



**VIPERKBD**  
**Remote keyboard**





## WARNING AND CAUTION

### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

### CAUTION



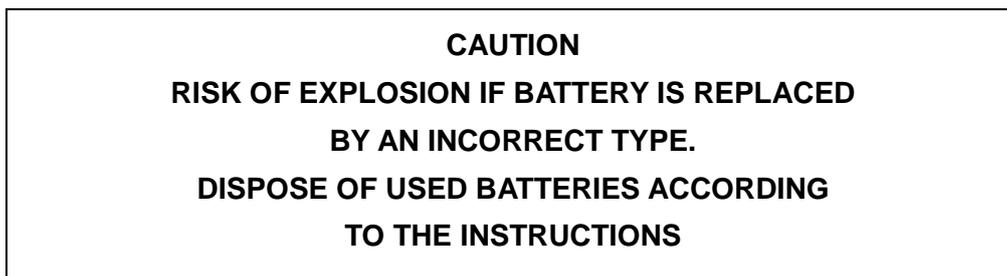
### Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated “dangerous voltage” within the product’s 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) instructions in the literature accompanying the product.



## 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.

## IMPORTANT SAFEGUARDS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prongs are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been moisture, does not operate normally, or has been dropped.
15. **CAUTION – THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU QRE QUALIFIED TO DO SO.**
16. **Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.**



## Table of Contents

1.1 Package Contents .....	4
1.2 Required Installation Tools .....	4
1.3 Connections.....	4
1.4 Features .....	5
1.5 Direct USB connection set up .....	6
1.6 Keyboard Setup- For multiple keyboard 485 to USB control .....	7
1.6.1. RS485 to USB connections:.....	8
1.6.2. VIPER Menu Setup- For 485 to USB control .....	9
2.0 <i>Using the keyboard</i> .....	10
3.0 Specification .....	14

## 1.1 Package Contents

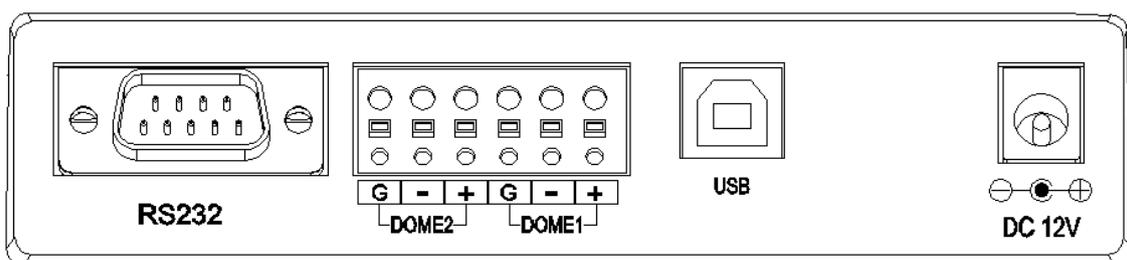
The package contains the following.

Description	Q'ty
Keyboard controller	1
CD(Instruction manual, VK2-CLIENT and Driver)	1
USB Cable	1
12VDC Power supply (SMPS)	1
Power Cord	1

## 1.2 Required Installation Tools

No special tools are required to install the KBD controller. Refer to the installation manuals for the other items that make up part of your system.

## 1.3 Connections



CONNECTOR	USAGE
<b>RS232</b>	RS232:DVR/UPGRADE
<b>DOME2</b>	Used for 485 to USB multi NVR connection
<b>DOME1</b>	Used for 485 to USB multi NVR connection
<b>USB</b>	Connection of USB cable to USB port on VIPER
<b>DC12V</b>	Power Supply connection

