# Digital Intellectual Keyboard User's Manual



Please read this manual carefully before using the machine.

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## 1. Notes on Installation&Use

Before installing and using this product, pay attention to the following items:

- Before installing and operating this equipment, please read all safety operating manuals carefully.
- \* Please don't put this product at places with water or moisture.
- \*\* Please don't abuse this machine; please don't operate the machine under exceeding rated voltage.
- Please don't clean this machine with strong cleanser, when dirt is accumulated too thick, gently clean with neutral cleanser, and noting limited to surface cleaning only.



Warm: To ensure safety of system operator, unrelated individual can not disassemble or assemble this machine and can't loose screw or open casing. There's no applicable part inside fitting to user.

## 2. Functions Introduction

#### 2.1 Summary

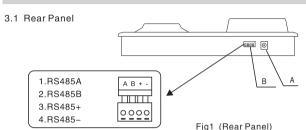
Digital intellectual keyboard is a supporting product for such terminal receivers as DVR, high speed dome, decoder, etc. Keyboard and receiver is connected with each other through EIA/RS-485 communication interface. After the keyboard is connected with DVR, functional control of relative DVR is realized and 16 DVR can be controlled in maximum. One keyboard can control 64 speed dome or decoders without adding BUS driven, and the maximum communicate distance between keyboard and receivers is 1.2KM. It is convenient to control and preset DVR and speed dome with keyboard. And it can also directly control terminal decoders and achieve control of front-end equipment such as scanner, camera lens, lamp and wipper.

3D keyboard has all the functions of 2D keyboard and in addition it can control zoom in&out by the racker.

- 2 2 Technical Parameters
- 2.2.1 communication mode: point-to-multipoint semi-duplex communication.
- 2.2.2 Standard of interface: RS-485
- 2.2.3 Baud rate: 1200bps, 2400bps, 4800bps, 9600bps for options.

- 2.2.4 Communication distance: 1.2KM
- 2.2.5 Power supply: DC9V
- 2.2.6 Maximum controlled DVR: 16pcs
- 2.2.7 Maximum controlled speed dome and decoder: 64pcs
- 2.2.8 Package size: 262×83×100mm; Weight: 0.6Kg

## 3. Introduction of Panel



A. Input DC9V by this interface.

connect to Hikvision DVR.

B. RS485 is connected with supporting products of terminal receivers such as DVR, variable speed dome, decoder, etc.1、3(RS485+);
 2、4(RS485-). Connect KB—D+、D- of rear panel of the DVR when

Connect KB—D+、D- of rear panel of the DVR when connect to Hikvision DVR

#### 3.2.1 Front Panel

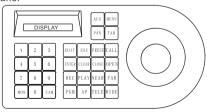


Fig2 (Front Panel)



## 3. Instruction on Key Functions on The Panel

17			Mile on the majoral and a majoral (T.S.)			
Key symbol	Key name	When hard disk video recorder used (TAB key light is on) When terminal equip used (TAB key light isn't on)				
0~9	Number	Input data of equipment				
MON	Channel	Confirm DVR address preset	Unused			
CAM	Address	Unused	Confirm address preset			
MENU	Menu	Menu start calls	Unused			
EDIT	Edit	Edit image hidden preset: confirm	Unused			
		record and playback preset				
ESC	Escape	Cancel current command	Decoder is automatically scanning			
TAB	Mode	DVR/ terminal equipment switch	DVR/ terminal equipment switch			
PAN	Shift up	When TAB key light is on,	Number keys 2,6,4,8 are up, down, left and			
		DVR/terminal equipment switch	right functions respectively			
REC	Record	Enter record preset (manual)	Unused			
PRESET	Preset	Unused	Set and clear preset point			
CLEAR	Clear	Unused	Clear data information			
AP	Revise	Clear image hidden point	Unused			
PLAY	Playback	Video playback	Unused			
ENTER	Enter	Confirm menu items	Unused			
CALL	Call	Unused	Call preset function and scan function			
PGM	Program	Unused	Confirm protocol and baud rate			
CLOSE	Aperture	Aperture off	Aperture off			
			Exit modify manu of high speed dome			
OPEN	Aperture	Aperture on	Aperture on			
			Enter modify manu of high speed dome			
NEAR	Focus	Focus near	When focusing near, modifying items			
			escape from speed dome camera menu			
FAR	Focus	Focus far away	When focusing far, modify item parameters			
			from speed dome camera menu			
TELE	Dolly-out	Lens dolly-out	When dolly-out, cursor moves upwards from			
			speed dome camera menu			
WIDE	Dolly-in	Lens dolly-in	When dolly-in, cursor moves downwards			
			from speed dome camera menu			
AUX1	Auxiliary 1	Picture 1, 4, 9, 16 switch	Decoder auxiliary 1			
AUX2	Auxiliary 2	Unused	Decoder auxiliary 2			
POWER	Power	Power on/off	Unused			
	Rocker	Cradle head moves upwards, downwards, leftwards and rightwards, menu option (flip leftwards and rightwards) and number +/- in menu (flip upwards and downwards)	Cradle head moves upwards, downwards, leftwards and rightwards			
	Rocker turning	Turn clockwise is focusing near; turn counter-clockwise is focusing far	Turn clockwise is focusing near; turn counter-clockwise is focusing far			

