

Preface

This manual introduces the process of systematic program and operation of SAE-M8000 matrix switching system. It is a CCTV security system with several video inputs, video outputs and matrixes. The main matrix has the sections of power module, control module, data receive/memory module, VIM (video input module), VOM (video output module) and corresponding back panel. SAE-M8000 offers menu and multimedia setup for system setting. Through keyboard, it can achieve basic information, camera title, various presetting, monitor function, users limited, one or several monitor sequences, fortify setup and alarm mode, etc.

We are making continuous effort to improve our products. We will upgrade the products constantly. This is our authority and obligation.

Therefore, if the menu is not true of the practicality, please conform to the practicality and refer to the latest digital document.

1.Introduction

This chapter introduces the functions and features of bilingual modularized video matrix SAE-M8000 with high capability. It also explains the features, functions, specifications, configuration, power and functions of each module, etc.

1.1 Feature

1. Modularized MPU and high compact configuration.
2. Ethernet port technology, online and remote control.
3. Video input and video output support hot swap. Facilitate the installation and maintenance.
4. Single matrix bay configuration: Max 272 video inputs; 64 video outputs
Max input setup: 272X16; Max outputs setup: 224X64
5. Four matrixes bay configuration: Max 1024 video inputs; 64video outputs.
6. Independent internal video; Chinese and English menus; Chinese and English camera titles and state displays.
7. Power sync switch: Adjustable Sync phase (multiple of 60degree): Convenient circuit.

1.2 Specification

- Power supply : AC220V/50Hz or AC110V/60Hz
- Input Signal: 1V (Peak-to-Peak, Input Impedance:75 Ω)
2V (Peak-to-Peak, Input Impedance: High)
- Input Impedance: High or 75 Ω
- Output Signal: 2V (Peak-to-Peak, Output Impedance:75 Ω)
- Output Impedance: 75 Ω
- Insert Gain: $\pm 0.5\text{dB}$
- S/N Ratio (Weighted): $\geq 52 \text{ dB}$
- Adjacent Channel Isolation Degree (Input to Input): $\geq 50 \text{ dB}$
- Adjacent Channel Crosstalk (Input to Output): $\geq 40 \text{ dB}$
- Frequency Characteristics (-3dB Bandwidth): 50Hz $\sim$ 12MHz
- DC Voltage (Video Signal): About-0.4V $\sim$ -0.6V;
- KB/Receiver Controlling Time: $\leq 20\text{ms}$ (Typical)
- Switch: Complete switching of cross-point matrix
- Switch Speed: Sync Switch $\leq 20\text{ms}$ (PAL), $\leq 16.70\text{ms}$ (NTSC)
- Video Input: BNC Jack, 16 $\sim$ 1024 Video Inputs
- Video Output: BNC Jack, 16 $\sim$ 64 Video Outputs
- RS232 Interface: One RS23 Local PC Interface
- Baud Rate: 9600bps、19200bps、38400bps、76800bps
- Ethernet Interface: 1Mbytes—2Mbytes/s Communication Speed
- OSD Display: Date/Time, Monitor Title, Camera No and Title, etc
- Character: Chinese: National Band-1 Word Storage; English In Common Use
- Sync Switch: Power Sync
- Data: Settings and configuration data can maintain at least 5 years
- Dimension: 312 mm (H) X 483 mm (W) X 470 mm (D)
- Weight: 30Kg

