Preface

This menu describes the operation of SAE-KB06 multi-functional keyboard. KB06 is a special surveillance keyboard, which designed according to the Human Engineering Principle, specially for controlling Integrate Speed Dome, Integrate Box Camera and Video Network Matrix DVR and multiplexer. For easy operation, it has LCD menu. Users can control dome/camera by operating the keyboard. For example, control Dome/Camera Pan/ Tilt movement, Iris, Zoom, Auto Scan, Auto Tour, Preset and Pattern etc. what's more, users can set Alarm Activate and Alarm relay by controlling Video Network Matrix through Ethernet or RS485

1. General

1.1 Feature

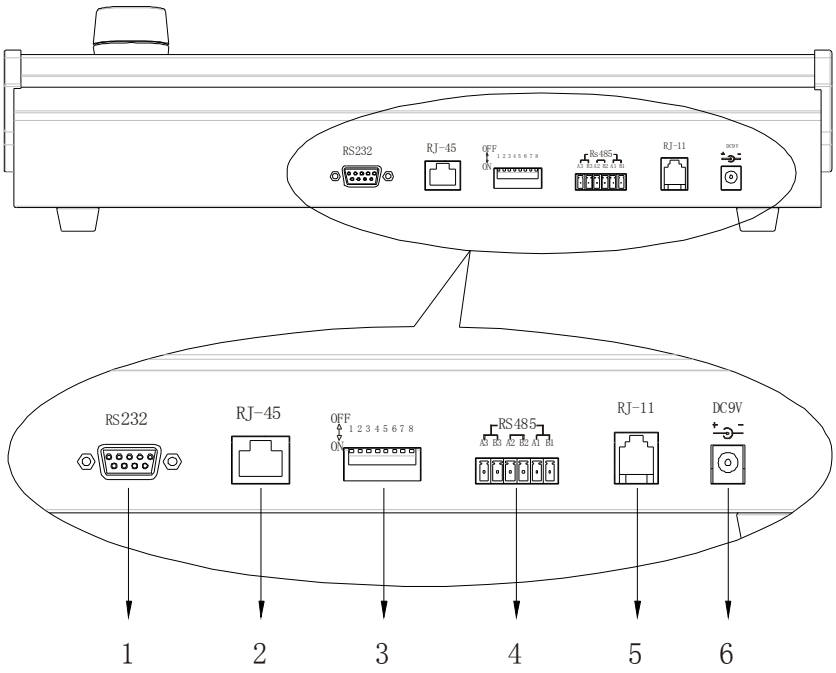
- Control Pan/Tilt, Focus, Zoom, Iris and other parameters setup;
- RS 485 Control Bus, control up to 255 Domes/Cameras;
- LCD Menu for easy operation;
- Camera Function Setup: Set Camera address, Presets, Auto Tour, Auto Scan, etc.
- Alarm activation and Alarm Export;
- Connect up to 4 keyboards when work on RS485;
- Control up to 1024 Domes with Ethernet based matrix;
- Connect up to 64 keyboards when work on Ethernet.

1.2 Specification

Communication Interface	Interface Type	RS-485（Half-duplex）and RS-232	Ethernet
	Connection Type	DJ216-pin Plug、RJ-11 6-pin Plug and RS-232 DB9 Jack	RJ45
	Baud Rate	2400/4800/9600/19200 bps	10M bit/s
Display	LCD	192X64 pixed，32X8 Character	
Joystick		3-axis （Left/Right；Up/Down；Zoom）	
Power Supply		DC 12V	
Power consumption		5W	
Dimension （WxDxH）		390×178×86（mm）	
Weight		2.7kg	
Environment Temperature		0℃～40℃	
Relative Humidity		<90%	

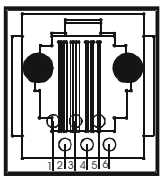
2. Keyboard Installation

2.1 Keyboard Interface Connection



picture 1

- DIP Switch
  Set bit 1,2 as ON stands for checking status, for technician only.
- RS485 port
  3 lines of RS485 outputs(A1--B1、A2--B2、A3--B3).
  A1,B1 for RS485 control Bus; A2,B2 for VCL DVR; A3,B3 reserved.
- Power supply port
  DC 12V, refer to the picture 1 for "+"and "-" poles.
  Note: When the keyboard is connected to DR3207 matrix, There's no need to connect power supply as power is supplied from the matrix.
- Special connection port for DR3207 matrix (RJ-11)
  It's for connecting keyboard to DR3207 matrix. The connector is RJ-11. Refer to the following picture and form for profile and pin designation.

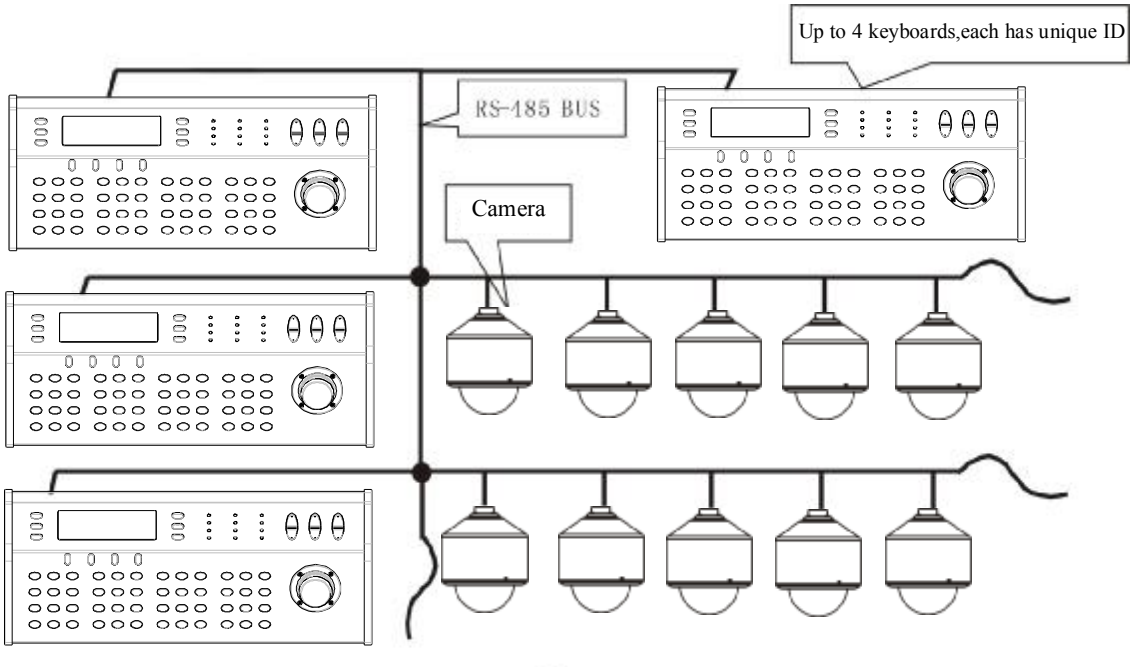


Pin 1 2 3 stand for GND GND A2
Pin 4 5 6 stand for B2 GND +12V

- Standard Ethernet(RJ-45) port
  This port is for connecting keyboard to M8000 matrix.
- Standard RS232 port
  It's for connecting keyboard to computer or multiplexer.