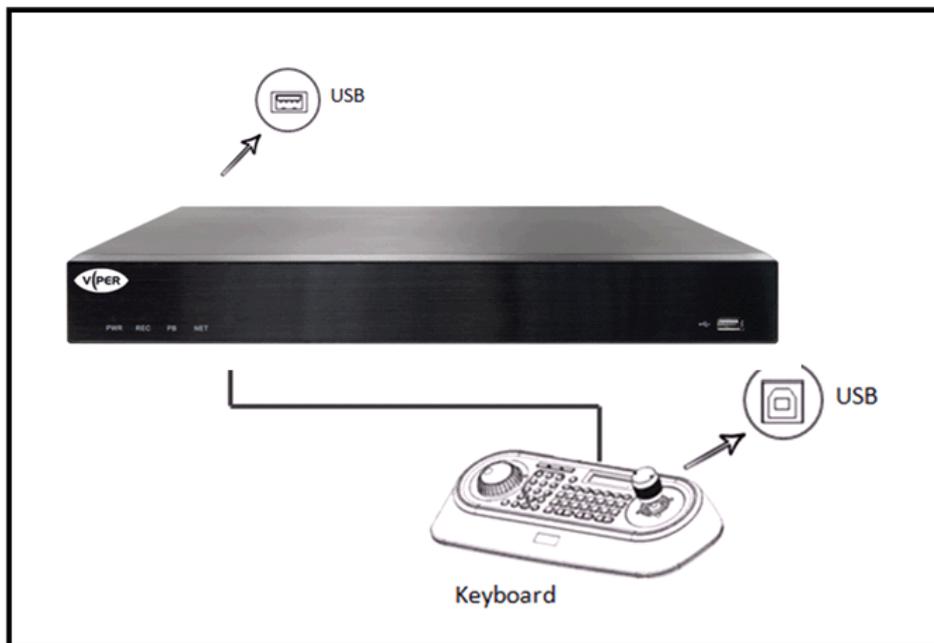
## 1.4 Features

This keyboard controller is capable of controlling the certain functions of VIPER NVR, including Live viewing, Reviewing of recorded data and PTZ control of dome cameras

- 3 Axis control joystick with zoom controlling handle.
- Program and recall programmed preset positions, auto scan, tour, pattern, from the selected dome camera.
- Two levels of password are supported for higher security, administrator and user.
- USB or 485 Interface Control.
- Up to 3 slave of the same type keyboard controllers can be connected to the master keyboard.
- Battery backed-up clock displays real time on the LCD screen.

Note: This manual is designed specifically for the use of the VIPERKBD and VIPER NVR. The keyboard can also be used to control other products such as Matrices and analogue PTZ domes. This is not covered in this manual.

**Figure 1 – Typical system Configuration local USB control**



## 1.5 Direct USB connection set up

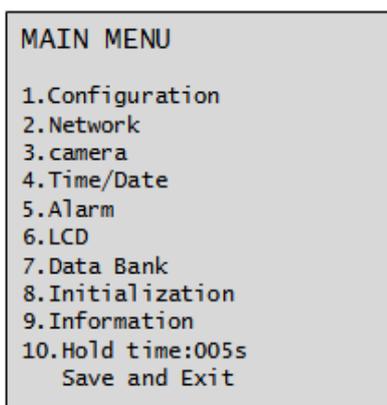
As default the VIPERKBD keyboard will be set to USB operation. – “U” will appear in the LCD display  
If the keyboard is not set to USB use the following method to set this mode.

To enter the Keyboard menu, press and hold CTRL and press MENU.

1. Use the Joystick to go down too option 2: Network
2. Go Right on the joystick to select Network
3. Go down to select COM:2.
4. Go Right to toggle to DVR5
5. Go up on the Joystick to select “SAVE + EXIT”
6. Go Right to save and return to Main Menu.
7. Go Down to option 3 USB
8. Set USB to “ON” by moving right to toggle between on and off.
9. Go down to “SAVE +EXIT” to return to Main Menu.
10. Go down to “SAVE + EXIT” and go right, to exit menus.

The letter “U” will appear in the LCD display, to show USB control.

**\*\* If Keyboard Controller power is disconnected and reconnected, you must also disconnect and reconnect the USB either from the Keyboard Controller or /NVR side. \*\***



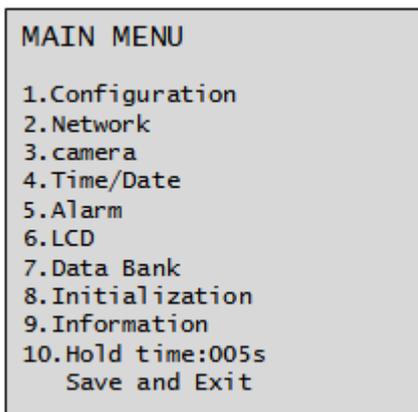
## 1.6 Keyboard Setup- For multiple keyboard 485 to USB control

As default the VIPERKBD keyboard will be set to USB operation. – “U” will appear in the LCD display  
The keyboard will need to be set to RS485 operation.

The following instructions assume the RS485 connection is made on DOME1 connection on the rear of the keyboard:

To enter the Keyboard menu, press and hold CTRL and press MENU.

