

Keyboard User Manual

For

IKB-2888

Thank you for using IKB-2888 keyboard. This manual will guide you how to connect and operate the IKB-2888 keyboard.

Notice:

The LCD screen and joystick are easy to damage, please take care of it when using or moving the keyboard. Don't put the keyboard on exposure of sunshine for long time. If it needs to be repaired, please wrap it and ship it by using original or safety package.

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1. Key Features and Specifications

1.1 Manage NetDVR

IKB-2888 keyboard works with all models of IL6000HC/HCS/HD/HDS/HN series of NetDVR. It can manage up to 31 NetDVR. It has the full functions of NetDVR remote controller and front panel.

1.2 Control Speed Dome through NetDVR or directly

IKB-2888 keyboard can control up to 496(31*16) Speed Domes through NetDVR (Speed Dome RS485 port connects to NetDVR RS485 port). If the Speed Dome RS485 port connects to keyboard RS485 port directly, it can control up to 255 Speed Domes (address are among 0~254).

1.3 Multiple PTZ Protocols

Up to 9 PTZ protocols are built in the keyboard. For special project that existed protocols cannot fulfill the requirement ILDVR offers software upgrade service without changing any hardware.

1.4 Cascade Connection

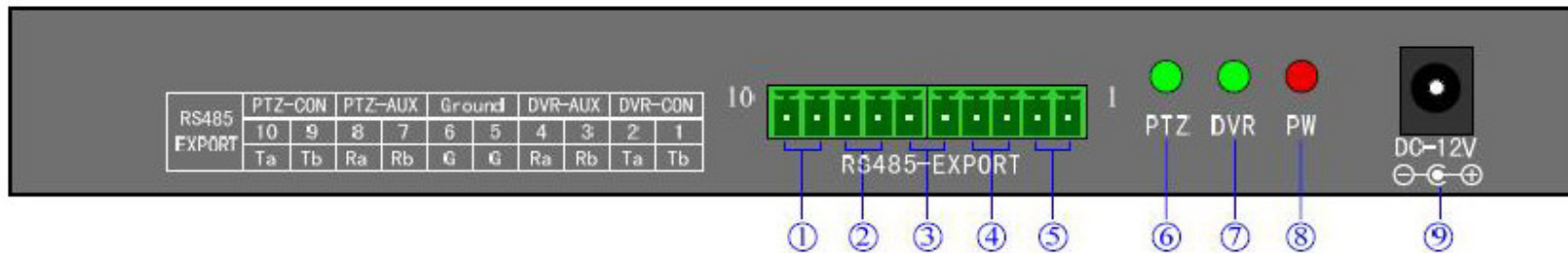
IKB-2888 keyboard supports one master keyboard and 15 slave keyboard cascade connections. Keyboard IDs range from 0 to 15.

1.5 Specifications

Keyboard model	IKB-2888
Support NetDVR number	31
Support PTZ number	255
Control model	RS-485 half-duplex mode Baud rate: 1200 ~ 19200bps
Communication interface	RS485 port
LCD screen	128mm×64mm
Joystick	3D
Max. cable length	1200m
Power supply	DC12V
Working temperature	-10℃-- +55℃
Working humidity	10%--90%
Size	360mm*200mm*108mm
Weight	3.2KG