1.3 Systematic Principle Picture

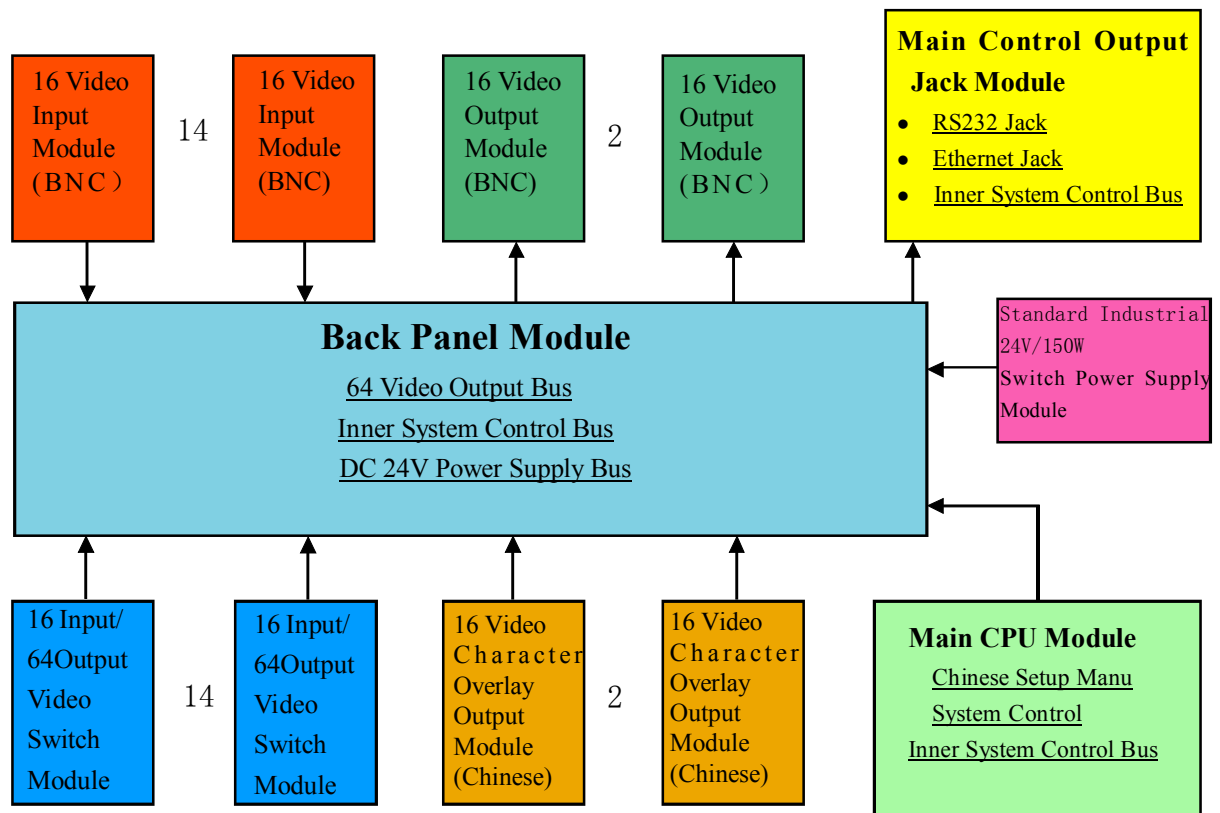


Figure 1 Systematic Principle

2. Function

2.1 System Components

Define the logical relationship of KB, monitor and camera. Make the system secure.

2.2 System Users

Maximum 131 system users include 3 administrators, 64 KB-06 users and 64 PC users. The 3 administrators, the first 3 KB users and PC users are system administrators. They are at higher priority level and can administrate and maintain the system directly.

2.3 System Program

All the setting and administration on SAE-M8000 are realized by system program which can be set through the matrix system menu, Ethernet port or administration & maintain computer applications.

System default setting is for most common applications, you may change it according to your need.

2.4 Administrators

To setup administrator is for security purpose. Only the administrators can compile the system program.

2.5 Operators

To operate this system, registered operators need to input his name and password in the system controller.

User's name and password are set by system program or keyboard. If the name and password inputted by operator do not accord with the registered data, system will deny his entry. Operator can input his name and password on any controller of the system to enter the matrix system.

2.6 Video Switch

The main matrix can switch pictures of any camera or presets of certain camera to any designated monitor to display. The core of the system is a full cross-point matrix switch.

2.7 Sync Switch

Power sync switch. Sync phase (multiple of 60degree) is adjustable.

2.8 Auto Sequential Scan

Auto sequential scan can display the videos on any monitor from the first camera to the last camera assigned by user. Video switch speed is independent and alterable.

2.9 Salvo Switch

The system can switch multiple videos to different monitors for displaying simultaneously. The system has up to 10 groups of salvo switches and each group has up to 64 steps. The dwell time of video is programmable and the video can be any preset of cameras.