2.2 Keyboard and Camera Connection

- Keyboard and camera are parallelly connected to the RS 485 Bus. Refer to picture 2.

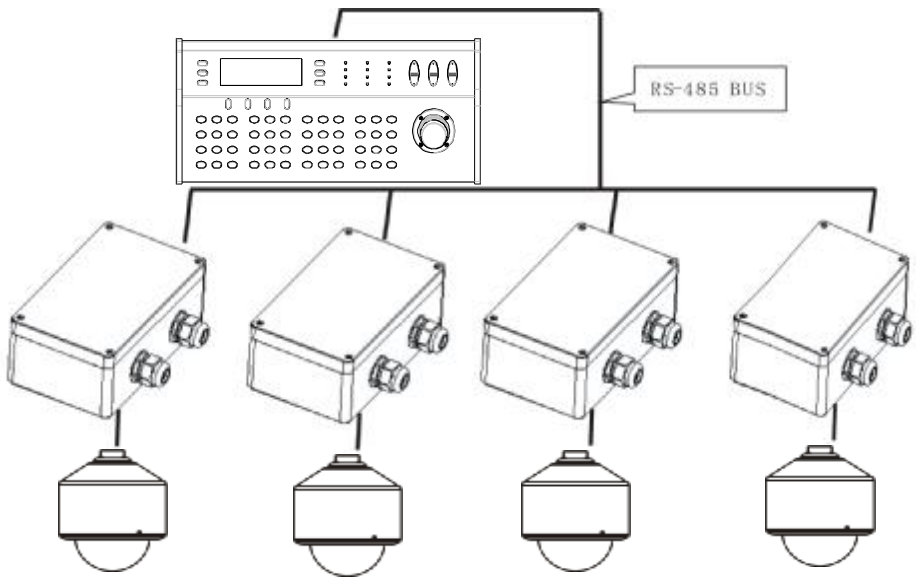


picture 2

- System can connect up to 4 keyboards, each of them has unique ID. System must have one and only one keyboard ID set to be 1.

2.3 Keyboard, Camera and Alarm Box Connection

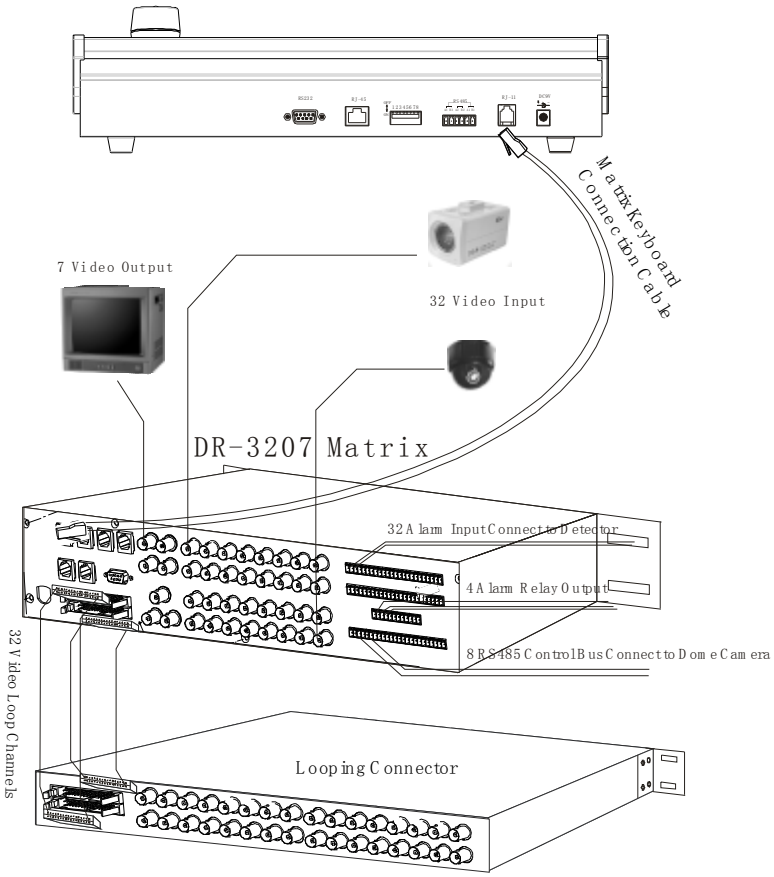
Camera must be connected to alarm box if camera needs to carry out the alarm function. Each alarm box can connect one camera only. Keyboard can control alarm box and dome camera operation. Connection refer to picture 3. Alarm box ID setting refer to the alarm box menu. Keyboard should select the dome ID as the same with relative alarm box ID.