The following options will be available:



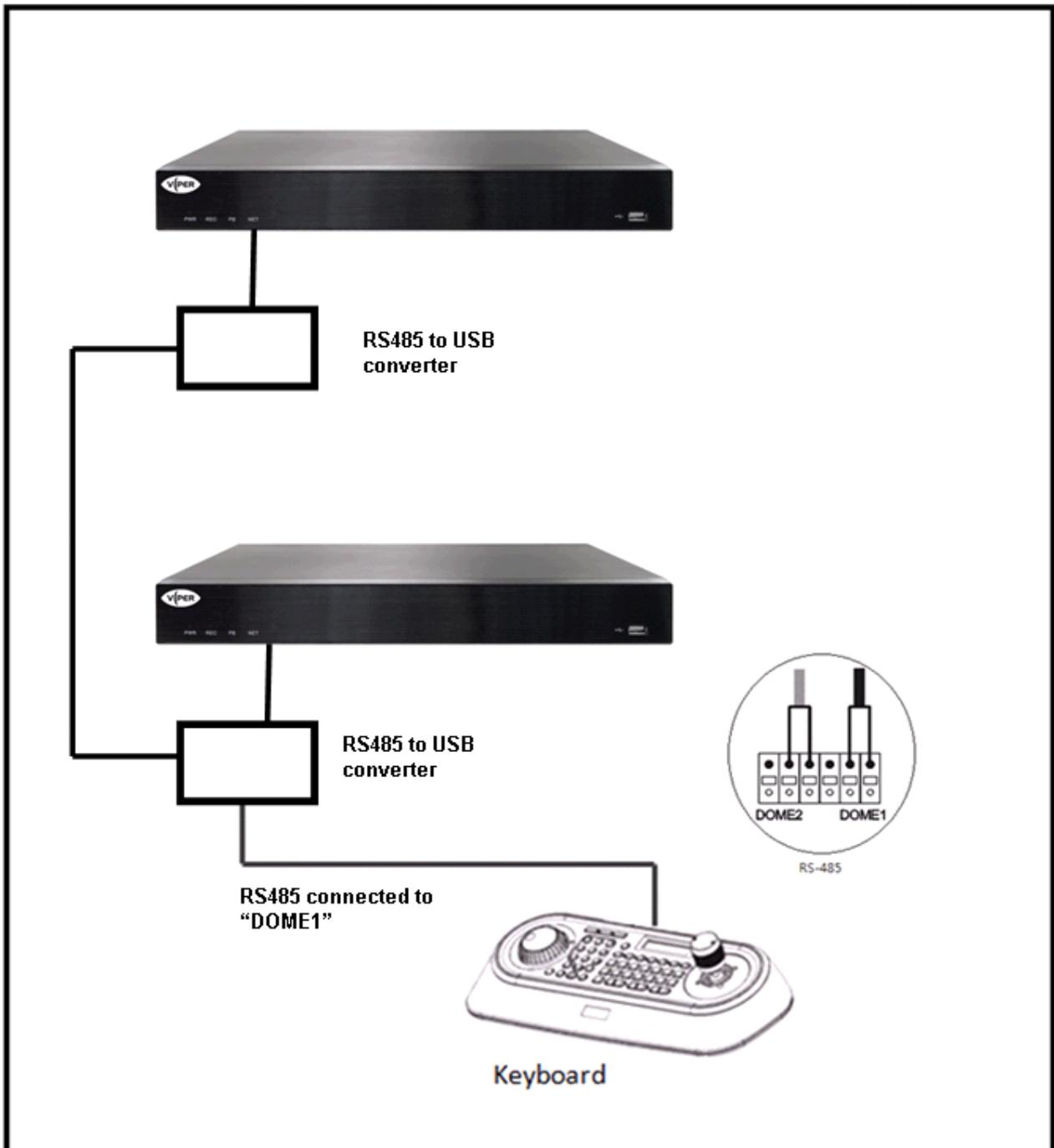
1. Use the Joystick to go down too option 2: Network
2. Go Right on the joystick to select Network
3. Go down to select BAUD RATE /DOME1
4. Set the BAUD RATE to the same as the VIPER BAUD rate ( Default 9600)
- \*For the detail information of VIPER Baud Rate (USB), Please refer to the System Controller / Printer Device section of the VIPER manual.
5. To Exit the BAUD RATE Menu, go down to SAVE and EXIT, and push the joystick to the right.
6. Go to COM PORTS option.
7. Go to Dome1 option, set this to DVR5
8. To Exit the COM PORTS Menu, go down to SAVE and EXIT, and push the joystick to the right.
9. Go down to USB option Set this to OFF
10. To Exit the USB Menu, go down to SAVE and EXIT, and push the joystick to the right.