2.10 Sequential Switch

It is a group of switches of any camera. The system can program and store 88 groups of sequence switches. Each group can include videos of multiple cameras and the dwell time of each video is programmable. The video can be any preset of any camera. In a group of sequence switch, a video or several presets of a camera can be repeated as different steps. The same group of sequence switch can be displayed on different monitors do not interfere with each other. Distribute as follows:

Length	64 Steps	64 Groups
Length	128 Steps	16 Groups
Length	256 Steps	4 Groups
Length	512 Steps	4 Groups

2.11 Camera backward switching.

To display the video of previous camera.

2.12 Camera forward switching

To display the video of next camera.

2.13 Alarm Input

Each alarm input box (AI64) can connect 64 detectors. The system can connect 16 alarm input boxes, totally 1024 detectors. The detector's probe mode can be NO or NC.

2.14 Alarm Output

Each alarm output box (AO16) has 16 inner relay outputs. Two modes are available: NO and NC. The system can connect 4 alarm output boxes, totally 64 relay outputs.

2.15 Fortify Setup

There are manual and auto fortifies which can be set through system menu. When auto mode is selected, the system activates according to the fortify table, and the system can process partial manual commands sent through the keyboard. When manual mode is selected, the system will only process manual commands and the auto fortify table is not available now. Besides, auto fortify form administrates according to the fortify area in a cycle of seven days.

2.16 Auto Alarm Switch

When system receives alarm signal, it will switch to the video of alarm event, and activates preset, auxiliary switch, video recorder and alarm sound and display the alarm status information on the monitor. The video, dwell time, preset and open/close time of auxiliary switch of an alarm event can be set by system administration software.

2.17 Alarm Handing Mode

The alarm display modes include sequence display mode and auto-build mode. There are 7 alarm modes.

2.17.1 Alarm Sequence Display

The assigned N monitors will display the alarm videos. When several alarm signals appears simultaneously, the N monitors of this group will display the previous not N alarm videos to which are not respondent. Besides, N could be 1, 2, 3, 4, totally 4 modes. When an alarm is respondent to, monitor will display the N+1 alarm video to which is not respondent. Analogize sequentially. On the manual mode, this system can keep alarm state. Even the alarm signal is disconnected, if the user does not respond to the alarm, the alarm status will exist.

2.17.2 Auto-build Mode

The designated N monitors will display the alarm videos. N could be 1, 2, 3, 4, totally 4 modes. When several alarm signals exist simultaneously, all of the signal will make sequential scan display on the first monitor according to the time priority. Besides, the N-1 signal will display on another monitor. When an alarm video is respondent to, the alarm group will anew and the next alarm video will display on that monitor. Until all the alarm videos are respondent to, the system will renew normal. On the manual mode, the system can also store alarm status. Even the alarm signal is disconnected, if the user does not respond to the alarm, the alarm status will exist.

2.18 Alarm ACK

There are two modes of alarm ACK: manual ACK and auto ACK. The modes can cause the system to exit the alarm event status and return to the working status before the alarm event. The system master can authorize any keyboard (user) the right to clear an alarm. The unauthorized keyboard does not have

the right. After ACK an alarm, the user will not hear the alarm sound. If the alarm event still exists, the ALM-XXXX in the alarm status display column on the monitor flashes. Besides, XXXX is the detector number.

2.18.1 Auto ACK

When the alarm detector is alarming over specified time, the alarm system will clear alarm automatically and the alarm video will disappear from the monitor automatically. Under this mode, any instant alarm can be caught. Once an alarm video was cleared from the monitor, the next alarm video will display on the monitor. Under the auto ACK mode, user can also clear the alarm manually.

2.18.2 Manual ACK

Under the manual ACK mode, the alarm videos remain on the corresponding monitors until the user visits the monitor through the keyboard. The administrator can set and authorize any user the right to clear alarm. Unauthorized user can not clear the alarms.

2.19 Priority

Authorized password has 8 priority levels which restrict related user to set and control the system. Besides, the first 3 keyboard users and PC users are on higher priority level 9, 10, 11. The default administrator's priority is the highest level 12.

2.20 Screen Display

Every monitor connected within this system can display camera ID, Chinese and English camera titles (16 English characters or 8 Chinese characters.), date/time, monitor ID and system status. Display mode and position are adjustable.

