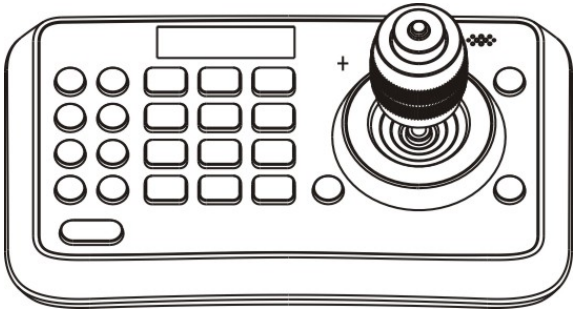
JSC02

Mini Keyboard Controller

User Manual V1.0



Safety Notes

Thank you for choosing our mini keyboard controller!

When you open the box:

1. Check that the packing and the contents are not visibly damaged. Contact your retailer immediately if any parts are either missing or damaged.
2. Make sure if the contents are all included as per the packing list.
3. Do not attempt to use the device with missing or damaged parts. Send the product back in its original packing if it is damaged.

[Note] The information contained in the document is subject to change without notice.

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Safety Notice---Important!!!

The following important notes must be followed carefully to run the controller and respective accessories in total safety.

- Power off the device immediately when the controller is not working correctly;
- Use DC12V power supply. Wrong power supply may damage the controller;
- To prevent electric shock, do not remove screws or covers of the camera. There are no self-serviceable parts inside. Refer to qualified service personnel for servicing.
- Do not operate thecontrollerbeyond the specified temperature and humidity.

About The Product

Introduction

The 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 ruggedPTZ cameras, video conference cameras, surveillance cameras and so on.

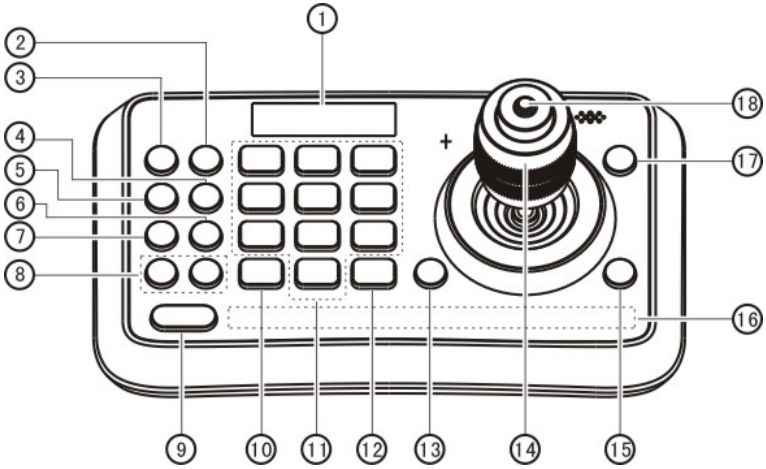
Features

- 4D joystick for pan/tilt/zoom/focus control, ergonomicdesign 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 address;
- Compact designwith portable features.

Technical Data

Comm. Interface	RS-485 + RS-232 or RS485 + Aux
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/Zoom Out, Focus Near / Focus Far)
Display	OLED
Power	DC12V
Power Consumption	<2W
Working Temperature	0℃~40℃
Storage Temperature	-20℃~+50℃
Relative Humidity	10%RH ~ 90%RH
Storage Humidity	10%RH ~ 95%RH
Dimensions	200mm(L)*120mm(W)*103mm(H)
Net Weight	0.5kg

Parts And View



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 the desired camera.

④ SET (SET / CLR Preset)

Input preset number, then press SET keyto 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 (Reserved)

These keys are reserved.

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.

⑫ENT (Confirm)

It is used to confirm menu setting.

⑬OPEN (IRIS Open)

This key is used to activate IRIS open of the camera. It is also a “confirm” key in a menu.

⑭Joystick

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.