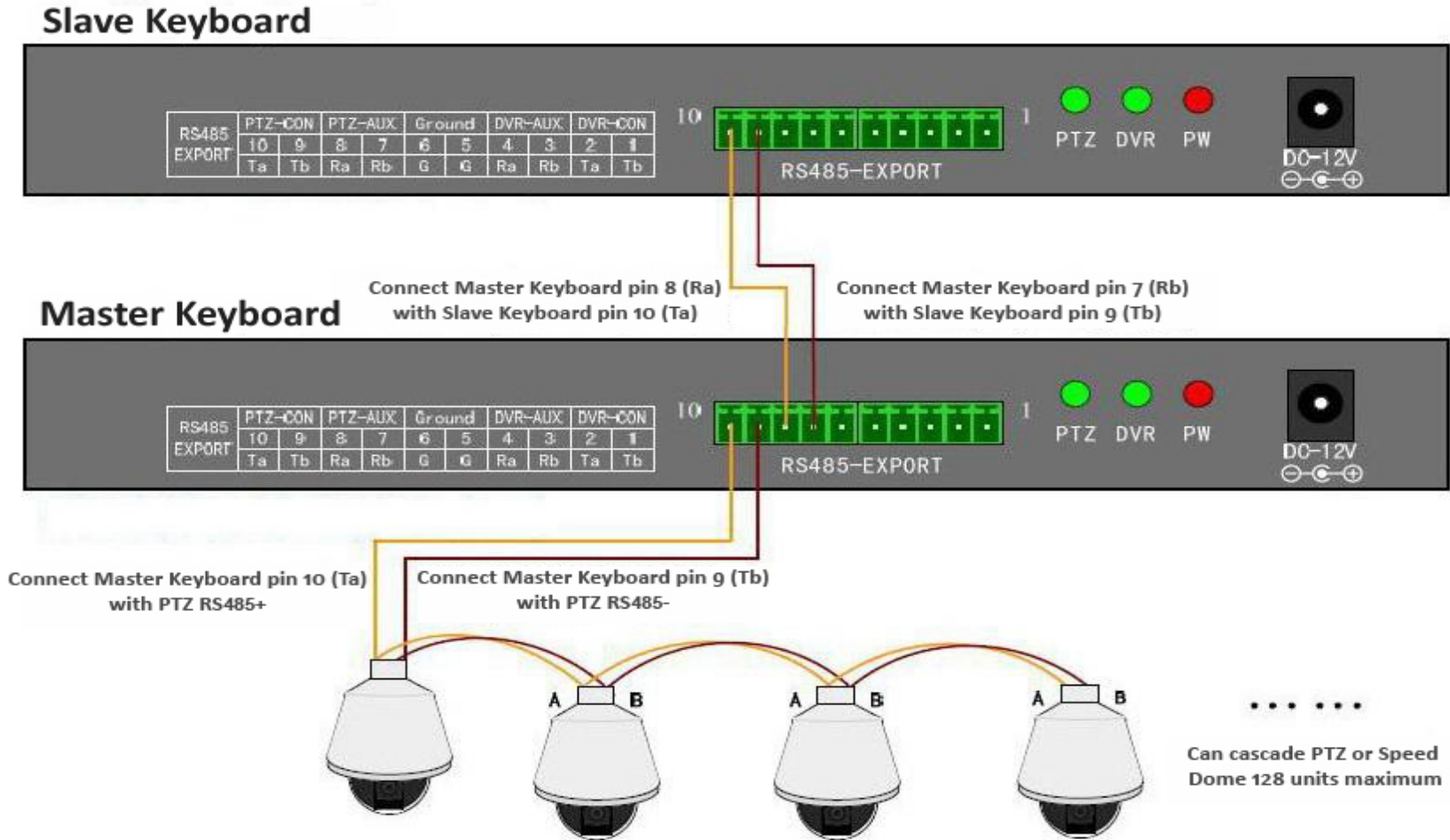
2. Wire Ports

2.1 Back panel interface



Item	Name	Descriptions
①	PTZ-CON	Master keyboard RS485 port. Ta=RS485+, Tb=RS485-. When there is only one keyboard in use, it must be used as master keyboard.
②	PTZ-AUX	Slave keyboard connection port. Ra (pin8) connects to slave keyboard Ta (pin10). Rb (pin7) connects to slave keyboard Tb (pin9).
③	Ground	Ground terminal
④	DVR-AUX	Slave keyboard NetDVR connection port. Ra (pin4) connects to Ta (pin2) of slave keyboard. Rb (pin3) connects to Tb (pin1) of slave keyboard.
⑤	DVR-CON	Master keyboard NetDVR connection port. Ta (pin2) connects to D+ of NetDVR KB port. Tb (pin1) connects to D- of NetDVR KB port. When there is only one keyboard in use, it must be used as master keyboard.
⑥	PTZ	PTZ work status indicator (Green=on).
⑦	DVR	DVR work status indicator (Green=on).
⑧	PW	Power indicator (Red=on).
⑨	DC-12V	DC 12V power input

