Avonic CM-CON100

PTZ Camera Keyboard Controller

User Manual

Version 2.0

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Contents

Introduction

Congratulations

Thank you for purchasing the Avonic CM-CON100 Keyboard Controller. Before beginning to operate this device, please read the manual in order to make sure the best performance is obtained. Save this manual for future reference.

Safety Notes

- Installation and servicing should only be done by Qualified Service Personnel and conform to all local codes.

- This unit is designed for indoor use only and it must not be installed where exposed to water or other liquids and moisture.

- Before powering on the device, check the input power voltage carefully.

- Avoid shock and vibration when transporting and installing the device.

- Use wall mount brackets or ceiling mount brackets available at Avonic for safe installation.

- Electronic devices produce heat. Do not block the ventilation slots of the device and make sure the installation environment is well ventilated to avoid overheating.

- Before cleaning, unplug the power cable. Use a soft, damp cloth to clean the device, do not use strong or abrasive detergent to clean that will damage the device.

- If you wish to dispose this product, please contact Avonic to obtain info about the take-back procedure.

Compliance Statements and Certifications

- FCC: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference, and 2. This device must accept any interference received, including interference that may cause undesired operation.

- CE: Certification

Package contents and Accessories

| Quantity	Description	Avonic SKU
1 pc	PTZ Camera Keyboard Controller	CM-CON100
1 pc	Power Supply	CM-CON100-PSU

Product Overview

The Avonic CM-CON100 is a mini keyboard controller is a full-function system keyboard. With features of ergonomic design, multi-function, high reliability and easy operation, it is a perfect controller for PTZ cameras, video conference cameras, surveillance cameras and so on.

Features

- 4D joystick for pan/tilt/zoom/focus control, ergonomic design and excellent finishing;

- High brightness OLED display;

- Auto backlight keys;

- Shortcut keys customization;

- Batch program cameras in the systems;

- Multi-level protection from illegal operation or setting;

- Multi-baud rate and protocols;

- 256 addresses;

- Compact design with portable features;

Product Description
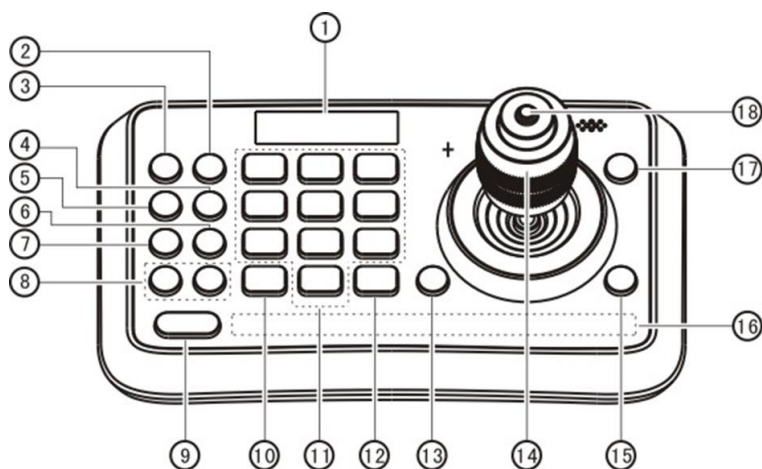
1. OLED screen. The OLED screen displays status of current operation.

2. CALL (Call preset) Input preset number, then press CALL key to call a preset

3.	CAMERA (Switch cameras) Input camera number, then press CAMERA key to switch to another camera.

4.	SET (Set / Clear preset) Input preset number, then press SET key to set or delete a preset (Short press to "set"; long press to "clear").

5.	SETUP (Enter setup menu) Press SETUP key to enter menu and program the keyboard

6.	CRUISE (Auto Cruise) Press CRUISE key to do auto cruise.

7.	PATTERN (Pattern Scan) Press PATTERN key to do pattern scan

8.	F1, F2 Toggle between Auto Focus and Manual Focus

9.	SHIFT (Extension key) It is an extension key to be used with other keys for special functions.

10.	ESC (Exit / Delete) It is a key to EXIT in a menu or DELETE in other operations.

11.	0~9 (Numbers) Those are keys used to input numbers. Combine with SHIFT key to activate various functions shown on number keys. For example, press SHIFT + 1 will turn on DIS function of the camera.