picture 3

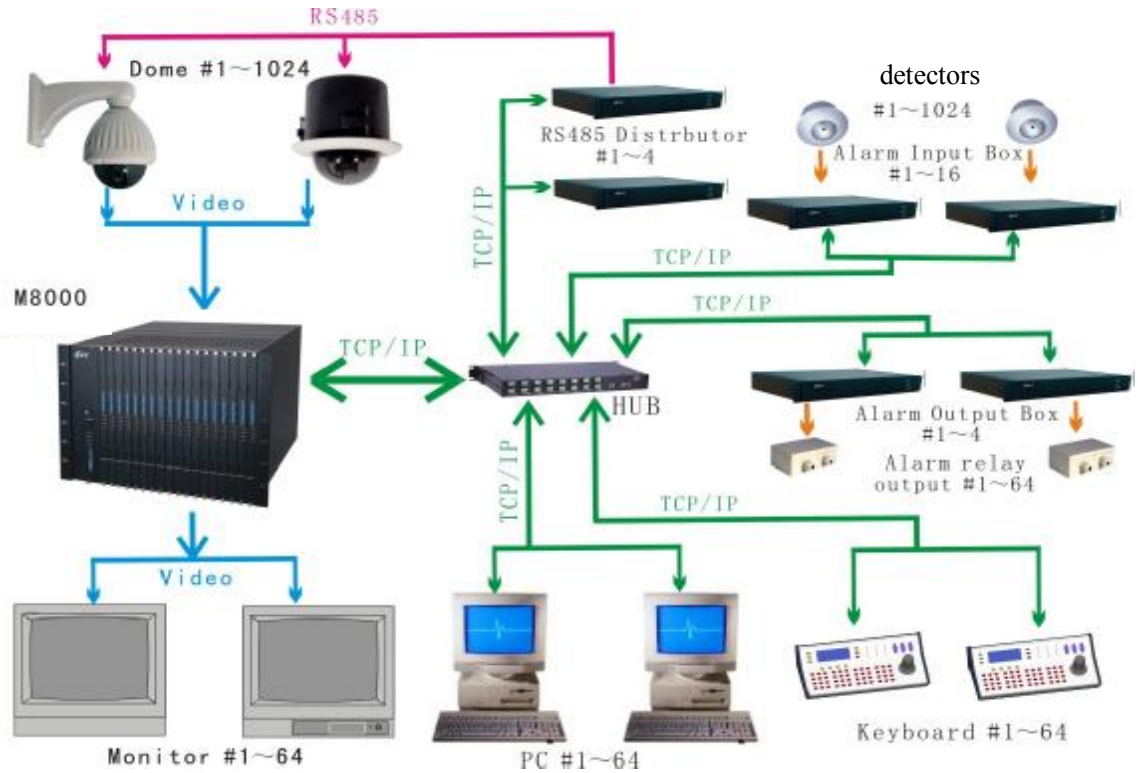
2.4 Keyboard and Matrix Connection

- Connect to DR-3207 matrix



picture 4

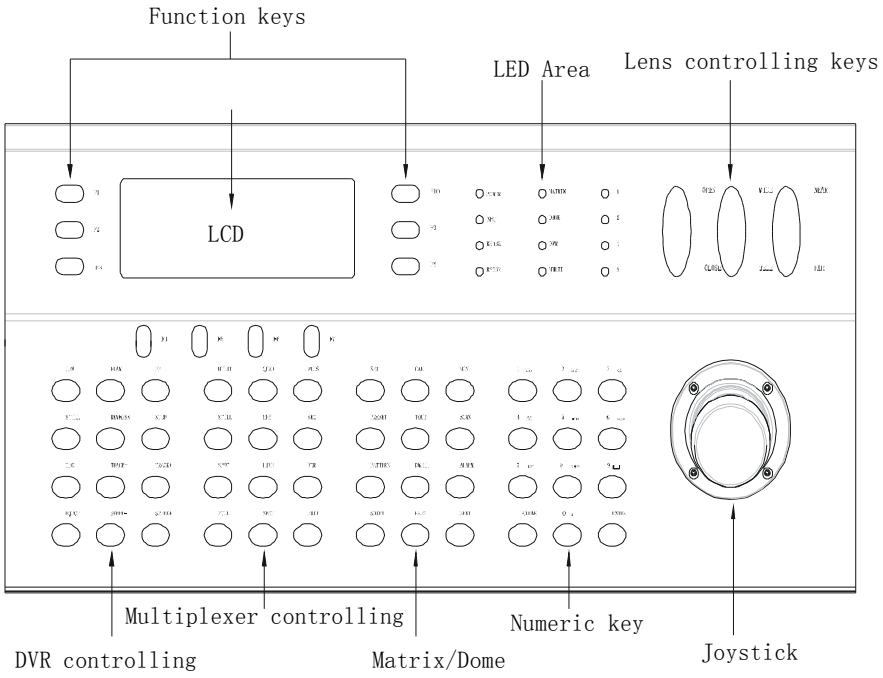
- Connect to M-8000 matrix



picture 5

3. Keyboard Operation

3.1 Keyboard Profile and Function



picture 6

1 LCD displays the current control status, the current menu and other necessary information. If there is operation, the backlight of LCD will be lit and it will switch off automatically in 10 seconds after there is no operation.

2 Lens controlling keys are for control lens IRIS, ZOOM, FOCUS or use other combined keys to control lens.

3 Keyboard distributed into 6 areas

1st area －－ keys around LCD，F1～F10 function keys

2nd area －－ the first key phalanx on the left; DVR control keys

3rd area －－ the second key phalanx on the left; multiplexer control keys

4th area －－ the second key phalanx on the right;

5th area －－ the first key phalanx on the right；

6th area －－ the first key phalanx on the upper right；

4th、5th、6th areas are matrix and dome camera control keys.

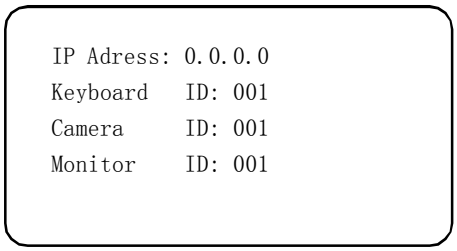
4 Numeric keys are used to input the parameter value and select menu items etc. combined keys are used to reach other functions. Press DEL key for 2 seconds to clear a wrong input.

5 Use separate function key or combined function keys to conduct function control. For example: Press F1 key to enter menu.

5 The joystick is used to control the pan/tilt movements of camera and edit menu. It can also be used to conduct ZOOM control.

3.2 Power On

Make sure the connections are correct before power on. The default peripheral equipment is M 8000 matrix. Then switch on the keyboard. LCD displays the information of the keyboard as picture 7 shows and the keyboard is in stand-by status.



picture7

" IP Address : 0.0.0.0" stands for the current keyboard ID hasn't been set.

"Keyboard ID: 01" stands for the current keyboard ID, factory default value is 01.

"Camera No: 001" stands for the current controllable camera ID number, default value is 001 when put the power on.

"Monitor No: 01" stands for the current monitor ID.

Note: before the keyboard input the commands, check if the keyboard has connected to the peripheral equipment and the setting is correct. The camera ID must be the same with the desired control target camera ID.

When connect to M 8000 matrix, the keyboard must has correct IP address. The IP address can not be 0.0.0.0;

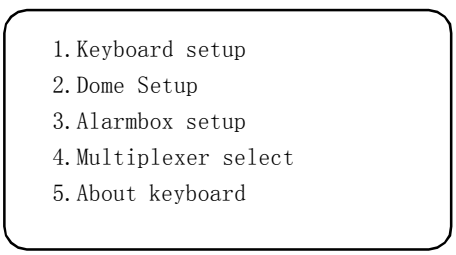
When connect to DR3207 matrix, use JR-11 wire to connect the keyboard to DR3207.

When connect to Dome and DR3207 matrix, set the keyboard baud rate the same as the controlled equipment.

3.3 Menu Operation

1. Enter main menu

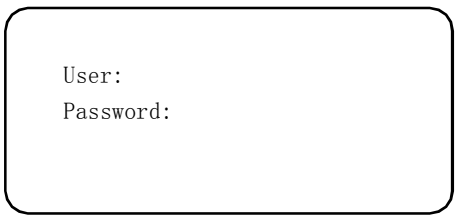
Press F1, LCD as picture 8 shows:



picture8

2. Input user name and 6-bits password

User name must be accordant with the user name which corresponding to the keyboard ID. If the user name and the password are correct, user can enter the menu, LCD as picture 9 shows.



picture 9

3. Enter the sub-menu

Press the item number on keyboard numeric pad, or move the joystick up and down to the item number and move the joystick right to enter the sub-menu.

4. Return the upper menu level

Press F1, or move the joystick left to return to the upper menu level.

5. Function operation

Refer to the instruction to select the corresponding numeric pad, and carry out the corresponding function operation.

6. Complete operation refer to the instruction

Complete the corresponding function operation or set refer to the instruction. Refer to the following section.

Note: the default keyboard password is"0 0 0 0 0 0", if you haven't set the password, you can enter the menu as picture 9 shows directory.

3.4 Command Operation

The keyboard can conduct the controlling and setting commands to matrix, camera, pan/tilt, lens by function keys, numeric keys and joystick. Please refer to the following sections for more details.

Keyboard input:

- Joystick

  Operate the joystick to conduct the up, down, left, right movements of the camera and control the lens.
- Single Key Command

  Press only one key to complete a command. For example: the command of Iris CLOSE/OPEN.
- Combined Key Command

  Sometimes user needs to conduct some commands with several functional keys or numeric keys.