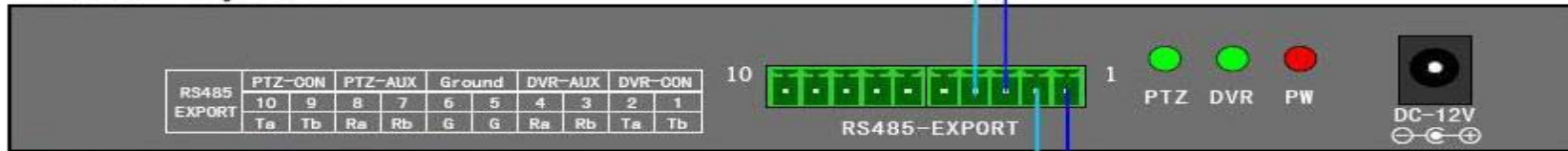
2.2 Typical Wiring Diagram



Slave Keyboard



Master Keyboard



Connect Master Keyboard pin 4 (Ra) with Slave Keyboard pin 2 (Ta)

Connect Master Keyboard pin 3 (Tb) with Slave Keyboard pin 1 (Tb)

Connect Master Keyboard pin 2 (Ta) with NetDVR KB port pin D+ (or NetDVR RJ45 keyboard port pin 3)

Connect Master Keyboard pin 1 (Tb) with NetDVR KB port pin D- (or NetDVR RJ45 keyboard port pin 4)

NetDVR 1



NetDVR KB port pin D+ (or NetDVR RJ45 keyboard port pin 3)

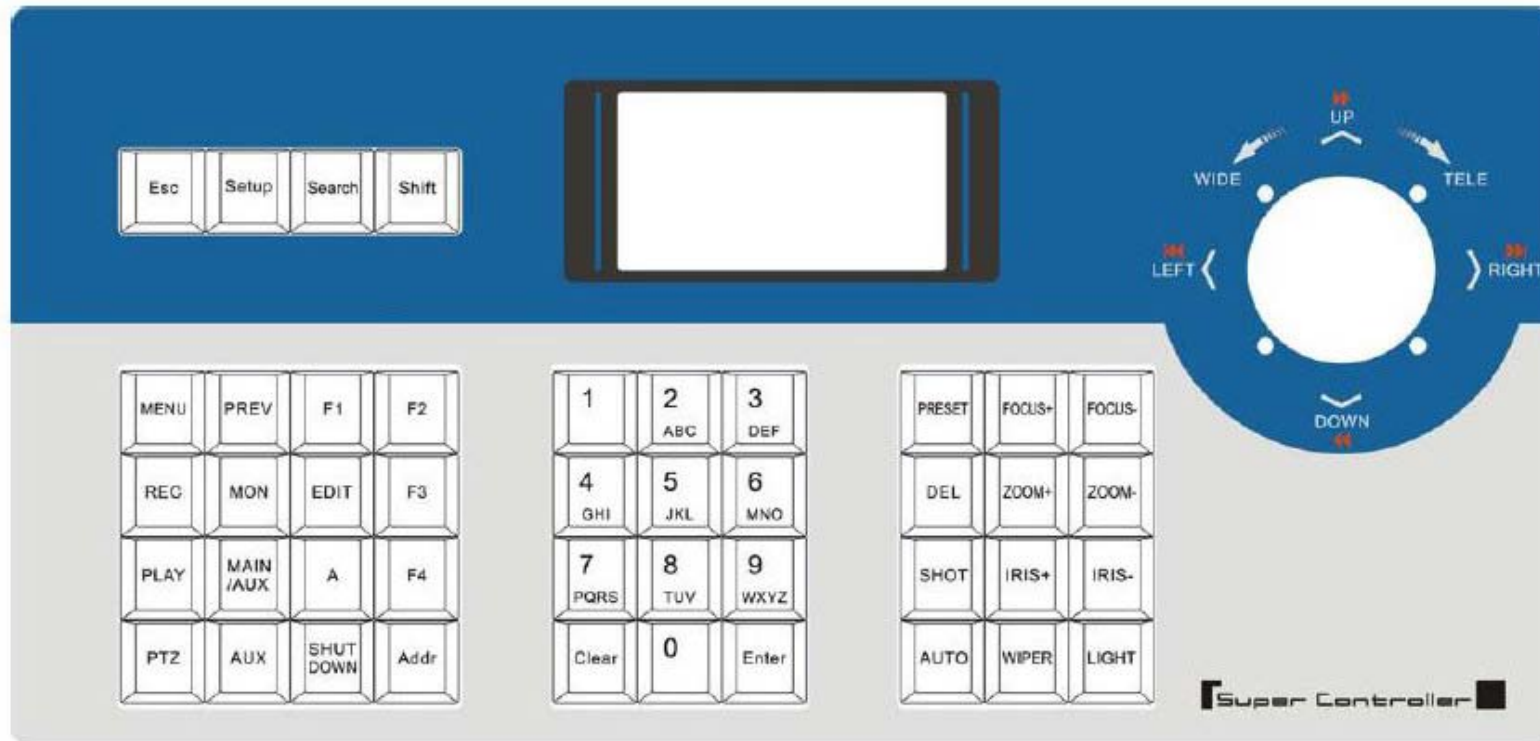
NetDVR KB port pin D- (or NetDVR RJ45 keyboard port pin 4)

