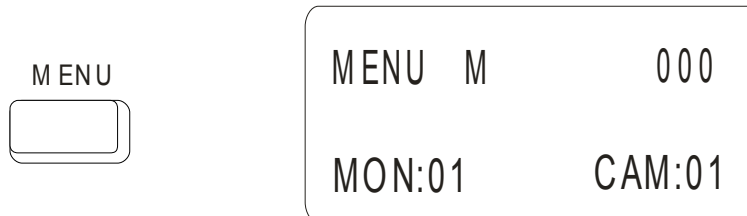
(9) Camera Auto focus: Press "AUTO FOCUS" the function is open, and press "AUTO FOCUS" again, the function is closed.



(10) AUX. switch control:

- Open the assistance switch= "NUMBER" + "ON";
- Close the assistance switch= "NUMBER" + "OFF";
- For example: open switch 1, just press "1"+"ON".

(11) Camera menu:

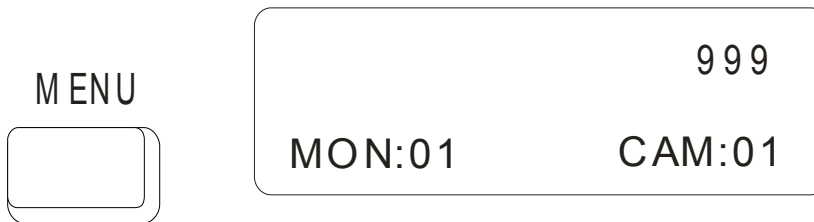


- When enter "MENU", the digital key are not available, should control the menu by the four directional keys, when close the men, press "MENU" again, then the digital key are available.
- The operation way of PELCO-D/P protocol menu.
- To enter menu: "9" + "5" + "PRESET";

- Enter: press “OPEN”;
- To enter the next menu: press “OPEN”;
- To back to the previous: press “CLOSE”;
- To move the cursor up and down with rocker to change the numerical value, then to press “OPEN” to confirm.

(12) Protocol and baud rate setting:

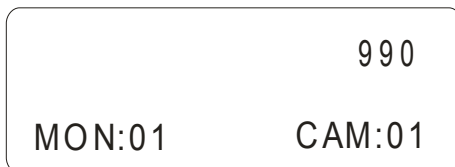
- Protocol: PELCO-D, PELCO-P.
- Baud rate: 2400, 4800, 9600, 19200.



Setting steps:

- ① Input password: 999;
- ② press “MENU”;
- ③ enter protocol setting menu; press 1 or 2 (1=PELCO-D, 2=PELCO-P);
- ④ Press “MENU” key.
- ⑤ enter baud rate setting menu; press 1-4(1=2400,2=4800,3=9600,4=19200);
- ⑥ press “MENU” to exit setting.

(13) Setting home position of joystick



- ① Adjust the joystick’s central position.
- ② Input password: 990.
- ③ Press “MENU” key.
- ④ Then operate the joystick; now the home position is the new setting position.

(14) Special function using for PELCO-D/P protocol:

- Preset Function
- 33 180° flip.
- 34 Level home position
- 79 open electronic zoom
- 80 close electronic zoom
- 81 Auto low lux shift function
- 82 Open low lux shift(B&W image)

- 83 Close low lux shift(color image)
- 84 To turn on wide dynamic;
- 85 To turn off wide dynamic;
- 86 To turn on backlight compensation;
- 87 To turn off backlight compensation;
- 88 To turn on video freeze;
- 89 To turn off video freeze;
- 90-91 To hand control the position limit; (The left and right limitation will be canceled if they have been set at the same position)
- 92-93 scan control limitation; (The left and right limitation will be canceled if they have been set at the same position)
- 94 To exit "MENU";
- 95 To enter "MENU";
- 96 To stop scanning;
- 97 Random scanning;
- 98 Preset tour
- 99 Auto scan

6. PARAMETER

(1) General parameter

- Key: constant open key
- Joystick: 3-axis joystick, home position automatically;
- Digital display: Double line English character with LCD
- Temperature: -7° ~ 49°C
- Humidity: 10 ~ 90%;
- Dimension: Length (34) x width (48) x height (5) CM
- Weight: 1.5kg

(2) Electrical parameter

- Input voltage: 12VDC;
- Rated power: 5W;
- Interface: RJ – 45, 8 cores.
- Control mode: PELCO-P/D protocol
- Control interface: RS-485;
- Baud rate: 2400b, 4800b, 9600b, 19200b;
- Parameter: 8 bytes, 1 stop bit, no parity.

7. Accessories

- **8 cores Flat data cable:** 1pc
- **KBD KIT :** 1pc
- **DC12V Power Supply:** 1pc
- **Manual :** 1copy

Maahantuonti ja markkinointi:

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