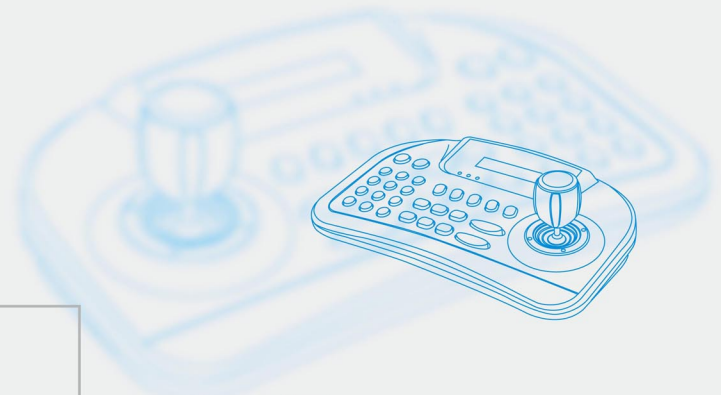




KB-545I/JS Keyboard Controller

FC CE



Distributed by



⌘ Instruction Manual

Please read the instructions carefully and keep this manual for future reference.

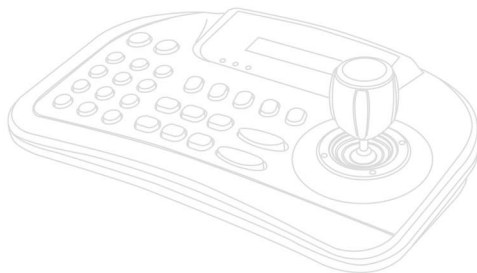
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☛ LIMITATION OF LIABILITY

THE INFORMATION IN THIS PUBLICATION IS BELIEVED TO BE ACCURATE IN ALL RESPECTS, HOWEVER, WE CANNOT ASSUME RESPONSIBILITY FOR ANY CONSEQUENCES RESULTING FROM THE USE THERE OF. THE INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE WITHOUT NOTICE. REVISIONS OR NEW EDITIONS TO THIS PUBLICATION MAY BE ISSUED TO INCORPORATE SUCH CHANGES.

⚡ WARNINGS AND CAUTIONS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT

⚡ CAUTION



⚡ EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrow head symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

⚡ IMPORTANT SAFEGUARDS

1. READ AND RETAIN INSTRUCTIONS

Read the instruction manual before operating the equipment. Retain the manual for future reference.

2. CLEANING

Turn the unit off and unplug from the power outlet before cleaning. Use a damp cloth for cleaning. Do not use harsh cleansers or aerosol cleansers.

3. ATTACHMENTS

Do not use attachments unless recommended by manufacturer as they may affect the functionality of the unit and result in the risk of fire, electric shock or injury.

4. MOISTURE

Do not use equipment near water or other liquids.

5. ACCESSORIES

Equipment should be installed in a safe, stable location. Any wall or shelf mounting accessory equipment should be installed using the manufacturer's instructions. Care should be used when moving heavy equipment. Quick stops, excessive force, and uneven surfaces may cause the equipment to fall causing serious injury to persons and objects.

6. VENTILATION

Openings in the equipment, if any, are provided for ventilation to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered

7. POWER SOURCES

The equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied at the installation location, contact your dealer. For equipment designed to operate from battery power, refer to the operating instructions.

8. GROUNDING OR POLARIZATION

Equipment that is powered through a polarized plug (a plug with one blade wider than the other) will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. Do not defeat the safety purpose of the polarized plug.

Alternate Warning: If the equipment is powered through a three way grounding type plug, a plug having a third (grounding) pin, will only fit into a grounding-type power outlet. This is a safety feature. Do not defeat the safety purpose of the grounding type plug. If your outlet does not have the grounding plug receptacle, contact your local electrician.

9. CORD AND CABLE PROTECTION

Route power cords and cables in a manner to protect them from damage by being walked on or pinched by items places upon or against them.

10. LIGHTNING

For protection of the equipment during a lightning storm or when it is left unattended and unused for long periods of time, unplug the unit from the wall outlet. Disconnect any antennas or cable systems that may be connected to the equipment. This will prevent damage to the equipment due to lightning or power line surges.