⑮CLOSE (IRIS Close)

This key is used to activate IRIS close of the camera; it is “return” key in a menu.

⑯Status Display area

This area is used to display status of functionsthat are turned on,relative icons will be back lighted.

⑰MENU (Enter Camera Menu)

This key is used to enter camera menu.

⑱Zoom / 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.

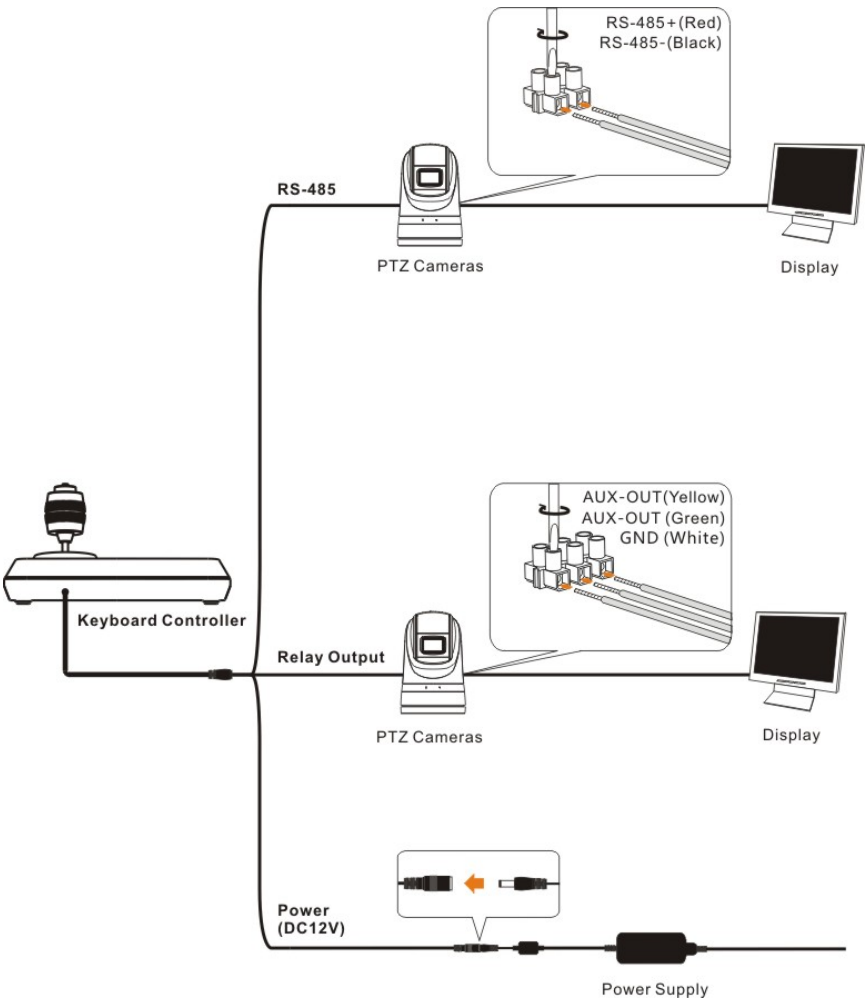
List of status and functions on Status Display Area

Icon	Explanation	Icon	Explanation
	Wiper		Far & Near light (Auto)
	Defogger	DIS	DIS
	Heater	WDR	WDR
A	Auto Heating	AUX	AUX Switching (Switch Output)
F	Far Light (Manual)		Tracking
N	Near Light (Manual)		