12.	ENT (Confirm) It is used to confirm menu setting.

13.	OPEN (IRIS Open) This key is used to activate IRIS open of the camera. It is also a "confirm" key in a menu.

14.	Joystick This joystick is used to Pan, Tilt, Zoom and Focus
Non-Menu State:
Left/Right/Up/Down: Pan/Tilt the camera correspondingly
Twist clockwise: Zoom In,
Twist anti-clockwise: Zoom Out;
Press Zoom/ Focus Switch Key and Twist: Focus Near/Far
Menu State:
Right: Enter a submenu or Confirm;
Left: Return to previous menu or exit (expect some not returnable menus);
Up: Move to last option;
Down: Move to next option.

15.	CLOSE (IRIS Close) This key is used to activate IRIS close of the camera; it is "return" key in a menu.

16.	Status Display area This area is used to display status of functions that are turned on, relative icons will be back lighted.

17.	MENU (Enter Camera Menu) This key is used to enter camera menu.

18.	Zoom / Focus Switch Key This key is used to switch between zoom and focus function. Operation: Press this key, the crisscross of indicator lighter near the joystick will go out, twist the joystick to zoom in / out; press this key again, the crisscross of indicator lighter will be lightened, twist the joystick will adjust focus value.

Installation
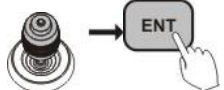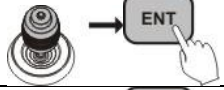
Connection Diagram

Power + RS-232 + RS-485
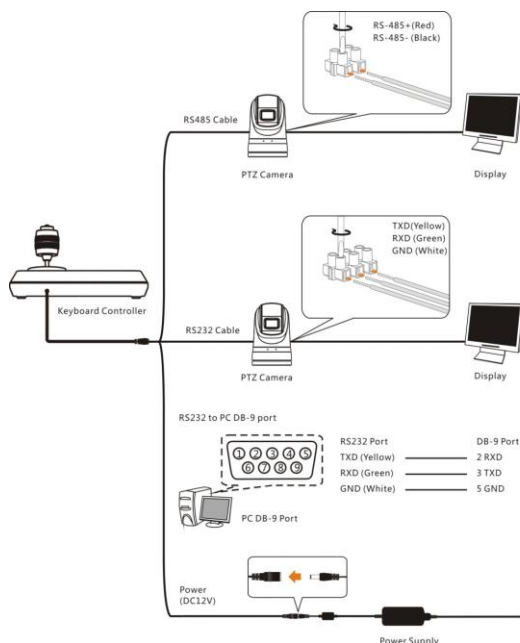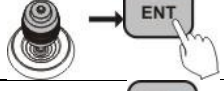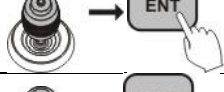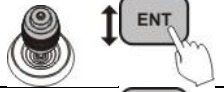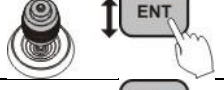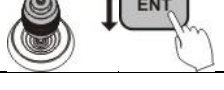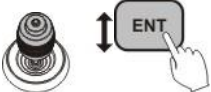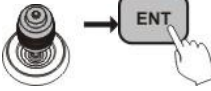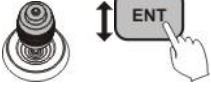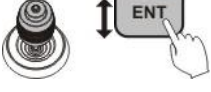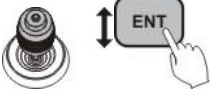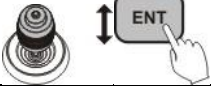
Operation Instructions

Menu

After powered on, "USER PIN" will show on the controller's screen. The initial pin is "111111".