11. OVERLOADING

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

12. SERVICING

Do not attempt to service the video monitor or equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

13. DAMAGE REQUIRING SERVICE

Unplug the equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power supply cord or the plug has been damaged.
- B. If liquid has spilled or objects have fallen into the unit.
- C. If the equipment has been exposed to water or other liquids.
- D. If the equipment does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage to the unit.
- E. If the equipment has been dropped or the casing damaged.
- F. When the equipment exhibits a distinct change in performance.

14. REPLACEMENT PARTS

When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

15. SAFETY CHECK

Upon completion of any service or repairs to the equipment, ask the service technician to perform safety checks to verify that the equipment is in proper operating condition.

16. FIELD INSTALLATION

The installation of equipment should be made by a qualified service person and should conform to all local codes.

⚡ FCC COMPLIANCE STATEMENT

FCC INFORMATION : THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT.

THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION : CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES -003.

CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003 DU CANADA.

⚡ CE COMPLIANCE STATEMENT

WARNING THIS IS A CLASS A PRODUCT. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

⚡ CHAPTER 1 INTRODUCTION

In This Manual

Overview | This manual covers the operation of the CCTV keyboard Controller.

KB-545I/JS Keyboard Controller

This remote keyboard is an accessory for PTZ camera, DVR, etc.
It allows the user to control from 1 to 255 cameras.

Features

- Controls from 1 – 255 cameras.
- Multiple protocol supported in each channel (WDS, WCY, CYN, WSL, Pelco).
- RS 485/RS-422 communication (Tx : 3 port , TRx :1 port).
- Programmable user preferences. (preset, tour, group, etc.).
- Built-in 3-Axis proportional joystick
- Easy upload programmed data via serial communication port of PC.
- Built-in 2 lines character LCD.
- User password support.
- Designed for desktop use
- programmable transmission speed for each ID. (2.4–57.6kbps)

Note: units should be set to the communication protocol and the same baud rate.

Before Installation

This keyboard system must be installed by qualified service and installation personnel.

Perform the following steps to install the keyboard system.








- A. Unpack all components.
- B. Place the keyboard in a convenient location.

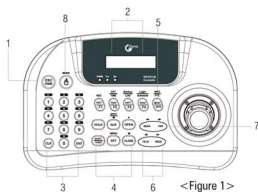
Note: *Carefully and completely read the manuals for each piece of equipment before attempting to install and connect the equipment.*

- C. Decide on the configuration method.
- D. Use one of the following sections to configure the wiring.








CHAPTER 1 INTRODUCTION

Hardware Overview(PTZ)

Number	Key Buttons	Description
1	ESC/POWER 	Pressing the ESC/POWER button enters the Power on/off or escape key. Right description led on (red). Pressing it again exits the POWER OFF. (Push the  button(about 2~3 seconds) and then POWER OFF)
2	LCD DISPLAY 	Display Camera ID, Protocol, function status, general status and etc.
3	Numbers 	Camera ID selection Camera ID setting value change, PTZ setup(1+ ) , Main setup(2+ ) Camera 11 ~ 16 : ( + 1 ~ 6 button)






















































< Figure 1 >

Number	Key Buttons	Description
4	Controller Function keys 	Hold: System locking (Unlocking : Input the Password 4 digit: ****) SHIFT/TURBO : SHIFT-key for special function / TURBO-High Speed AUX: External equipment on/off SET : PTZ and Main set up (1+ ) ,(2+ ) CLOSE : Camera Iris close OPEN : Camera Iris open
5	Function keys 	F1 ~ MENU/AUTO : Function Keys (Preset, Tour, Pattern, Scan, Auto) MENU: Used for Camera (Pan/Tilt) Menu adjustment.
6		Camera Focus control
7		Camera Zoom control
8	MODE 	Controller mode change Camera mode: Push button one time. DVR mode: Push button two times. Mouse mode(on/off) : Push button for 2-3 seconds

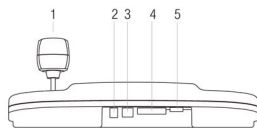
CHAPTER 1 INTRODUCTION

Hardware Overview(DVR)