The message “DVR000x CAM:000x” will appear in the LCD display, to show the keyboard is in RS485 Mode.

### 1.6.1. RS485 to USB connections:

The diagram below shows a typical install for multiple VIPERs connected to single keyboard via RS485.

This set up has been tested using the VIDEX 481 RS485 to USB converter, available from Norbain, part code : 0555050.



## 1.6.2. VIPER Menu Setup- For 485 to USB control

You can set the communication for System Keyboards with the VIPER menu, go to: System Controller/Printer Device menu page, as shown below.

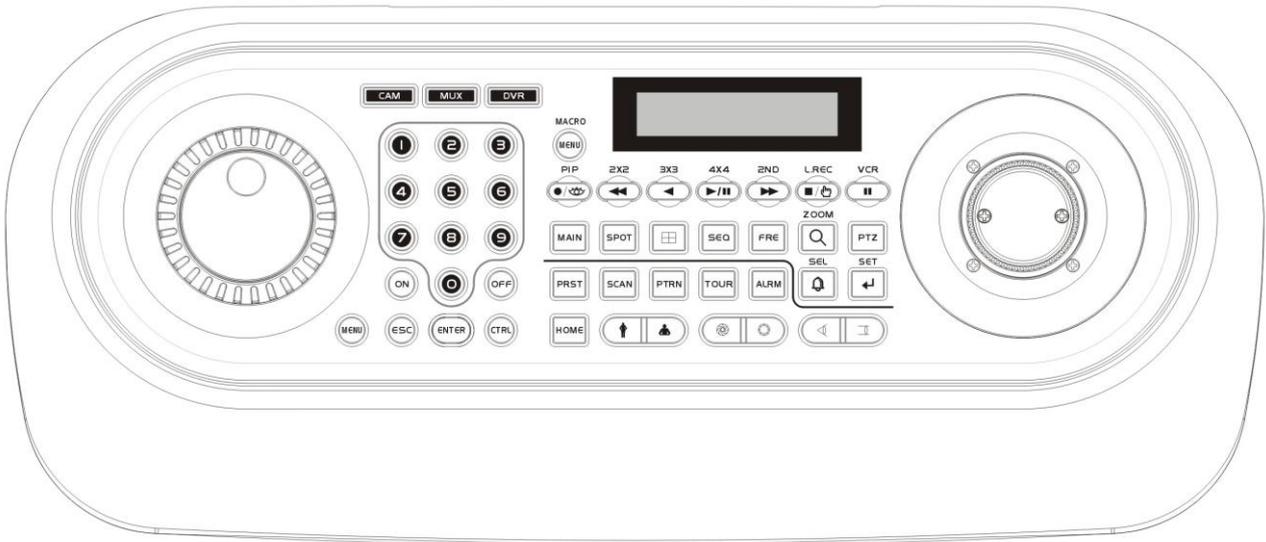


**System Keyboard:** Select it USB position and enter ID (0~255).

**POS/ATM:** Select it OFF position

**RS-232/USB:** Set the Baud Rate. USB Baud Rate must match the System Keyboard RS-485 Baud Rate. (Dome1 or Dome2)

## 2.0 Using the keyboard



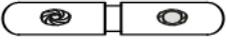
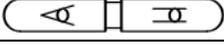
### KBD Controller Keys in USB (NVR-LIVE)

Function	Key Label	Descriptions
Menu		Enter the NVR MENU screen. You will need to enter the administrator password to access the DVR/NVR MENU. Pressing the button also closes the current. Using the Joystick, you can navigate menu and select by turning the Joystick clockwise. This will also function as Enter.
Display Mode		Change the display mode to different split screen.
PTZ		Control PTZ camera(s) connected to your DVR/NVR. PTZ icon with blue highlight will indicate the PTZ mode as been activated.
Enter		Select a highlighted item or completes an entry that you have made. Using the Joystick and turning it clockwise will also function as Enter.
Full Screen and Input Number	No.+ 	Displays selected channel in full screen. However, when selecting a channel to display in full screen, no channels must be highlighted (yellow border) in the multi-channel