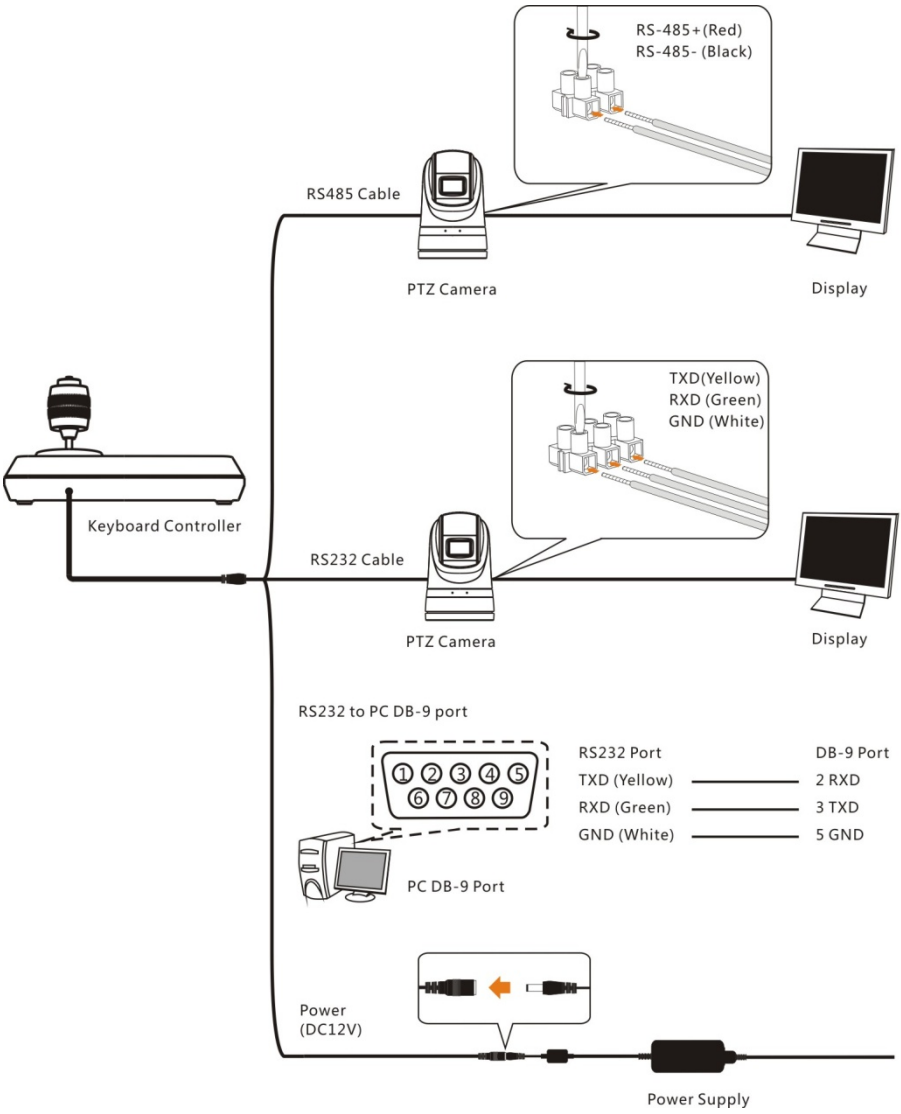
Connections

There are two options of cables. Please see the instruction label at bottom of the device.

Option1: Power + Aux output + RS-485.



Option2: Power + RS-232 + RS-485.



Menu Operation

After powered on, “USER PIN” will show on the controller’s screen. The initial pin is “111111”.



USER PIN: - - - -

Enter “USER PIN”
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 displaycurrent time automatically. If still no operations, the controller will enter sleeping mode.

Enter OSD menu

Press SETUP key.

Screenshows “ADMIN PIN:”. Initial admin pin is “111111“.