NetDVR 2



Can cascade NetDVR 31 units maximum

2.3 Front panel description



2.3.1 LCD screen

All operation steps will be displayed on the LCD screen. The screen will automatically turn to screen save mode in 30 seconds without any input.







2.3.2 Definitions of keys

Name of key	Description of operation function
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ESC	Back to up-level menu
Setup	Hold on 3 seconds to enter keyboard configuration status (default password: 8888)
Search	To view the keyboard system info such as device serial number, model name and PTZ protocol
Shift	Switch the CONTROL mode between NetDVR and speed dome
MENU	Show the main menu
PREV	Switch the split viewing mode of 1x, 4x, 9x, and 16x
F1, F2, F3, F4	Speed dome function key. Refer to LCD screen indication depending on the PTZ protocol to operate
REC	Shift to NetDVR manually record mode.
MON	Special control key the four auxiliary outputs of NetDVR (hold on 2 seconds)
EDIT	Edit/change the inputs.
PLAY	Enter NetDVR playback status.
MAIN/AUX	Switch the main/aux output port (hold on 2 seconds)
A	Switch input method
PTZ	Enter NetDVR PTZ control status.
AUX	Reserved in NetDVR control mode
Shut Down	Power off NetDVR
Addr	Change the NetDVR device ID or PTZ address to operate
Clear	Clean the current input
ENTER	Confirm the current input
0-9	Numeric key of 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
A-Z	Letter key of A-Z (26 letters)
PRESET	Setup the speed dome preset
DEL	Delete the speed dome preset
SHOT	Call the speed dome preset
Auto	Run the speed dome tour (depending on the connected speed dome, please refer to the speed dome operation guide)
FOCUS+	Set the lens focus near
FOCUS-	Set the lens focus far
ZOOM+	Zoom in the lens

ZOOM-	Zoom out the lens
IRIS+	Open the lens iris
IRIS-	Close the lens iris
WIPER	PTZ wiper on/off
Light	PTZ light on/off