2.21 Power-down Protection

All of the users' program data including system division, patrol, salvo switch, alarm config, port config and system information are stored in memory with spare battery. After cutting off the power, the programmed data can exist at least 5 years.

2.22 RJ45 Port

Use RJ45 port to connect with LAN switcher. Communicate with the matrix system on Ethernet.

3. User Logs in & Logs out

To input user's name and password is a safety precaution. It only allows the person who has user limit to use the system. Matrix user must have a correct name and password to enter the system. The factory password is in default status. This system allows max 131 users and their independent password including 64 KB users, 64 PC users and 3 administrators. The newly purchased matrix or reset system is in default status. The administrator can enter the system according to the default.

SAE-M8000 matrix system has two kinds of users which are the administrator and the user. Besides, users have different use limit according to different priority.

3.1 Administrator Logs in & Logs out

The registered administrator should input his name and password in the system controller to operate the system. The administrator's name and password are set through system program and keyboard. If the name and password inputted do not accord with the registered, system will refuse his entry. Administrator can input his name and password in any controller to enter the system.

Administrator Logs in: After the keyboard is powered on, administrator should input his name and password to enter the system under the instruction of LCD.

Administrator Logs out: Press F2 to logs out the system.

Administrator Modify User's Password: The administrator can enter the system menu to set passwords of all the users in advance. After determining the priority of each user, administrator should give passwords to each user based on his priority level. User must register before entering

Administrator Clear User's Password: If necessary, system master can clear any user's name and password.

3.2 User Logs in & Logs out

User Logs in: After keyboard powered on, user must input his name and password given by administrator to enter this system under the instruction of LCD

User Logs out: Press F2 to logs out the system.

4. System Menu

4.1 Menu Function

The functions of this menu mainly focus on the setup and administration of SAE-M800 matrix system, including system setup, camera setup, monitor setup, users setup, tour setup, salvo setup, fortify setup, alarm setup and system info, etc. Those functions can be achieved by setting directly through setup menu or setting multimedia applications. In this chapter, it focuses on the setting methods and process through system menu. In this system, there are administrators. Those users have the right to use, set, modify and store system menu. They can use all the functions in the menu. At the meanwhile, he exists in the matrix system, he can operate the matrix. He can not only set and administrate the matrix; also he is a user of SAE-M8000. So, he can operate and control the matrix. However, other users can only operate and control this system. Under the condition of administrator's authorization, users can enter SAE-M8000 matrix system. Administrator authorizes user by determining user's level.

System Setup: system date setup, baud rate setup, users management, video mode setup, language setup, Ethernet adaptor and system basic config.

Camera Setup: camera enable, camera title, camera protocol and camera phase.

Monitor Setup: font size and position.

Users Setup: KB user and PC user. To set control monitor, camera limited, tour limited, salvo limited, control area and priority setup respectively.

There are two modes to switch camera in Sae-M8000 matrix system: specified and sequence. The specified mode means to switch definite camera video to display on the specified monitor through manual operation; Sequence mode means to switch series of programmed camera videos to display on one or several specified monitors one after another. The sequence mode has two modes: tour switch and salvo switch. The main difference between those two modes lies in the number of specified monitors. In the tour mode, there is only one specified monitor. Under the salvo mode, there are several specified monitors. Settings of specified mode include camera limit setup and control monitor setup. Settings of salvo switch include participant camera, preset position, dwell time of each step. All of those should be set step by step. Settings of salvo switch include dwell time of each step participant monitors, switching corresponding cameras on monitor and preset position. All of those should be set step by step.

Fortify Setup: probe config, fortify mode, fortify area and fortify form.

Alarm Setup: alarm mode and alarm export.

System Info: system config, hardware connection, video switch, video loss, probe setup, probe state, fortify state, fortify record and alarm record.

Surveillance events achieve by settings including setting time fortify area and setting 64 fortify areas.

Alarm disposal includes whether allows probe to activate alarm or not and response after alarm. There are 3 methods to deal with events before alarm.