ADMIN PIN: - - - -

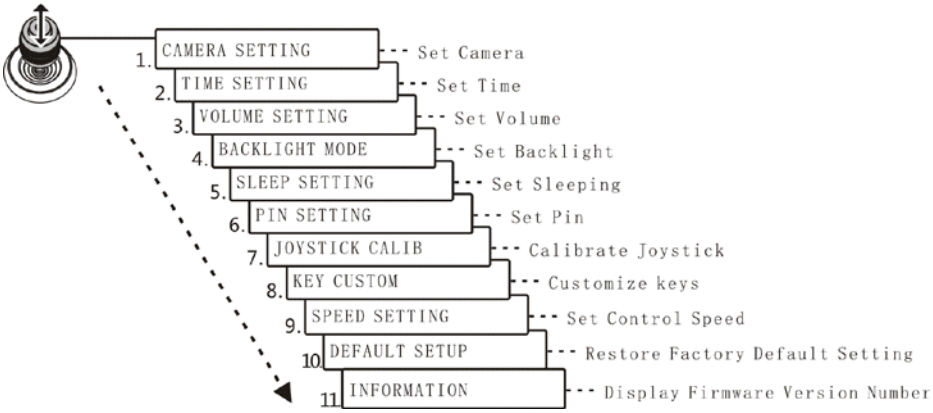
Enter “ADMIN PIN”
See “PIN SETTING” to set pin.

↓

CAMERA SETTING

↓

OSD Menu List:



Camera Setting

Set camera ID (Range from 0~255), corresponding protocol, baud rates and camera address of the target cameras. Then every camera can be controlled easily by choosing their relative camera ID.

❶Move up / down the joystick, choose “CAMERA SETTING”.



CAMERA SETTING

❷Right move the joystick or press ENT key to enter menu “ ”. Press number keys to input camera number (range from 0~255) .If the input number exceeds this range, the system will show “ERROR”. After the setting is finished, press ENT key to confirm.



- - - - Define the camera ID (range from 0~255).

❸Protocol Setting. Move up/down the joystick, choose protocol, right move the joystick or press ENT to confirm.



PROT : PELCO D - - - -

Set protocol. This protocol must be the same as the camera's protocol.

Available Options:
PELCOD/PELCOP
/VISCA / VISCA DC

❹ Baud rate setting. Move up/down the joystick, choose baud rate, and right move the joystick or press ENT to confirm.



BAUD RATE: 2400 - - - -

Set baud rate. This baud rate must be the same as the camera's baud rate.

Available Options:
2400/4800/9600/19200
/38400

❺Address Setting. Input number to set camera address (range from 0~255). Press ENT to confirm.



ADDRESS:1 - - - -

Set the controller's address, this address must be the same as the camera's address.

Available Options :
0~255

❻The 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.



INCREMENT: - - -

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.

Available options:
1~20

❼After the camera setting is finished, the system will automatically return to the main menu.

Time Setting

Set time in 24 hour format.

❶ Move the joystick up/ down, choose ”TIME SETTING”.



TIME SETTING - - - - Time Setting

❷ Right move the joystick or press ENT to get into time setting menu, “H” hour becomes editable, input digits from keypad or move joystick up / down to set the “H” (range: 0~23). If input digits by keypad, after the hour has been set, it will automatically get into “M” minute setting; if set by joystick, right move the joystick to get into “M” minute setting. Move right / left the joystick to select from “H”, “M” and “S” settings.



10 : 52 : 59 - - - - Set the time of keyboard (H: M: S).

Available Value:
0~23

❸ “M” minute setting menu. Set the “M” minute and “S” second, refer to “H” hour setting.



20 : 52 : 59 - - - - Set Minute and Second.

Available Value:
00~59

❹ Press ENT to save and return to Main Menu.

Volume Setting

6 levels of volume from low to high are available to choose from.

❶ Move the joystick up/down, select “ VOLUME SETTING”.



VOLUME SETTING ---- Volume setting

❷ Right move the joystick or press ENT to get into " VOLUME SETTING" ; after setting right move the joystick or press ENT to confirm.



VOLUME：OFF ---- Available Value:
OFF (switch off sound)
1~6 (6 levels from low to high)

Available Value:
OFF、1~6

Backlight Setting

Back light mode enables the keys to be clearly presented even at very dark environment.