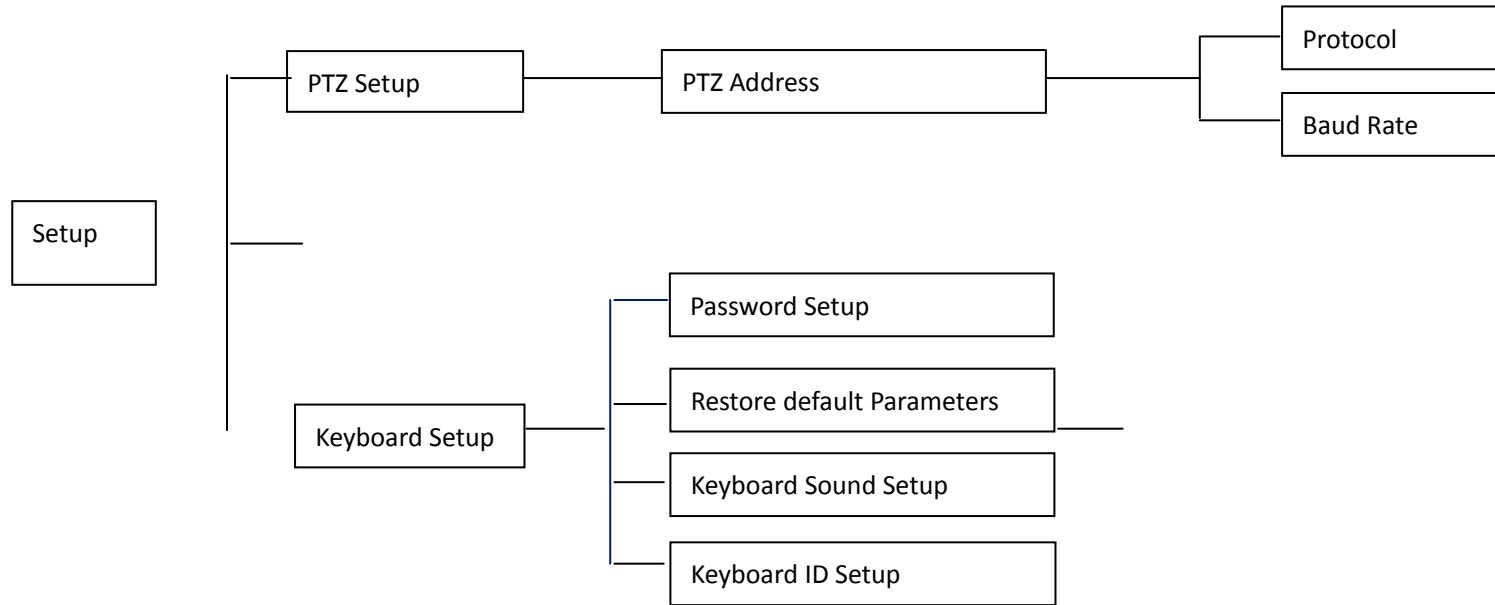
2.3.3 Joystick movements

Figure	Operation	Descriptions
	up	In PTZ control mode: control the movement of pan/tilt In DVR control mode: play fast when playback the record file
	down	In PTZ control mode: control the pan/tilt to move upon In DVR control mode: play slowly when playback the record file
	left	In PTZ control mode: control pan/tilt to move left In DVR control mode: move backward when playback the record file
	right	In PTZ control mode: control pan/tilt to move right In DVR control mode: move forward when playback the record file
	rotate left	Zoom in the lens
	rotate right	Zoom out the lens

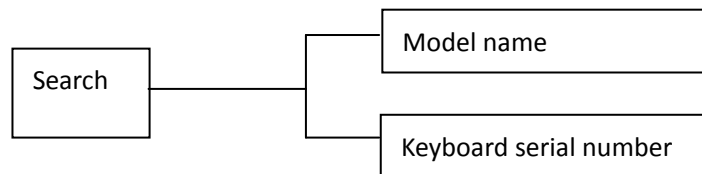
3. Keyboard Configuration

3.1 Keyboard menu structure tree

Configuration menu structure: Press SETUP key and hold on 3 seconds to enter setup interface, default password is “8888”