Note: terminal equipment means variable speed intellectual neutral speed ball, variable speed intellectual high speed dome, decoder, matrix, etc.

#### 3.3 Instruction of LCD panel

LCD panel display the mainly control information and part of operating information. It will turn into Power saving mode automatically in 10 seconds without any input.(Lowest brightness)



PS: The plastic film of the LCD panel is just for protection, tear it up before use.

The first line "NUN=xxx" temporary display the number input. Press (CLEAR) key to clear the number.

The first line also display protocol and other command of operation. Please refer to 4.1.3 and 4.1.4:

The second line "M=xxx" display the device address of DVR, operation method please refer to 4.2.1. Ignore it if connect with terminal device directly. "C= xxx" display the address of terminal device. Operation method please refer to 4.1.1. Ignore it if connect to DVR.

The second line "B=xxx" is about Baud rate. Operation refer to 4.1.2

- "PELCO-D" display "PROTOCOL: PELCO-D"
- "PELCO-P" display "PROTOCOL: PELCO-P"
- "PTS" display "PROTOCOL: PTS"
- when DVR is working, "PELCO-D" protocol display "PROTOCO
- when operate "up" command, display "\*\*\*\*\*\*\* UP \*\*\*\*\*\*\*
- when operate "down" command, display "\*\*\*\*\*\*\* DOWN \*\*\*\*\*\*\*"
- when operate "left" command, display "\*\*\*\*\*\*\* LEFT\*\*\*\*\*\*"
- when rocker move slantly,LCD panel display two direction alpha (with "+")
- when operate "lens close" command, display " \*\*\*\*\*\*\*\* CLOSE \*\*\*\*\*\*\*\*
- when operate "lens open" command, display "\*\*\*\*\*\*\* OPEN \*\*\*\*\*\*"

- when operate command "focus near" it display " \*\*\*\*\*\*\* NEAR \*\*\*\*\*\*\*
- when operate command "focus far" it display "\*\*\*\*\*\*\* FAR \*\*\*\*\*\*\*"
- when operate command "telephotograph" it display "\*\*\*\*\*\*\* TELE
   \*\*\*\*\*\*\*\*
- when operate command "lens wide" it display "\*\*\*\*\*\* WIDE \*\*\*\*\*\*\*

## 4. Operation manual

## <u>Please be familiar with the operation of decoder PTZ scanner,</u> speed dome and DVR before operated this keyboard.

4.1 Operation when connected with terminal device Keep (TAB)key light on, refer to 4.1.2 and 4.1.3.

#### 4.1.1Address setting:

Press relative number keys as per position of decoder preset and then press [CAM] key for confirmation, address range is 0~999.

#### 4.1.2. Baud rate preset:

Press relative binary number key as per baud rate required by decoder (for instance: for 2400, press [2] [4]; for 4800, press [4] [8]; and for 9600, press [9] [6]), and then press [PGM] key for confirmation.

## 4.1.3 . Protocol setting:

Input 44, press [PGM] key, select Pelco-D protocol.

Input 55, press [PGM] key, select PTS protocol (BO1 compatible).

Input 50, press [PGM] key, select Pelco-P protocol.

## 4.1.4 Manual operation of PTZ:

Method 1: flip the rocker up and down, let and right to make the scanner turn up and down, let and right. when the rocker turn back to neutral, it stops scanning. The angle of inclination is more big, the PTZ movement is more faster.