❶ Move the joystick up/ down, select " BACKLIGHT MODE".



BACKLIGHT MODE ---- Backlight setting

❷ Right move the joystick or press ENT to enter "BACKLIGHT MODE". Move the joystick up/ down to select backlight options. Right move the joystick or press ENT to confirm.



BACKLIGHT：AUTO ---- AUTO: Auto backlight; The controller detects lights on the working environment, then turns on / off the backlight mode accordingly
ON: open the backlight;
OFF: close the backlight.

Available Value:
AUTO/ON/OFF

Sleep Setting

Set sleep time of the controller. In non-menu status, the screen will enter the sleep mode if no operation is performed for a programmable period.

❶ Move the joystick up/ down, select " SLEEP SETING".



SLEEP SETTING▶ - - - - Sleep setting

❷ Right move the joystick or press ENT to enter " SLEEP SETTING" . Move the joystick up/ down to select sleep time. Right move the joystick or press ENT to confirm.



SLEEP TIME：30S - - - - Available Value:
OFF/ 30S/ 1M/ 5M/10M / 30M/60M.

Available Value:
OFF/30S/1M/5M/10M/
30M/60M

Pin Setting

Set user and admin pins of the controller.

❶ Move the joystick up/ down, select "PIN SETTING".



PIN SETTING - - - - PIN setting

❷ Right move the joystick or press ENT to enter "PIN SETTING". Move the joystick up/ down to select the PIN digits. Right move the joystick or press ENT to confirm.



PIN：USER - - - - USER：this is the first level pin, correct pin must be input before the controller can be operated.
ADMIN：this is the second level pin, correct pin must be input before menu setting and controller setup.

Available Value:
USER/ADMIN

❸ Enter the PIN setting menu. "OLD PIN" requires to be input, press ESC to cancel input digit. If correct Pin is input, it will get into "NEW PIN" menu. If wrong pin is input, "ERROR" will be displayed.



OLD PIN: - - - - Input “OLD PIN”:
Initial USER PIN：111111
Initial ADMIN PIN：111111

❹ “NEW PIN”



(Digits key)

NEW PIN: - - - - Input “NEW PIN”

❺ “CONFIRM”: after new pin is input, input it again to confirm. If the two pins don’t match, it displays “PIN NOT MATCH”, menu goes back to “NEW PIN”.



(Digits key)

CONFIRM: - - - - Input “NEW PIN” again to confirm

❻ If the two pins match, it displays “OK!” and new pin will be applicable..

OK ! - - - - New pin is set.

To disable “PIN PROTECTION” function, there is no need to input any digit in both “NEW PIN” and “CONFIRM”, press ENT directly to confirm. To enable “PIN PROTECTION” again, simply set new pins with digits.

During these operations, press key ESC to exit the PIN setting menu.

【**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 Calib

After long-time use, the joystick may require calibration.

❶ Move the joystick up/ down, select “JOYSTICK CALIB”.



JOYSTICK CALIB - - - - Joystick calibration

❷ Right move the joystick or press ENT to confirm, enter the “JOYSTICK CALIB” menu. “PAN LEFT” will be displayed, move the joystick to the left limit and hold, then press ENT to finish “PAN LEFT” calibration. It will enter next menu.



PAN LEFT - - - - Pan Left
Move the joystick to left limit + ENT

❸ Refer to the setting of “PAN LEFT” to calibrate “PAN RIGHT”, “TILT UP” and “TILT DOWN”.



PAN RIGHT - - - - Pan Right
Move the joystick to right limit + key ENT .

↓

TILT UP - - - - Tilt up
Move the joystick to upper limit + key ENT .

↓

TILT DOWN - - - - Tilt down
Move the joystick to lower limit + key ENT.

❹“ZOOM TELE” calibrating menu, twist the joystick clockwise until limit position, and press ENT.