Function	Key Buttons	Description
PTZ focus / Special Function 		- When PTZ control box is popped up SHIFT + 7 () : Focus out SHIFT + 8 () : Focus in SHIFT + 9 () : Auto Focus - When DVR is normal mode SHIFT + 7 () : Multi Screen function SHIFT + 8 () : Repositioning function SHIFT + 9 () : Enter into POS/ATM menu <i>* Please refer to DVR manual for more information</i>
SPOT Display 		- AUX () : Display mode - SHIFT + AUX () : Enter into SPOT monitor set up menu
Menu 		- SET () : Enter into DVR Menu
REC 		- F1 () : Start to record data
Search - External - Time 		- F2 () : Enter into Time search menu - SHIFT + F2 () : Enter into External search menu
Backup Log 		-F3 () : Enter into LOG list in DVR -SHIFT + F3 () : Enter into Backup up menu
Login(out) or Schedule 		- F4 () : Pressing the button again toggles Log in and Log out. - F4 () : Pressing the button again toggles schedule record start and stop. <i>Note: This button is operated differently between two function (Login/out and schedule) by DVR model.</i>
PTZ 		- Menu/Auto () : Pressing button, PTZ control box pops up.
Play 		- OPEN () : Play recorded data
Stop 		- CLOSE () : Stop playback
Rewind Forward 		- NEAR () : Play video backward at high speed - FAR () : Play video forward at high speed Pressing the button again toggles playback speed from X1 ~ X16
Step 		- TELE () : Step Rewind - WIDE () : Step Forward Pause playing by frame
Cancel Enter 		- CLR : DVR cancel function key - ENT : DVR enter function key
Joystick 		- Navigate the menu items in DVR menu. - Left turn : '-' button in DVR menu - Right turn : '+' button in DVR menu

CHAPTER 1 INTRODUCTION

Components



<Figure 2>

Number	Item	Description
1	Joystick	Telemetry Joystick Bit allows precise control of Pan/Tilt/Zoom DVR arrow buttons(screen split) and select(sequence) button.
2	DC 12V Input	DC 12V Input, 140 mA
3	USB PORT	Universal Serial Bus Port, USB Mouse function (External Equipment communication port)
4	TRx Tx3 Tx2 Tx1 RS-485	RS-485/RS-422 communications. (Tx : 3 port , TRx : 1 port)
5	Program	Download connector (For Program Update)

CHAPTER 1 INTRODUCTION

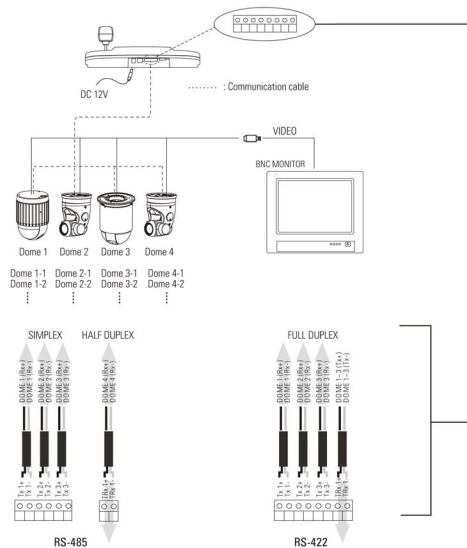
System Configuration and Wiring

Basic

Use the Keyboard Configuration when only one keyboard is connected to the controlled units.

Installation

Connect the RS-485 output port of Remote keyboard to RS-485 input port of the first controlled unit using the terminal block



CHAPTER 2 SYSTEM INSTALLATION & TYPICAL APPLICATIONS

System Installation

Keyboard Installation

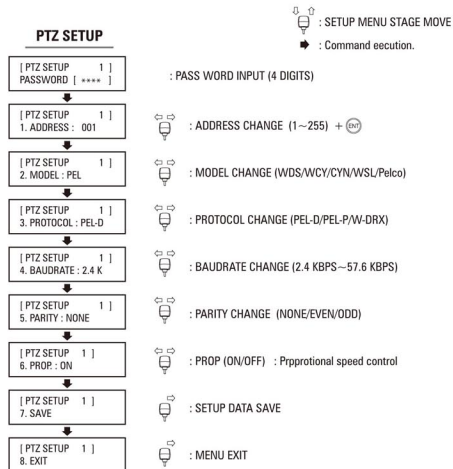
Before you start connecting the keyboard equipment to your system, make sure the units to be controlled are completely installed and everything is working correctly. Before use of this keyboard, you should set the protocol and baud rate (2.4~57.6kbps) in the PTZ SETUP mode. Use the following steps to set the communication protocol and baud rate.