Operation	Button	Screen	Comment
Enter USER PIN	![1 DIS]	USER PIN:	The initial USER pin is "111111" See "PIN SETTING" to set pin.
Pin Error：When"USER PIN：ERROR" shows on screen, it indicates wrong pin was input. Enter correct pin to get to next step Pin Correct：Screen shows" 1"camera icon and default camera number. If there is no further operation for long time, screen will display current time automatically. If still no operations, the controller will enter sleeping mode			
Enter menu	![SETUP] Press SETUP key	ADMIN PIN:	The initial ADMIN pin is "111111" See "PIN SETTING" to set pin.
Menu List			

Camera Setting		CAMERA SETTING▶	Move up / down the joystick, choose "CAMERA SETTING"
Camera ID	ENT	▷□ :	0-255, use num keys, press ENT to confirm
Protocol setting	ENT	PROTOCOL :	PELCO D/PELCO P /VISCA
Baud rate setting	ENT	BAUD RATE :	2400/4800/9600 / 19200/38400
Address Setting	ENT	ADDRESS: 1	0-255
Increment	ENT	INCREMENT:	1-20

The controller can also batch program cameras in the system. It will set the same baud rate, protocol for the 10 cameras next to the current one while the cameras' address to be increased by increment number sequentially. After step 5, press SHIFT to enter menu "INCREMENT:" Input a number within 1~20, press ENT to confirm.
The address increment between two sequential cameras. For example, the current camera address is 1 and the increment is 2, then the next camera address is 3.

Time Setting		TIME SETTING ▶	
Set time in 24 hour format.		10 : 52 : 59	
Volume Setting	ENT	VOLUME SETTING	OFF (switch off sound) 1~6 (6 levels from low to high)
Backlight Setting	ENT	BACKLIGHT MODE	AUTO/ON/OFF
Sleep Setting	ENT	SLEEP SETTING ▶	OFF/ 30S/ 1M/ 5M/10M / 30M/60M
PIN setting	ENT	PIN SETTING ▶	USER/ADMIN

【Note】 In non-menu status, quickly lock function can be realized by simply pressing SHIFT + ENT . "USER PIN"or "ADMIN PIN" is required for operation the controller again.

Joystick calibration		JOYSTICK CALIB ▶	After long-time use, the joystick may require calibration
Pan left		PAN LEFT	Move the joystick to left limit and press ENT
Pan right		PAN RIGHT	Move the joystick to right limit and press ENT
Tilt up		TILT UP	Move the joystick to upper limit and press ENT
Tilt down		TILT DOWN	Move the joystick to lower limit and press ENT
Zoom tele		ZOOM TELE	Twist the joystick clockwise to the limit and press ENT
Zoom wide		ZOOM WIDE	Twist the joystick anti clockwise to the limit and press ENT
Free state		FREE STATE	Need not any operation, press ENT
Save		<SAVE> CANCEL	Move the joystick left/ right to choose, and press ENT to confirm.
Key Custom		KEY CUSTOM ▶	It is used to custom keys to realize special functions requested.
Speed setting		SPEED SETTING▶	Set control speed of the joystick HIGH MIDDLE LOW
Default Setting		DEFAULT SETTING▶	Restore the keyboard setting to factory default
Information Display		INFORMATION ▶	It displays firmware version number

Maintenance

Before cleaning, unplug the power cable. Use a soft, damp cloth to clean the device, do not use strong or abrasive detergent to clean that will damage the device.

Troubleshooting

Contact

For any questions or suggestions, contact the reseller or the local Avonic distributor. Find the local distributor on the Avonic website. For support qustions mail to support@avonic.eu

For the recent manual or datasheet, look at the Avonic website.

www.avonic.eu

Appendix

Technical Data

Comm. Interface	RS-485/RS-232
Protocol	Pelco-D, Pelco-P, VISCA
Baud Rate	2400bps, 4800bps, 9600bps, 19200bps, 38400bps
Address	0~255
Joystick	4-axis (Left/Right, Up/Down, Zoom In/Out, Focus Near/Far)
Display	OLED
Power	DC12V
Power Consumption	<2W
Working Temperature	0℃~40℃
Storage Temperature	-20℃~+50℃
Relative Humidity	≤90% (non-condensation)
Dimensions	200mm(L)*120mm(W)*103mm(H)
Net Weight	0.5kg