

Dynamic CCTVLtd Quality, Reliability, Price

Please follow this guide if you wish to use the above keyboards for controlling a DVR or PTZ device through RS485 serial bus connection

On initial power up the first thing to do will be to activate the keyboard similar to what is required with an out of the box DVR or NVR we need to create a password containing upper case, lowercase letters and numbers at least two different characters are required with the use of all three giving the strong level of password.



You are required to enter your password twice once under Pswd and once under OK before pressing the OK button on the keyboard to confirm. You can switch between the different character ABC, abc and 123 by pressing the FOCUS button on the front of the keyboard.



Once you have activated the keyboard you will then need to login using the same password you have just created.

Once logged in you will see the below screen:



The Shortcut option allows you to quickly select a connected PTZ or DVR through its ID number for control and the System option allows you to move into the keyboards configuration sub menus as below, use the joystick to move between them and press OK to select option.





Use the joystick to move up and down the options and press OK to select an option

1. Version

Shows the current Firmware, Hardware and Software versions of your keyboard, if you do not have the latest version it is possible to perform an upgrade through USB connection which will be explained later in this guide.



2. User

Allows you to change the admin password and also add and edit and delete additional users to the keyboard of which up to 15 can be added.



3. RS485

Configure communication parameters for all devices connected through RS485 interface, up to 255 devices can be connected and configured using specific ID address from 1 to 255.



Add. Bit allows you to set ID of device you wish to set paramters for, use joystick to move to option then use numeric keys on keyboard to set ID

Baud Rate set required baud rate of chosen ID by tapping joystick right or left, you can select 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200 baudrates

Data Bit select required data bit rate for connected device from 7 or 8 data bits

Protocol set required protocol for connected device by tapping joystick left or right, you can choose from HIKVISION, PELCO P, PELCO D, VICON and KALATEL

Stop Bit Select required stop bit for communication with selected device, tap joystick right or left to select 1 or 2 stop bit.

Parity Set the parity for the transmission to your selected device, tap the joystick left or right to select None, Odd or Even parity.

NOTE: When controlling a Hikvision DVR or NVR the above communication settings must be set as below to achieve control:

Baud rate 9600, Data bit 8, Stop bit 1, Parity None

The protocol setting is irrelevant for DVR/NVR control and can be set to any of the supported options, the keyboard communicates with DVR/NVR through embedded code so will work on any.

4. RS422

Configure communication parameters for all devices connected through RS422 4 wire serial interface, contains the same setup options as for RS485 and is used predominantly for MATRIX control and other 4 wire communication systems.

5. HARDWARE

Contains auto log off option which can be set ON or OFF, if set to ON the keyboard will automatically log the user off if there has been no activity after 30 minutes.



6. TIME

Enter to set time information of keyboard, here we can set Year, Month, Day, Format, Hour, Minute, Second by using the joystick to move up and down options and tapping the joystick left or right to change setting.



7. Maintenance

Here we can Upgrade the keyboards firmware or import/export the keyboards configuration information as well as defaulting the keyboard to factory setting, the upgrade, import and export options are carried out by inserting a USB pen into the port on the rear of the keyboard as shown below:





Devices can be selected to be controlled by the keyboard by pressing the MODE button on the front of the keyboard which will bring up the below menu on the LCD screen





1. MAG by RS422

select this option if you wish to control a third party matrix unit connected using the RS422 serial bus, ensure that your RS422 settings as configured within the SYSTEM sub menu match that of the connected matrix for communication to be achieved.

2. DVR by RS485

Select this option if you wish to control a HIKVISION DVR/NVR using RS 485 KBD interface, press OK on the option to show below screen



Enter the DVR/NVR device ID using the keyboards numeric keys and press the DEV button on the keyboard to lock to that particular device, remember to set your RS485 settings to the specific values for HIKVISION DVR/NVR operation as detailed earlier in this guide. If everything is correct you should now have achieved communication with the DVR/NVR.

Common DVR/NVR keyboard control commands

Full screen channel view: To view any channel full screen simply press the numeric key on the keyboard for the chosen channel number which will bring it up full screen, you can sequence through the full screen images by tapping the joystick left and right.

Split screen view: To view the images in split screen view press the MULT button on the front of the keyboard, if you press it continuously the DVR/NVR will display all available split screen options you can also tap the joystick left and right to move through these split screen options.

DVR/NVR OSD menu access: to display the DVR/NVR OSD menu simply press the MENU button on the keyboards front controls, you can exit the OSD menu by pressing the ESC button.



PTZ operation: To control a PTZ in DVR mode you will need to bring the chosen camera up full screen then press the PTZ button to activate telemetry control.



When you have finished you can exit PTZ mode by pressing the ESC button.

Playback To enter the playback screen of the DVR/NVR press the PLAY button on the keyboard front controls

3. Dome by Rs485

Select this option if you wish to control a PTZ camera that is connected directly to the DS-1006KI keyboard, press OK on the option to view the below screen:



Press the numerical button that relates to the dome ID you wish to control then press the CAM button to lock the keyboard to the dome, remember to set your RS485 settings within the system menu for the chosen ID the same as the dome to achieve communication.

Common PTZ keyboard control commands

PAN, TILT, and ZOOM: All of this can be achieved using the 3 axis keyboard joystick

ZOOM, **FOCUS** and **IRIS** All of these can be controlled using keyboard control buttons located on the left hand side of the keyboard:



OSD menu access The domes OSD menu can accessed by pressing 95 followed by the preset button, you can then select options using the IRIS + and – buttons.

Moving to a preset position Press the preset number using the numerical keypad followed by the preset button

Activating a programmed PATROL Press the patrol number using the numerical keypad followed by the PATROL button – NOTE this function only works when using the HIKVISION protocol to control your dome.

Activating a programmed PATTERN Press the pattern number using the numerical keypad followed by the PATTERN button – NOTE this function only works when using the HIKVISION protocol to control your dome.