PTZ SETUP

PTZ SETUP

PTZ Setup mode, select 1+**SET** (2~3 seconds) setup screen allows you to make change each programmable clause.

Note: The baud rate must be the same between the controlled unit and the keyboard.



CHAPTER 2 SYSTEM INSTALLATION & TYPICAL APPLICATIONS

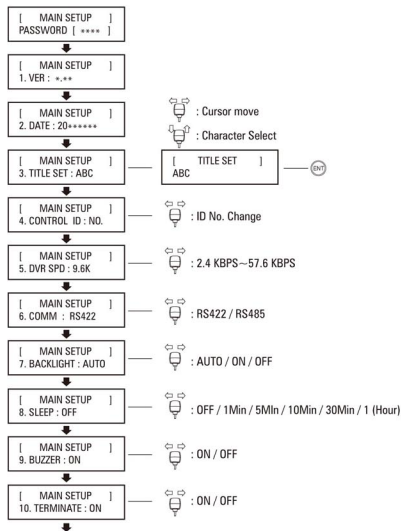
MAIN SETUP

MAIN SETUP

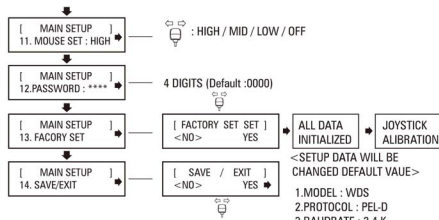
Main Setup mode, select 2+**SET** (2~3 seconds) setup screen allows you to make change each programmable clause.

Note: The baud rate must be the same between the controlled unit and the keyboard.

MAIN SETUP

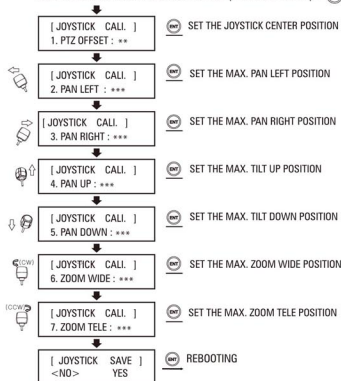


CHAPTER 2 SYSTEM INSTALLATION & TYPICAL APPLICATIONS



JOYSTICK CALIBRATION

It is for the keyboard to set the Max. movement of joystick
CALIBRATION METHOD : JOYSTICK MOVE (POSITION VALUE) + ⏏



CHAPTER 2 SYSTEM INSTALLATION & TYPICAL APPLICATIONS

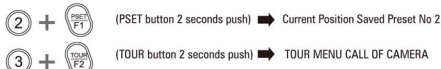
EASY SETTING FUNCTION (E.S.F)

EASY SETTING FUNCTION (Number key + Function key)

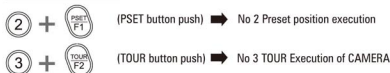
Number key + PSET/TOUR/PATT/SCAN/ E.S.F

is current position data (pan, tilt, focus, zoom data) save or call of Dome memory

DATA SAVE (SET)



DATA CALL (GOTO)



SPECIFICATIONS

Model	iC-1000 Keyboard Controller
Keyboard Communication	Interface: RS-485 (Tx 3 port, TRx 1 port)
	Pan/Tilt operating distance :4700 ft (1029m) No 24 AWG wire
Connector Type Data	Protocol: Multiple (Pelco-D, etc.) (Baud rate selectable)
Keyboard Keypad	TERMINAL BLOCK(8p)
Joystick	Rubber button
Input Voltage	Numeric keypad and camera function key
Power Consumption	Stick 3-axis, variable speed with zoom
LCD Display	12V DC or 9V batt (battery mode)
Operating Temperature	Max.140mA
Humidity	Graphic display : 16 * 2 Graphic display
Dimension & Weight	0℃ to 45℃
Packing include	10% -70% non-condensing
	280mm(W) x 174mm(D) x 92mm(H), Net : 0.7Kg Gross: 1.7Kg
	CCTV Keyboard Controller, Adaptor
	Packing include : BATT 9V(Alkaline), USB CABLE, MANUAL, TERMINAL BLOCK(8p)