ZOOM TELE - - - - ZOOM TELE.
Twist the joystick clockwise until limit position + press ENT.

❺ “ZOOM WIDE” calibrating menu, twist the joystick anticlockwise until limit position, and press ENT.



ZOOM WIDE ---- Zoom wide.
Twist the joystick anticlockwise until limit position + press ENT.

❻"FREE STATE" setting menu, no need any operation, simply press ENT to confirm.



FREE STATE ---- No need any operation, press ENT .

❼Upon completion of the above settings, "<SAVE> CANCEL" will be displayed to save or cancel. Move the joystick left/ right to choose, and press ENT to confirm.



<SAVE> ---- SAVE.
CANCEL.

Key Custom

It is used to custom keys to realize special functions requested, see below chart for operation, function.

❶ Move the joystick up/down, choose "KEY CUSTOM".



KEY CUSTOM ---- Key Custom

❷ Right move the joystick or press ENT to enter "KEY CUSTOM" setting menu.



MENU PRESET：95 ---- MENU PRESET.
Customize the preset number to call up the OSD menu.

❸ Example 1 of keys with special function: If preset 60 is requested to call Pattern Scan. Press PATTERN, then press number key 60, press ESC to cancel, finally press ENT key to confirm.



(Numeric Keys)

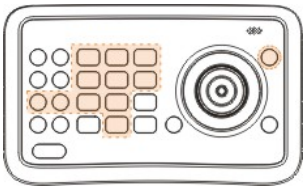
PATT PRESET：60 - - - - PATT PRESET: 60

↓

CHANGED TO：60 - - - - Changed to 60.

❹Example 2 of keys with special function: If preset 35 is requested to activate WIPER, press 7（WIPER） and SHIFT in the same time. If press 7（WIPER） only, then only 7 will be displayed.

List of Custom Keys and Functions



Custom Button Diagram

Key	Function	Operation
PATTERN	Start Pattern Scan	PATTERN
CRUISE	Start Cruise	CRUISE
MENU	Enter Camera Menu	MENU
HEATER	Activate Heater	SHIFT + 9
DEFOGGER	Activate Defogger	SHIFT + 8
WIPER	Activate Wiper	SHIFT + 7
LIGHTS-A	Far&Near Lights On	SHIFT + 6
LIGHTS-N	Near Lights On	SHIFT + 5
LIGHTS-F	Far Lights On	SHIFT + 4
WDR	Activate Wide Dynamic Range	SHIFT + 2
DIS	Activate Digital Image Stabilization	SHIFT + 1
TRACKING	Start Tracking Function	SHIFT + 0

Speed Setting

Set control speed of the joystick.

❶ Turn the joystick up/down, choose"SPEED SETTING".



SPEED SETTING ---- Speed Setting.

❷ Right move the joystick or press ENT to enter "SPEED SETTING" menu. Move the joystick up/ down to switch among speed levels, and right move the joystick or press ENT to confirm.



SPEED：HIGH ---- HIGH;
MIDDLE;
LOW;

Available Value:
HIGH/MIDDLE/LOW

Default Setting

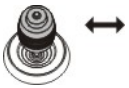
Restore the keyboard setting to factory default.

❶ Move the joystick up/ down, choose "DEFAULT SETUP".



DEFAULT SETUP▶ ---- Default Setup.

❷ Right the joystick or press ENT key, enter "DEFAULT SETUP" menu, move the joystick left/ right, select options"<YES> NO", press ENT to confirm.



<YES> NO ---- YES：Restore Default Setting;
NO：Cancel Restoring Default Setting.

Information

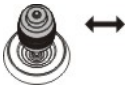
It displays firmware version number..

❶ Move the joystick up/ down, choose "INFORMATION".



INFORMATION ▶ - - - - Information display.

❷ Rightmove the joystick or press ENT key, enter "INFORMATION" menu to view the information.



VER: V2.0 - - - - VER: Display the firmware version.