1. To fortify in Time Event item.
2. To fortify directly in Fortify Area item.
3. Select ON or OFF in Probe Setup item.

Please note that those three methods are relative. Anyhow must set fortify area to which the probe belongs to enable this probe. On the contrast, withdraw the fortify area to which the probe belongs to disable the probe. Alarm will lead to video switch, AUX and auto ACK-time. Set video switch in Probe Setup; Set AUX in Alarm Export; Set auto ACK-time in the menu directly.

Only the administrator can administrate and maintain the matrix system. Limit include: to administrate his password, to program level form, to settle and restore data, to copy data, to resume data and to draw data. To settle and restore data is in order to optimize and regain resources of the waste and guarantee the stability and

security of the database because use those data very often can lead to loss and waste of database resource; To copy data can prevent virus disoperation or data loss because of hardware trouble; To resume data is in order to resume the data in system after the system is destroyed and reinstalled

4.2 SAE-M8000 System Menu

System menu is set according to the functions. It includes following 9 items and corresponding submenus: System Setup, Camera Setup, Monitor Setup, Users Setup, Tour Setup, Salvo Setup, Fortify Setup, Alarm Setup and System Info.

Figure 2 shows the configuration of System Menu. User can operate according to this figure. It is easy to find out the classified method and every submenu. Only the last level menu is used to achieve functions.