Method 2: press [PAN] key, the light is on, then press number keys 2, 6, 4 and 8 to scan upwards, downwards, leftwards and rightwards, loose and scanning stops. Press [PAN] key again to exit.(If the (TAB)key light is on,need to press (ESC) key first then press (PAN) key to exit.

#### 4.1.5 Automatic scanning control of Scanner:

Press [ESC] key, scanner begin automatic scanning, slightly rock the rocker or press [EDIT] key to stop scanning.

#### 4.1.6 Lens control:

Press [CLOSE], [OPEN], [NEAR], [FAR], [TELE] and [WIDE] keys respectively to control Iris on/off;Focus near/ far; Dolly in/out; when the rocker is three-dimensional vector rocker, clockwise turning of the scanner is used to control Telephotograph (TELE) and close-up lens (WIDE).

#### 4.1.7 Auxiliary function:

Press [AUX] key to start [AUX1], press again is to close then.

4.1.8 Preset settings and delete: numeric keys N + PRESET is set N preset position. Initially N (number keys), and then a long press PRESET 3 seconds to hear the sound of the "drops", that is, delete the number N preset position.

#### 4.1.9 Others

The operation of controlling high speed dome, medium speed dome, low speed dome, scanner with decoder buit-in, decoder of other terminal equipments please refer to related manual accordingly.

## 4.2 Operation manual when connect with DVR

When(TAB) key light is on,DVR starts,then the mainly functions of DVR can be operated through keyboard as well as operated through DVR.

## 4.2.1 Setting of Device number:

Press (CLEAR) key when (TAB)key light is off, then press the corresponding device number that displayed on the DVR, then press (MON) to confirm. And then press (TAB) to enter working mode.

## 4.2.2 Enter operating manu of DVR

Press (MENU) when (TAB) key light is on,to enter operating manu of DVR, press (ESC) to exit. Press twice (MENU) to enter again after exit.

## 4.2.3 Enter manual operation setting:

When (TAB) key&(MENU) key lights are both on, press (REC) to enter manual record preset. And then press (ESC) key to exit.

## 4.2.4 Enter manual playback preset:

When [TAB] & [MENU] key lights are both on, press [PLAY] key to enter manual video playback preset and then press [ESC] key to exit.

## 4.2.5 Enter terminal device parameter and preset-points preset.

When [TAB] key light is on, press [MENU] key and then the light is on, enter DVR menu preset, choose "decoder" with rocker, press [ENTER] key for confirmation and enter decoder preset-point preset, choose "cancel" with rocker to cancel this preset and then press [ENTER] key to confirm.

#### 4.2.6 Images switching:

Under preview interface, press number key to switch to relative camera images.

## 4.2.7 Enter manual operation of PTZ:

When [TAB] key light is on, press [PAN] key and then the light is on, flip rocker upwards, downwards, leftwards and rightwards, when the rocker stands neutral, it stops turning. When [TAB] key & [PAN] key are both on, press [CLOSE], [OPEN], [NEAR], [FAR]...[WIDE] key respectively to control the lens. When the keyboard is 3 Dimentional racker, rotation of the racker can be used to control zoom in and out. Press (ESC) to exit.

## 4.2.8 Enter image hidden preset:

When [TAB] key light is on, press [MENU] key, choose "image" with rocker and press [ENTER] key for confirmation; when selecting hidden area, press [EDIT] key (this area is in red); if canceling hidden area (in yellow) is needed, press [AP] key and then press [ESC] key to escape.

#### 4.2.9 Matrix switch:

When [TAB] key light is on, press [ESC] key and then press [PRESET] key, choose relative output number key of monitor, and then choose number key in your camera channel.

#### 4.2.10 Start camera password preset:

When [TAB] key light is on, press [MENU] key and then the light is on, choose "local display" with rocker, press [ENTER] key for confirmation and then choose "start password preset" and then press [ENTER] key for selection, switch rocker to "confirmation" and preset password, modify password in "User management" and press [ESC] key to escape.

## 4.2.11. Close camera power supply:

When [TAB] key light is on, press [POWER] key and press [ENTER] key for confirmation; when [MENU] key light is off, choose "Cancel" with rocker and press [ENTER] key for confirmation in order to cancel close operation.

#### 4.2.12 Others

Other opperation method to control DVR please refer to to related DVR manual.



# CAUTION

RISK OF ELECTRIC SHOCK DONOT OPEN



#### Note:

One who is not professional can't open the casing.

There's no part in the machine that user can repair by himself.

Repair work must be done by qualified personnel.

Distributor:		