  For example, the command of calling a preset is:

  N + PRESET

  User should conduct the following operation continually:

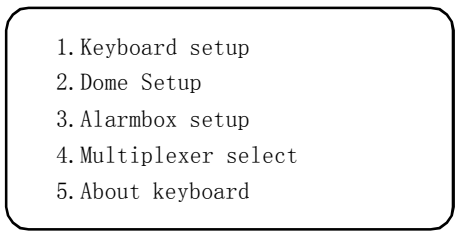
1. Input numeric value N by keyboard numeric key.
2. Press PRESET key

4. Set keyboard Menu

4.1 Set keyboard Parameter

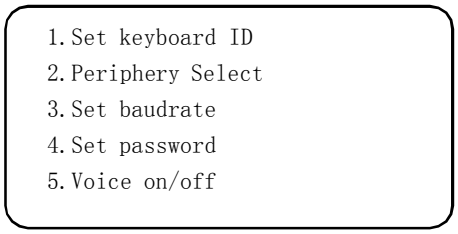
4.1.1 Set Keyboard ID

1. Enter the menu, LCD as picture 10 shows:



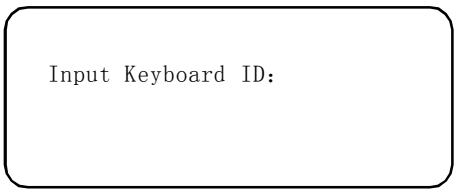
Picture 10

2. Press 1 to select set keyboard, LCD as picture 11 shows:



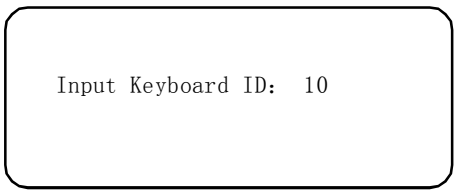
picture 11

3. Press 1 to select set keyboard ID, LCD as picture 12 shows:



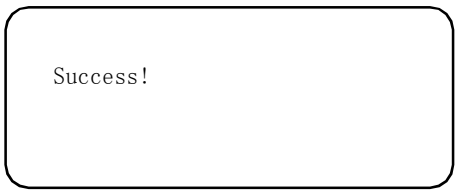
Picture 12

4. Press the corresponding numeric key1-64, as picture 13 shows:



Picture 13

5. Press ENTER to confirm;



Picture 14

Picture 14 means operation successful

6. Press F1 to back to the upper menu level

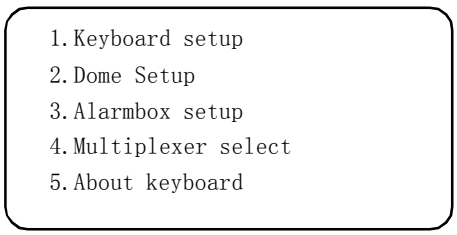
Note: The factory default ID number of the keyboard is 1. The ID number must be set as 1 when only one keyboard is connected in the system. Up to 4 keyboards are connected to the same system by RS485 distributor. And only one keyboard must be set as 1, others' ID are different. Otherwise, all the keyboards can not work propenly.

Note: Up to 64 keyboards can be connected to one system when connected to the Ethernet matrix. All of the IDs must be different.

4.1.2 Select Peripheral Equipment

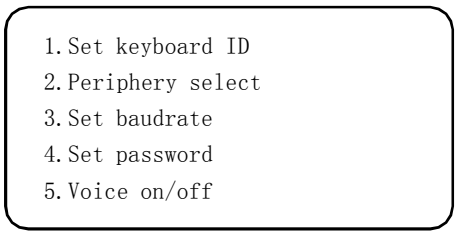
KB03 select the peripheral equipment by the DIP Switch while the KB06 selects the peripheral equipment by the menu. The steps as follow:

Press F1 to enter the main menu(Step 1).



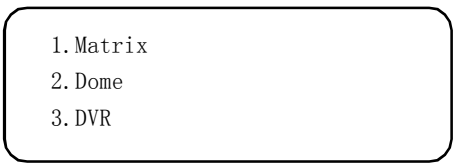
pictute 15

Select 1. Keyboard setup(Step 2)



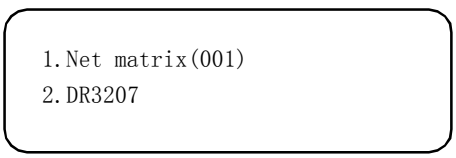
picture 16

Select 2. Periphery select(Step 3)



picture 17

Select 1.Matrix



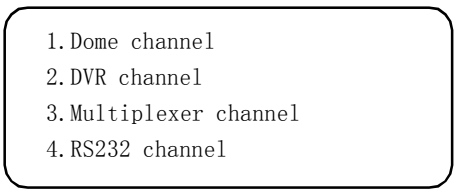
picture 18

Select 1.Net matrix(001) Set the peripheral controlled equipment as M8000 matrix.
User can set the connecting matrix ID.
Select 2. DR3207 Set the peripheral controlled equipment as DR3207 matrix.
Press F1 until exit the menu, selection effect.

During step 3:
Select 2.Dome, select the dome protocol
Select 3.DVR, select DVR

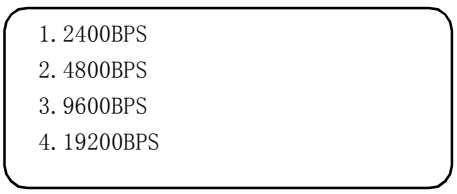
4.1.3 Set Baud Rate

1. Enter the menu (LCD as picture 10 shows)
2. Press 1 to select KB setup (LCD as picture 11 shows)
3. Press 3 to select KB baud rate (LCD as picture 19 shows)



Picture 1 9

Press the corresponding number key; or move the joystick up and down to select the item needed to be set; or move the joystick up and down to select the baud rate needed to be set. Press ENTER key or move the joystick right to confirm it. LCD as picture 14 means operation successful.



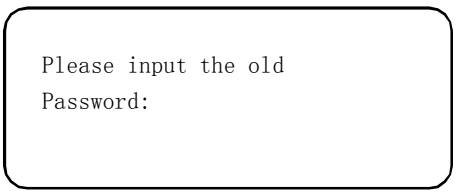
picture 20

4. Press F1 to return

Note: choose 19200 bps when connect to DR3207 matrix; no need to set baud rate when connect to M8000 matrix.

4.1.4Set Password

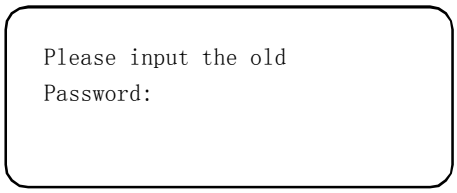
1. Enter the menu (LCD as picture 10 shows)
2. Press 1 to select Keyboard setup(LCD as picture 11 shows)
3. Press 4 to select Set password (LCD as picture 21 shows)



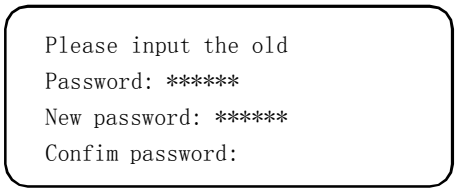
picture21

After enter the old password, press ENTER key: if the password error, there will be an error message to note user. LCD as picture 22 shows. User can input again until the correct password. Press F1 to exit set password and to go to upper menu.

After input the new password, press ENTER key: system will requite user to confirm the new password. LCD as picture 23 shows. User should input the new password and press ENTER key. If two passwords you had input are different, operation will be unsuccessful, and the old one is still effective.



picture22



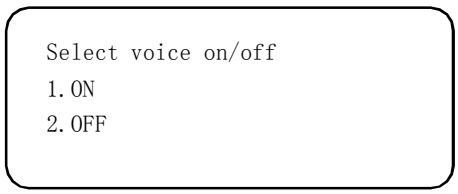
picture23

4. Press F1 to return

Note: Users can enter the keyboard menu directly when the password is “0 0 0 0 0 0”.