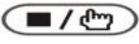
		mode.
Channel Switching	No.+ 	Use the Joystick to highlight(yellow border) the channel. This can be done simply by turning the joystick clockwise. Once it's highlighted, enter the channel (No.) and press the MAIN button.
Digital Zoom		From Live display, select the desired channel and click the Zoom In button to activate the Zoom Mode.
Digital Zoom Control		On the keyboard, press these buttons for digital Zoom IN/OUT control.
Freeze		From Live Display, click the FRE button to activate the Freeze Mode.
Auto Sequence Mode		When in the Live Mode, clicking the SEQ button will display another full live channel sequentially.
Alarm		Will turn off the alarm
Record		Toggle will start and stop the recording operation
Search		Pressing the SCAN button on the keyboard and it will take you to Search Menu. This function will only work when it's not in PTZ mode.
Play		This button has two functions. 1. If a playback has been stopped and the play button is pushed again, it will resume from where it was stopped. 2. If play back button is pushed for the first time, it will take you to the Search Menu.
Joystick		<ul style="list-style-type: none"> <li>- The use of the Joystick will allow you select channels, view in different modes (single or multiple), Zoom IN/OUT, Select/Enter or navigate through menu.</li> <li>- Turn the Joystick counter clockwise for single view mode.</li> </ul>

#### KBD Controller Keys in USB (NVR-PTZ Camera)

Function	Key Label	Descriptions
PRESET, TOUR, PTRN,		PRST, TOUR, PTRN, SCAN action

SCAN Action	No. +    	
PRESET Setting	No. +  	Preset save
Zoom		Zoom In/Out control. Turn the Joystick clockwise or counter clockwise for Zoom IN/OUT control.
Iris		Iris Open/Close control, Smart Focus(Specific camera)
Focus		Focus Near/Far control
Configuration		Enters programming menu
Control		CTRL + Joystick : In a programming mode (Preset, Pattern, Scan, Privacy....) the joystick operates as if in the normal control mode. While pressing and holding down the CTRL key, all movements of the joystick will start recording when in the pattern programming menu
Cancel		Cancels current inputs. Exits from currently running functions or menu, error status, etc.
Enter		Completes entering data for the password or title
Joystick		The camera UP, Down, Left, Right motion (Direction of the camera control). Turn the Joystick clockwise or counter clockwise for Zoom IN/OUT control.

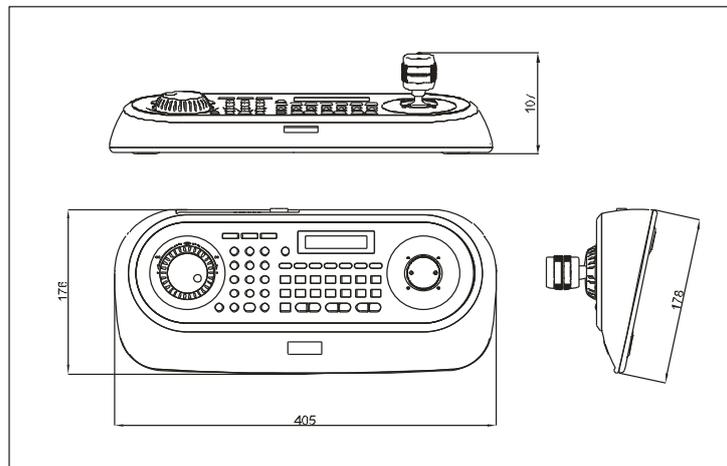
## KBD Controller Keys in USB (NVR-Playback)

Function	Key Label	Descriptions
Play Back Control		Play/Pause recorded data
Play Back (PB) Stop		Pause/Play, Fast Forward, Fast Rewind, Forward One Frame, Go Back One Frame
Play Back (PB) Stop		Return to Playback Mode, Live Mode
Jog/Shuttle		Fast Forward, Fast Rewind, Forward One Frame, Go Back One Frame

### 3.0 Specification

<b>ELECTRICAL</b>	
LCD	16 X 2 Line LCD
Joystick	3 AXIS Joystick
Input Voltage	12 VDC
Power Consumption	0.5A (6W)
USB	USB Control to VIPER NVRs
<b>MECHANICAL</b>	
Dimension	15.9 X 6.9 X 4.2(Unit : inch) : 405x176x107(Unit : mm)
Unit Weight	Approx 1.2 kg
Shipping Weight	Approx 2.2 kg
Shipping Size	19.7 X 9.1 X 6.3(Unit : inch) : 500 x 230 x 160 mm
<b>ENVIRONMENT</b>	
Operating temperature	0°C to 50°C (32°F to 122°F)
Operating humidity	0 to 90%RH (non-condensing)
Storage temperature	-20°C to 60°C ( -4°F to 140°F)

**Specifications are subject to change without notice.**



Dimensions

MEMO

---