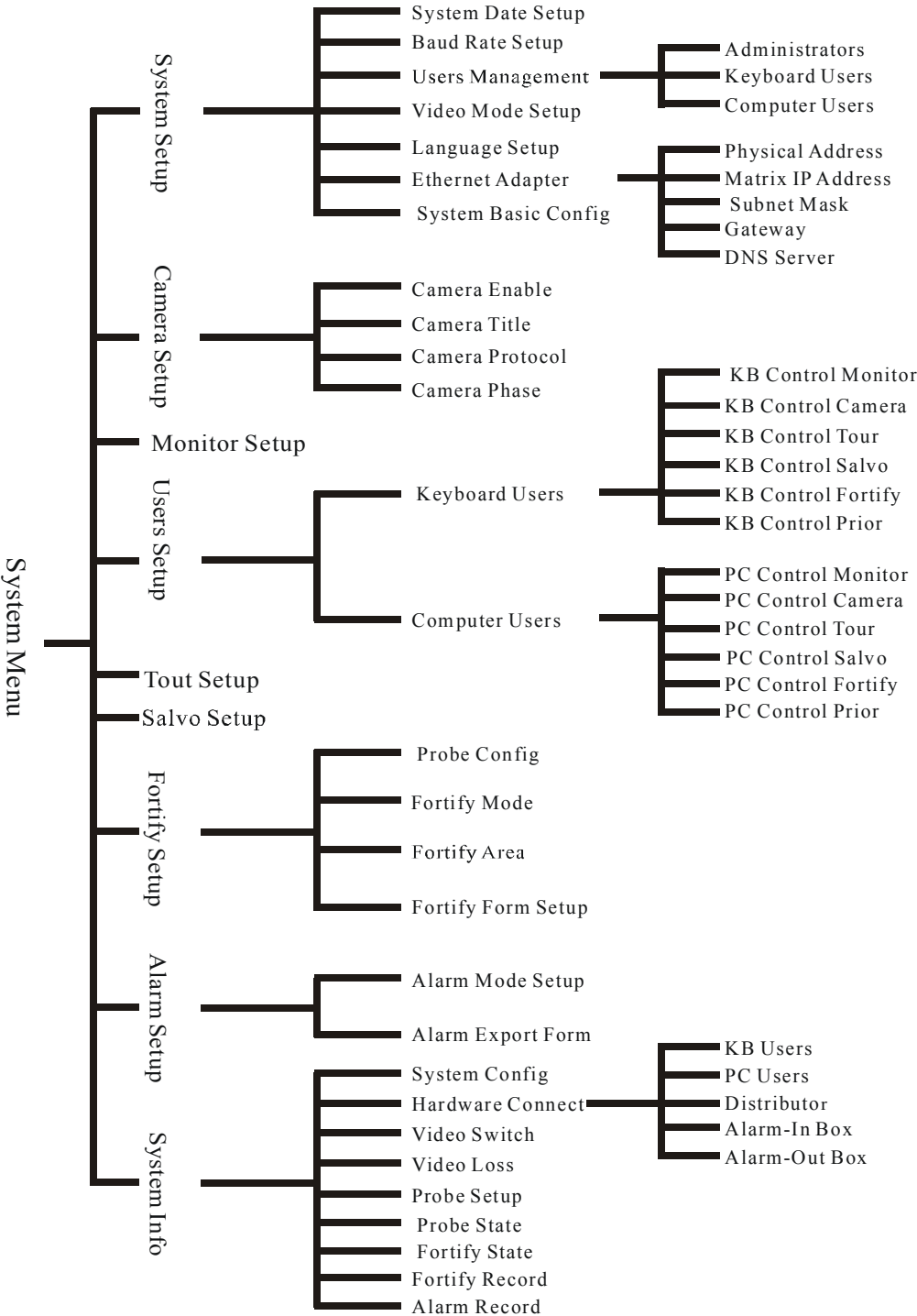


Figure 2 System Menu Tree

5. System Menu

Only one administrator can enter the system after his register at one time. As figure3 shows:

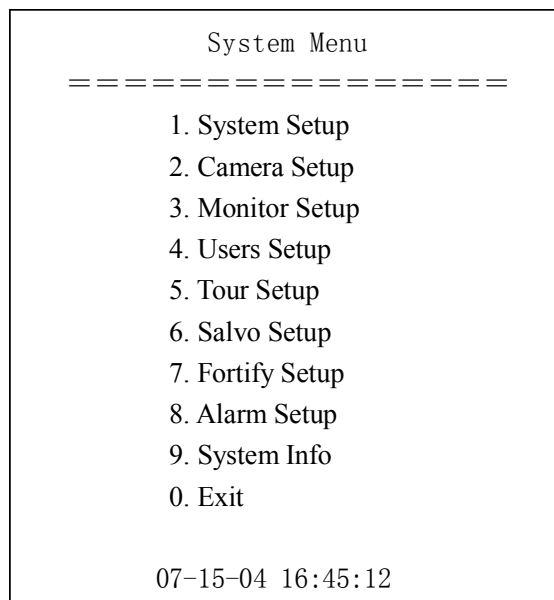


Figure 3 System Menu

The setting procedure is as follows (system menu):

1. Move the joystick up or down to let the flashing cursor point to the desired item. Move the joystick right to enter the setting or press the item number directly to enter the setting.
2. If there is no other item to set, press 0 or move the joystick up or down to the 0 item to exit system menu.

5.1 System Setup

Enter System Setup menu: Move the joystick up or down to let the flashing cursor point to the No.1 item in system menu. Move the joystick right to enter the setting or press 1 directly to enter the setting. System setup menu includes following items: 1. System Date Setup 2. Baud Rate Setup 3. Users Management 4. Video Mode Setup 5. Language Setup 6. Ethernet Setup 7. System Basic Congfig. As figure 4 shows:

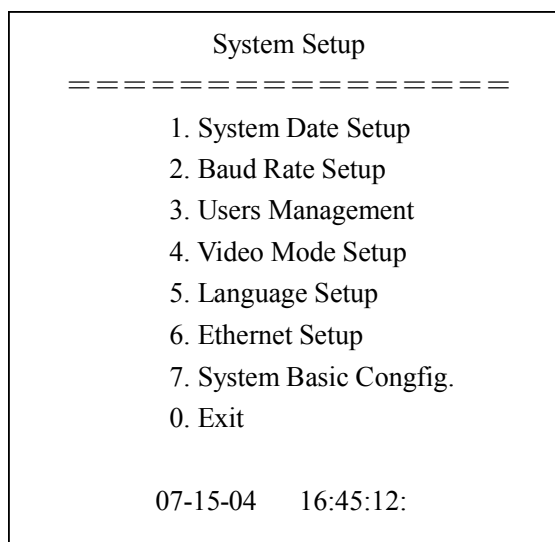


Figure 4 System Setup

The setting procedure is as follows (System Setup):

1. Move the joystick up or down to let the cursor point to the desired item. Move the joystick right to enter the setting or press the item number directly to enter the setting.
2. If there is no other item to set, move the joystick left to return to the upper menu. Press 0 or move the joystick up or down to the 0 item to exit system menu.