4.1.5 Voice on/off

1. Enter the menu (LCD as picture 10 shows)
2. Press 1 to select keyboard setup (LCD as picture 11 shows)
3. Press 5 to select voice on/off (LCD as picture 24 shows)



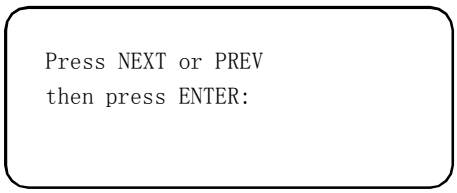
picture24

Press corresponding number key or move the joystick up and down to select the item. Then press ENTER key or move the joystick right, LCD as picture 14 shows. That means operation successful.

4. Press F1 to return

4.1.6 Set LCD contrast

1. Enter the menu (LCD as picture 10 shows)
2. Press 1 to select keyboard setup (LCD as picture 11 shows)
3. Press 6 to select LCD contrast adjust (LCD as picture 25 shows)



picture25

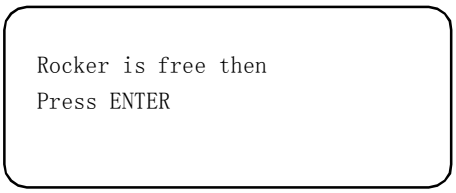
Press “next” key to increase LCD contrast adjust.

Press “prev” key to reduce LCD contrast adjust

Press ENTER key after setting, LCD as picture 14 shows. That means set successful.

4.1.7 Joystick calibration

1. Enter the menu (LCD as picture 10 shows)
2. Press 1 to select keyboard setup (LCD as picture 11 shows)
3. Press 7 to select Rocker calibrate, free the rocker as the nature position then press ENTER. LCD as picture26 shows.



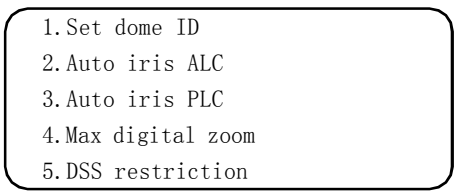
picture26

Press ENTER key to complete operation, LCD as picture 14 shows. That means operation successful.

4.2 Control Dome and Pan/Tilt

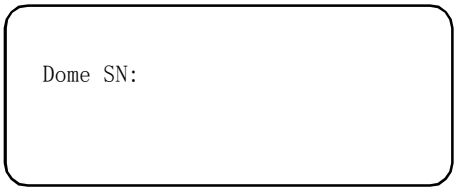
4.2.1 Set Dome ID

1. Enter the menu (LCD as picture 10 shows)
2. Press 2 to select Dome setup (LCD as picture 27 shows)



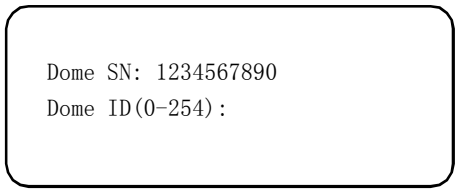
picture27

3. Press 1 to select Set dome ID (LCD as picture 28 shows)



Picture28

Input 10 bites Dome SN, take ”1234567890” for example, LCD as picture 29 shows, after input the10 bits Dome SN, press ENTER key to confirm.



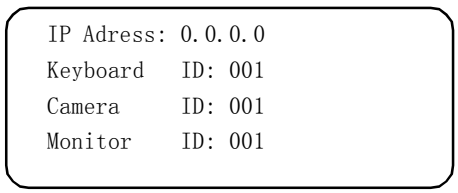
Picture29

4. Press F1 to return

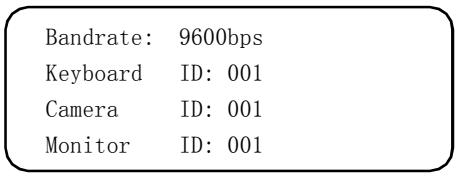
Note: Camera DIP switch must be set at soft ID, refer to the camera manual.

4.2.2 Select Target Camera

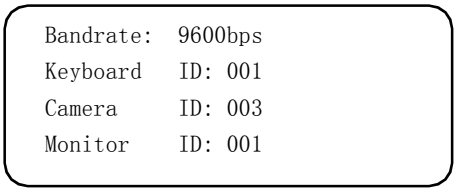
Under the stand-by video state as picture 30, picture 31 shows, this command can select the ID number as current camera (Example: to select camera with ID number 3). If the stand-by video state is picture 30, LCD will shows as picture 32:



picture30



picture31



picture32

4.2.3 Set the Camera Parameters

- Use the commands to set camera parameters

  SET + N + SHIFT + M + ENTER

  N stands for the command number of camera parameter setting. Refer to the attached “Command table of

camera parameter setting" for the detailed value.

M stands for the parameter value of camera parameter setting. Refer to the attached "Command table of camera parameter setting" for the detailed value.

- Set camera auto iris ALC

  Two methods to be selected as below:

  1.Set it as Appendix? by command number No.7.

  2.Set it through the menu:

  1) Enter the menu as picture 10 shows;

  2) Press 2 to select Dome setup as picture 27;

  3) Press 2 to select Dome auto iris ALC as picture 33 shows;

  4) Input the setting number and press ENTER key to confirm.

- Set camera auto iris PLC

  Two methods to be selected:

  1 Set it as Appendix? by command number No.8;

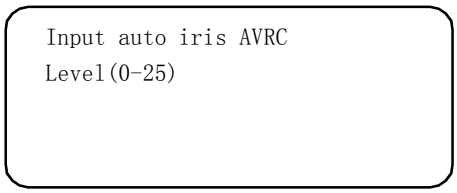
  2 Set it through the menu:

  1) Enter the menu as picture 10 shows;

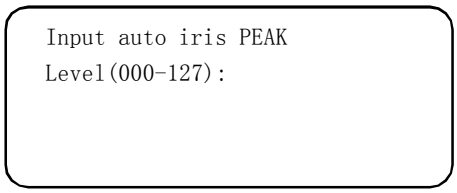
  2) Press 2 to select Dome setup as picture 27 shows;

  3) Press 3 to select camera auto iris PLC as picture 34 shows;

  4) Input the setting number and press ENTER key to confirm.



picture33



picture34

- Set camera maximum digital zoom.

  Two methods to be selected as below:

  1.Set it as Appendix Ⅰ by command number No.9.