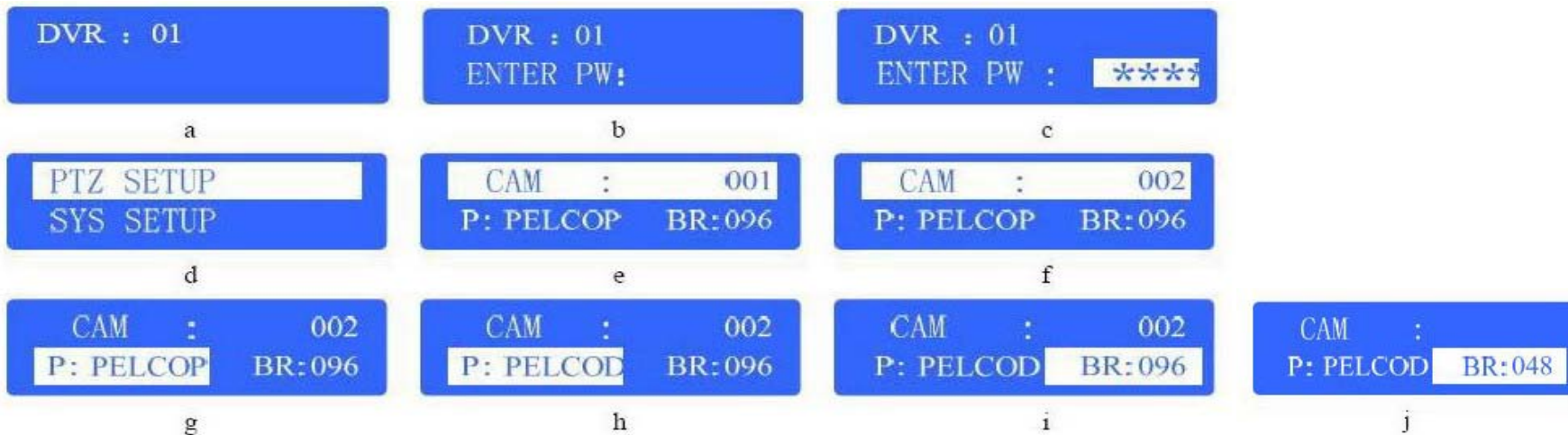
Keyboard system info menu structure: Press SERACH key to display the keyboard system info.



3.2 Configuration illustration

Here is an example to illustrate how to setup speed dome, change the PTZ protocol of speed dome 002 to PELCO-D, then change the baud rate to 2400.

1. In the mode of standby (icon a), press and hold on the “Setup” key for 3 seconds, login the main menu (icon b).
2. Input the password (icon c, default password: 8888).
3. Press [Enter] into setup menu, move the joystick up / down to choose [PTZ SETUP] / [SYS SETUP] (icon d).
4. Choose [PTZ SETUP] and press [Enter] into [PTZ SETUP].
5. Move the Joystick left and right to select the address (ID) of speed dome, e.g. 002 (icon e, f), then press [Enter] into next level menu (icon g).
6. Move the joystick up / down to select PTZ protocol, e.g. PELCO-D (icon h).
7. Move the joystick right to change the baud rate (icon i), and then select the correct baud rate (icon j).
8. Press [Enter], then press “ESC” back to the standby mode (icon a).
9. Configuration is done



4. Control Speed Dome through NetDVR

In this application the Speed Dome RS485 port connects to NetDVR RS485 port. Multiple speed domes may have same address (ID) if their RS485 ports connect to different NetDVR separately. Operation steps are:

Step 1: Set every NetDVR device ID an exclusive number such as 01, 02, 03, and so on.

Step 2: Set every speed dome address (ID) an exclusive number such as 01, 02, 03, and so on. These speed domes are all connected to one NetDVR.

Step 3: Press “Shift” key to enter NetDVR working mode

Step 4: Press “Addr” key then input NetDVR device ID to select a target NetDVR device.

Step 5: Press “Enter” key to confirm your selection.

Step 6: Press “PTZ” key then input a target speed dome ID number that you want to control.

Step 7: Begin PTZ control

Step 8: To change other speed dome just input the ID number then begin PTZ control.

5. Control Speed Dome directly

In this application the Speed Dome RS485 port connects to keyboard RS485 port directly. Every speed dome must has an exclusive address (ID), address are among 0~254. Operation steps are:

Step 1: Set every speed dome address (ID) an exclusive number such as 01, 02, 03, and so on.

Step 2: Press “PTZ” key then input a target speed dome ID number that you want to control.

Step 3: Begin PTZ control.

Step 4: To change other speed dome just input the ID number then begin PTZ control.

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