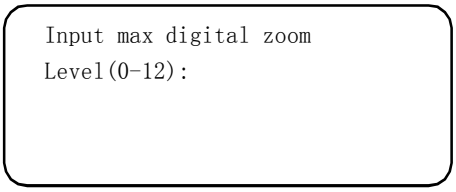
  2.Set it through menu;

  1) Enter the menu as picture 10 shows;

  2) Press 2 to select Dome setup as picture 27 shows;

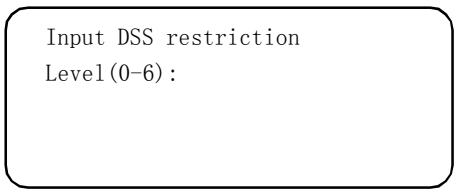
  3) Press 4 to select Camera max digital zoom as picture 35 shows;

  4) Input value of maximum digital zoom or move the joystick to select, then press Enter key to confirm.



picture 35

- Set camera maximum DSS restriction.
  Two methods to be selected as below:
  1.Set it as Appendix Ⅰ by command number No.10.
  2.Set it through menu;
  1) Enter the menu as picture 10 shows;
  2) Press 2 to select Dome setup as picture 27 shows;
  3) Press 5 to select Camera DSS restriction as picture 36 shows;
  4) Input value of maximum DSS restriction or move the joystick to select, then press Enter key to confirm.



Picture 36

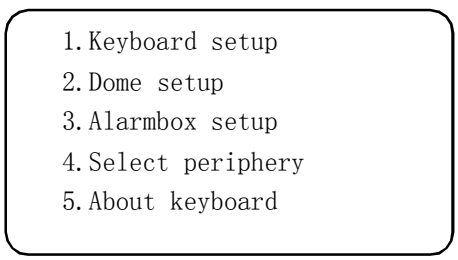
4.3 Control Alarm Box

Operation for keyboard to alarm box

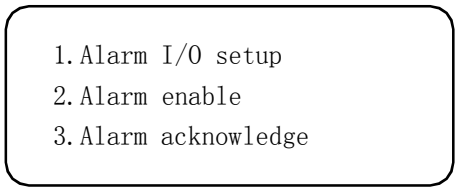
- Set alarm input port status and the corresponding preset number.
- Arm or disarm the alarm input port.
- Set the reset mode(manual/auto)and reset time of each alarm input port.
- Manually acknowledge the alarm input.
- Control camera through alarm box without effecting camera's functions. The ID number of the connected camera is set by the DIP switch of alarm box.

4.3.1 Set Alarm Input Port Status and Corresponding Preset

1. Enter the menu as picture 37 shows:
2. Press 3 to select Alarm box setup as picture 38 shows:

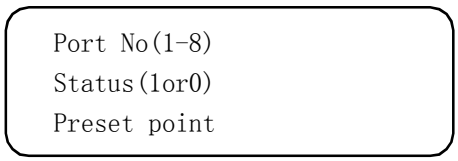


picture37



picture38

3. Press 1 to select Alarm I/O setup as picture 39 shows:

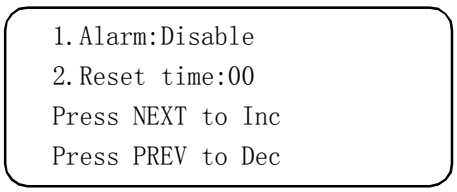


Picture39

Input the corresponding port number (1-8) and press ENTER key, then the cursor moves to the second line. Select the port status (1: Normal Open; 0: Normal Close) and press ENTER key. The cursor moves to the third line. Input the corresponding preset number and press ENTER key. The LCD displays as picture 35 again. Set another port, status and preset point. After completing all the settings, press F1 key to return to upper menu.

4.3.2 Set Alarm Arming/Disarming and Reset Time

1. Enter the menu and LCD displays as picture 37;
2. Press 3 to select Alarm box setup and LCD displays as picture 38;
3. Press 2 to select Alarm enable as picture 40 shows;



Picture40

Press NEXT key to switch from alarm DISABLE and ENABLE, which is to disarm or arm an alarm. Press PREV key or NEXT key to revise the reset time with effective value as 0-50. The alarm box needs manual reset when the reset time is set as 0.

4. Press F1 key to exit.

4.3.3 Acknowledge Alarm Input Manually

1. Enter the menu as picture 37 shows;
2. Press 3 to select Alarm box setup as picture 38 shows;
3. Press 3 to select Alarm acknowledge as picture 41 shows;

:

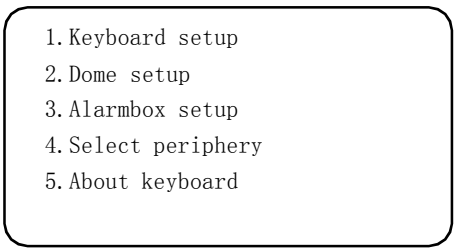
picture 41

Input the port number to be acknowledged and press ENTER key.

4. Press F1 key to exit.

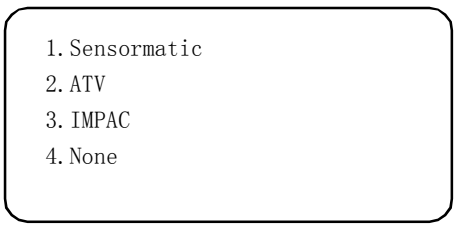
4.4 Multiplexer Controlling

1. Enter main menu, LCD as picture 42 shows:



Picture 42

2. Press 4 to select Periphery equipment, LCD as picture 43 shows:



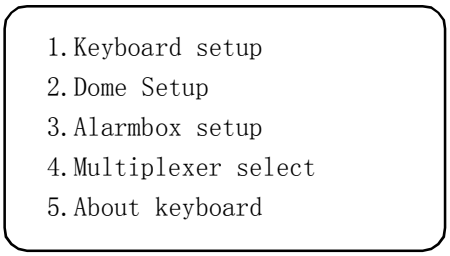
Picture 43

3. Press 1,2,3 to select SENSORMATIC, ATV, IMPAC
4. Press 4 to select NONE

Keyboard can not control MULTIPLEXER when you select NONE

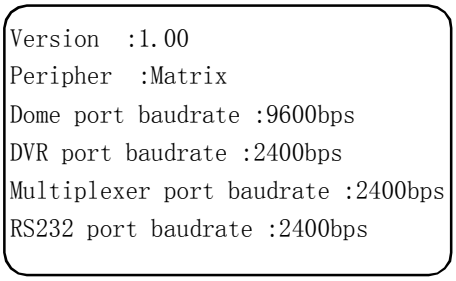
4.5 Keyboard Information Display

1.Enter the menu, LCD as picture 44 shows:



picture44

2.Press 5 to select About keyboard, LCD as picture 45 shows:



picture45

3. Press F1 key to return.

5、Keyboard Command Operation

5.1 Command Form for Keyboard to Net Matrix

	Item	Function	Command	Note
Matrix command	Menu	Enter matrix menu	[F8]	Command keys can't be input after you enter the menu
		Exit matrix menu		
	Auto scan switch	Area setting	[X1]+[PREV]+[X2]+[NEXT]	X1，X2 dome ID
	(SCAN)	Activate auto switch	[SHIFT]+[X]+[SCAN]	speed=X
		Stop auto switch	[SHIFT]+[0]+[SCAN]	speed=0
	Tour	Activate Tour	[SHIFT]+[X]+[TOUR]	X=sequence
		Stop Tour	[SHIFT]+[0]+[TOUR]	X=0
	Salvo switch	Set dwell time	[SHIFT]+[T]+[DWELL]	T=dwelling time, unit: second
		Activate salvo switch	[SHIFT]+[X]+[PATTERN]	X=sequence
		stop salvo switch	[SHIFT]+[0]+[PATTERN]	X=0
	Manual switch	prev	[PREV]	
		next	[NEXT]	
	Monitor switch	Set current monitor	[X]+[MON]	X monitor ID
	Single video switch	Single video switch	[X]+[CAM]	X dome ID
	Fortify	Single point arm	[SET]+X+[CAM]	X=area ID
		Single point disarm	[CLEAR]+X+[CAM]	
		Area arm	[SET]+X+[ALARM]	
		Area disarm	[CLEAR]+X+[ALARM]	
		All arm	[SET]+0+[ALARM]	
		All disarm	[CLEAR]+0+[ALARM]	
	Alarm ACK	Single ACK in appoint monitor	[ALARM]	X=monitor ID
		All ACK in appoint monitors	[X]+[ALARM]	
		All ACK in appoint area	[X+64]+[ALARM]	X=area ID
		All alarm ACK	255+[ALARM]	
	logout	User logout	[F2]	
		Date/time	SHIFT+X+[Open]/X+[Close]	
		camera ID	SHIFT+X+[Open]/X+[Close]	
		Camera title	SHIFT+X+[Open]/X+[Close]	
	Character overlay control	Monitor ID	SHIFT+X+[Open]/X+[Close]	
		Status row	SHIFT+X+[Open]/X+[Close]	
		All display	SHIFT+X+[Open]/X+[Close]	
		Monitor font	SHIFT+X+[Wide]/X+[Tele]	
	Character overlay window position	Activate Setup	X+[F10]	
		Stop setup	[F10]	
		Adjust position		

5.2 Command Form for Keyboard to Camera

	Items	Function	Command	Note
Dome command	Select current dome ID		[C]+[CAM]	
	Select current monitor		[M]+[MON]	Using only connect to matrix
	Enter keyboard menu		press F1	
	Preset	set	[SET]+[P]+[PRESET]	P: desired preset number
		call	[P]+[PRESET]	P: set preset number
	Home position	set	[W]+[DWELL]+[P]+[PRESET]	W: dwelling time
		delete	[0]+[DWELL]+[0]+[PRESET]	
	Tour	sequence set	[P]+[SET]+[T]+[TOUR]	T: tour sequence number(1--4)
		Dwell set	[DWELL]+[D]+[TOUR]	D: dwelling time
		activate	[T]+[TOUR]	T: tour sequence number (1--4)
		Delete sequence	[CLEAR]+[T]+[TOUR]	T: tour sequence number (1--4)
	Auto scan	Set left limit	[SET]+[1]+[SCAN]	
		Set right limit	[SET]+[2]+[SCAN]	
		activate	[V]+[SCAN]	V: scan speed
	PATTERN	Activate record	[SET]+[PN]+[PATTERN]	PN:PATTER sequence
		Stop record	[SET]+[0]+[PATTERN]	
		replay	[PN]+[PATTERN]	
	Dome parameter setup		[SET]+[CM]+[SHIFT]+[PR]+[ENTER]	CM: command number
				PR: parameter value

5.3 Command Form for Keyboard to Camera Parameter Setting

<table>
<tr><th></th><th>Function</th><th>Value</th><th colspan="3">description</th><th>Note</th></tr>
<tr><td>0</td><td>Resume dome camera default setting</td><td>0</td><td colspan="3"></td><td></td></tr>
<tr><td>1</td><td>Auto stop Idle</td><td>0-255</td><td colspan="3">After 50xData 2ms auto stop</td><td></td></tr>
<tr><td>2</td><td>Auto focus</td><td>0-255</td><td colspan="3">0:OFF</td><td></td></tr>
<tr><td>3</td><td>Auto iris</td><td>0-255</td><td colspan="3">0:OFF</td><td></td></tr>
<tr><td>4</td><td>R WB</td><td>0-255</td><td colspan="3"></td><td></td></tr>
<tr><td>5</td><td>B WB</td><td>0-255</td><td colspan="3"></td><td></td></tr>
<tr><td>6</td><td>AWB mode</td><td>0-255</td><td colspan="3">0: AUTO</td><td></td></tr>
<tr><td>7</td><td>Auto Iris ALC</td><td>0-255</td><td colspan="3"></td><td></td></tr>
<tr><td>8</td><td>Auto Iris PLC</td><td>0-127</td><td colspan="3"></td><td></td></tr>
<tr><td>9</td><td>Maximum Digital Zoom</td><td>0-8</td><td colspan="3">0:OFF</td><td></td></tr>
<tr><td rowspan="8">10</td><td rowspan="8">DSS restriction</td><td rowspan="8">0-6</td><td rowspan="2">Value</td><td colspan="2">Shutter speed</td><td rowspan="8"></td></tr>
<tr><td>NTSC</td><td>PAL</td></tr>
<tr><td>1</td><td>-1/60</td><td>-1/50</td></tr>
<tr><td>2</td><td>1/60-1/30</td><td>1/50-1/25</td></tr>
<tr><td>3</td><td>1/30-1/15</td><td>1/25-1/12</td></tr>
<tr><td>4</td><td>1/15-1/8</td><td>1/12-1/6</td></tr>
<tr><td>5</td><td>1/8-1/4</td><td>1/6-1/3</td></tr>
<tr><td>6</td><td>1/4-1/2</td><td>1/3-1/1.5</td></tr>
<tr><td rowspan="12">11</td><td rowspan="12">Exposure Priority</td><td rowspan="12">0-10</td><td colspan="2">value</td><td>Exposal</td><td rowspan="12"></td></tr>
<tr><td colspan="2">0</td><td>Auto</td></tr>
<tr><td colspan="2">1</td><td>F1.6</td></tr>
<tr><td colspan="2">2</td><td>F2.2</td></tr>
<tr><td colspan="2">3</td><td>F3.2</td></tr>
<tr><td colspan="2">4</td><td>F4.4</td></tr>
<tr><td colspan="2">5</td><td>F6.4</td></tr>
<tr><td colspan="2">6</td><td>F8.8</td></tr>
<tr><td colspan="2">7</td><td>F12</td></tr>
<tr><td colspan="2">8</td><td>F17</td></tr>
<tr><td colspan="2">9</td><td>F24</td></tr>
<tr><td colspan="2">10</td><td>F34</td></tr>
<tr><td rowspan="17">12</td><td rowspan="17">Shutter Priority</td><td rowspan="17">0-15</td><td rowspan="2">Value</td><td colspan="2">Shutter speed</td><td rowspan="17"></td></tr>
<tr><td>NTSC</td><td>PAL</td></tr>
<tr><td>0</td><td>AUTO</td><td>AUTO</td></tr>
<tr><td>1</td><td>1/2</td><td>1/1.5</td></tr>
<tr><td>2</td><td>1/4</td><td>1/3</td></tr>
<tr><td>3</td><td>1/8</td><td>1/6</td></tr>
<tr><td>4</td><td>1/15</td><td>1/12</td></tr>
<tr><td>5</td><td>1/30</td><td>1/25</td></tr>
<tr><td>6</td><td>1/60</td><td>1/50</td></tr>
<tr><td>7</td><td>1/120</td><td>1/100</td></tr>
<tr><td>8</td><td>1/180</td><td>1/150</td></tr>
<tr><td>9</td><td>1/250</td><td>1/250</td></tr>
<tr><td>10</td><td>1/500</td><td>1/500</td></tr>
<tr><td>11</td><td>1/1000</td><td>1/1000</td></tr>
<tr><td>12</td><td>1/2000</td><td>1/2000</td></tr>
<tr><td>13</td><td>1/4000</td><td>1/4000</td></tr>
<tr><td>14</td><td>1/10000</td><td>1/10000</td></tr>
<tr><td>15</td><td>1/30000</td><td>1/30000</td></tr>
<tr><td>13</td><td>BLC MODE</td><td>0-255</td><td colspan="3">0:OFF</td><td></td></tr>
<tr><td>14</td><td>Auto gain control</td><td>0-255</td><td colspan="3">0:AUTO</td><td></td></tr>
<tr><td>15</td><td>WDR</td><td>0-255</td><td colspan="3"></td><td></td></tr>
</table>

5.4 Command Form for Keyboard to DR3207 Matrix

	Item	Function	Command	Note
Matrix command	Menu	Enter Matrix Menu	SHIFT+SET	
		Exit Matrix Menu		
	Auto scan switch (SCAN)	Area setting	[X1]+[PREV]+[X2]+[NEXT]	X1，X2 Dome ID
		Activate auto switch	[SHIFT]+[X]+[SCAN]	Speed=X
		Stop auto switch	[SHIFT]+[0]+[SCAN]	Speed=0
		Clear step	F6	Matrix Menu
		Set step	F7	
	Tour	Activate Tour	[SHIFT]+[X]+[TOUR]	X= sequence
		Stop Tour	[SHIFT]+[0]+[TOUR]	X=0
		Clear step	F6	Matrix Menu
		Set step	F7	
	Salvo switch	Set dwell time	[SHIFT]+[T]+[DWELL]	T= dwelling time, unit: second
		Activate salvo switch	[SHIFT]+[X]+[PATTERN]	X= sequence
		stop salvo switch	[SHIFT]+[0]+[PATTERN]	X=0
	Manual switch	prev	[PREV]	
		next	[NEXT]	
	Monitor switch	Set current monitor	[X]+[MON]	X monitor ID
	Single video switch	Single video switch	[X]+[CAM]	X dome ID
	Fortify	Area arm	[ALARM]+ X+[NEXT]	X area ID
		Area disarm	[ALARM]+ X+[PREV]	
		All arm	[ALARM]+ 0+[NEXT]	
		All disarm	[ALARM]+ 0+[PREV]	
	Alarm ACK	Single ACK in appoint monitor	[ALARM]	X monitor ID
		All alarm ACK	255+[ALARM]	
	Character overlay control	Date/time	120＋[SET]	
		Video signal	121＋[SET]	
		Status row	122＋[SET]	
		Camera title	123＋[SET]	
		Monitor ID	124＋[SET]	
		All display	125＋[SET]	

5.5 Command Form for Keyboard to Multiplexer

Note:

1. When control the matrix, Dome camera and DVR, press F9 to switch into control mode of various multiplexer. Function key F9 will void if user haven't choose any kinds of multiplexer.
2. When control the multiplexer, press F7 to switch joystick mode of the multiplexer.
3. When control the multiplexer, Keyboard be combined for system, only can control multiplexer by single keyboard.
4. Baud rate of communicate interface can be set to: 2400/4800/9600/19200, SENSORMATIC、ATV、IMPACK use RS232 interface, and GUARDALL use RS483-3 interface.

1. SENSORMATIC multiplexer

Item	SENSORMATIC	SAE	Description
1	Function	MPX	
2	Zoom	SPOT	
3	Up	Up	
4	Down	Down	
5	Left	Left	
6	Right	Right	
7	Live	LIVE	
8	Tape	REC	
9	SEQ	SEQ	
10	Call	SET	
11	Cam1-16	X+CAM	X:1-16
12	Rec1-16	X+REC	X:1-16
13	Fun/Live	SHIFT+LIVE	
14	Fun/Up	Up	
15	Fun/Down	Down	
16	Fun/Left	Left	
17	Fun/Right	Right	
18	Fun/Zoom	SHIFT+SPOT	
19	DispCam1-16	X+LIVE	X:1-16
20	Hold/Up	Up	
21	Hold /Down	Down	
22	Hold /Left	Left	
23	Hold /Right	Right	
24		Prev	n: Current Dome ID
25		Next	

2. ATV Multiplexer

Item	ATV	SAE	Description
1	Display	FULL	
2	Freeze	STILL	
3	Sequence	SEQ	
4	PIP	PLUS	
5	Quadrand	QUAD	
6	Zoom	SPOT	
7	VCR	VCR	
8	VCR Bypass	LIVE	
9	Call Monitor	MON	
10	Camera	X+CAM	X:1-16
11	ENTR	ENTER	
12	EXIT	EXIT	
13	Down	Down	
14	Left	Left	
15	Right	Right	
16	Up	Up	
17		PREV	
18		NEXT	

3. IMPACK Multiplexer

Item	IMPACK	SAE	Description
1	Monitor_A	MON	
2	Monitor_B	SHIFT+MON	
3	LIVE	LIVE	
4	PLAY	PLAY	
5	RECORD	REC	
6	ALARM	ALARM	
7	SEQ	SEQ	
8	ZOOM	SPOT	
9	MACRO	MPX	
10	FREEZE	STILL	
11	CAM1-16	X+CAM	
12	UP	UP	
13	DOWN	DOWN	
14	LEFT	LEFT	
15	RIGHT	RIGHT	
16	MENU	SET	
17	ENTER	ENTER	
18		PREV	n: Current Dome ID
19		NEXT	

4. GUARDALL Multiplexer

① Command Form of Control Panel

SEQ	Guardall	SAE	Description
1	ZOOM	SPOT	
2	UP	UP	
3	DOWN	DOWN	
4	RIGHT	RIGHT	
5	LEFT	LEFT	
6	FREEZE	STILL	Pan of Multiplexer
7	SET	SET	
8	ESC	EXIT	
9	1-16（CAM）	X+CAM	X：1－16
10	2nd	REVERSE	
11	PIP	PLUS	
12	FULL	FULL	
13	2×2	X+QUAD	X：2,3,4
14	3×3		
15	4×4		
16	RECORD	REC	
17	SEQUENCE	SEQ	
18	MACRO	MPX	
19	VCR	VCR	
20	PALARM	ALARM	
21		PREV	n: Current Dome ID
22		NEXT	

② Function Command Form

SEQ	Guardall	SAE	Description
1	PANIC RECORD (CAMERA1-CAMERA16)	X+REC	X：1-16
2	STOP PANIC RECORD	STOP	
3	SETUP MENU	SHIFT+SET	
4	FACTORY RESET	REW	
5	ALARM HISTORY LIST	TRACK+	
6	ALARM HISTORY LIST	TRACK-	
7	SELECT CAMERA X FOR DISPLAY	X+LIVE	X：1-16
8	UP (PRESS & HOLD ARROW BUTTON)	UP	
9	DOWN (PRESS & HOLD ARROW BUTTON)	DOWN	
10	LEFT (PRESS & HOLD ARROW BUTTON)	LEFT	
11	RIGHT (PRESS & HOLD ARROW BUTTON)	RIGHT	
12	TIME/DATE OSD ON/OFF	STILL	Pan of DVR

③ Command Form for Selecting Combined Multiplexer

00-16	X：0-10（HEX）	X+MULIT

User Manual

KB06 Ethernet Multi-functional Keyboard

ⓘ **Before use the product, please read this manual carefully.**

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