5.1.1 System Date Setup

Enter the System Date Setup: Move the joystick up or down to let the cursor point to the No.1 item in system setup. Move the joystick right to enter the setting or press 1 directly to enter the setting. Menu items include: Mode: (YY/MM/DD); Date; Time; Week. As figure 5 shows:

System Date Setup

=====

Mode: YY/MM/DD

Date: 04/01/15

Time: 08:50:55

Week: Thursday

07-15-04 16:45:12

Figure 5 System Date Setup

The setting procedure is as follows (System Date Setup):

1. Move the joystick up or down to enter the desired item.
2. **Mode:** the selectable date display of system. Three formats are available: Asian format: YY/MM/DD, International format: DD/MM/YY and U.S format MM/DD/YY. To set as follows: let the flashing cursor point to the mode item, and then turn the joystick clockwise or just press WIDE or TELE to set. Date mode will change accordingly.
3. **Date:** year, month and day. To set as follows: let the flashing cursor point to the Date item, and then turn the joystick clockwise or anticlockwise or just press WIDE or TELE to enter the desired item. Input the data by pressing the numeric keypad directly.
4. **Time:** hour, minute and second. To set as follows: let the flashing cursor point to the Time item, and then turn the joystick clockwise or anticlockwise or just press WIDE or TELE to enter the desired item. Input the data by pressing the numeric keypad directly.
5. **Week** To set week as follows: let the flashing cursor point to the Week item, turn the joystick clockwise or anticlockwise or just press WIDE or TELE to modify..
6. If there is no other item to edit, move the joystick left, and then do as the screen suggestion to confirm your setting. As figure 6 shows: Press CLEAR to cancel. Press ENTER to update. After your selection, it will return to the upper menu automatically..

```

System Date Setup
=====
Mode: YY/MM/DD
Date:  04/01/15
Time:  08:50:55
Week:  Thursday
PRESS [CLEAR] TO CANCEL
PRESS [ENTER] To UPDATE

07-15-04  16:45:12

```

Figure 6 System Date Setup

Note: Administrator should set the week and date correspondingly. Because the system will fortify every day automatically regarding one week as a cycle according to the fortify form.

5.1.2 Baud Rate Setup

Enter the Baud Rate Setup: Move the joystick up or down to let the flashing cursor point to the No.2 item in system setup. Move the joystick right or press 2 directly to enter the setting. It only includes RS232. As figure 7 shows:

```

Baud Rate Setup
=====
RS232  :  38400

07-15-04  16:45:12

```

Figure 7 Baud Rate Setup

The setting procedure is as follows (Baud Rate Setup):

1. Move the joystick up or down to set different baud rate.
2. If there is no other item to edit, move the joystick left to return to the upper menu.

5.1.3 Users Management

Enter the Users Management: Move the joystick up or down to let the flashing cursor point to the No.3 item in system setup. Move the joystick right or press 3 directly to enter the setting. Three items are available: 1. Administrators 2. Keyboard Users 3. Computer Users. As figure 8 shows:

```

Users Management
=====
1. Administrators
2. Keyboard Users
3. Computer Users
4. Exit

07-15-04  16:45:12

```

Figure 8 Users Management

5.1.3.1 Administrators

Enter Administrator: Move the joystick up or down in users management to let the flashing cursor point to the No.1 item. Move the joystick right or press 1 directly to enter Administrators menu. It offers 3 administrators whose ID is 01, 02 and 03 respectively. User can modify the administrator's name and password if needed. As figure 9 shows:

```

      Administrators
=====
Administrator ID: 01
Administrator Name: UserName *01
Old Password: *****
New Password: *****
Verify New:  *****
=====

Number:
      07-15-04   16:45:12

```

Figure 9 Administrators

The setting procedure is as follows (Administrators):

1. Turn the joystick clockwise or anticlockwise to edit administrator ID. Move the joystick down to edit Administrator Name.
2. Edit administrator name according to appendix Chinese Input. Move the joystick down to Input Old Password item.
3. Edit old password by pressing numeric keypad. Move the keyboard down to Input New Password item.
4. Edit new password by using numeric keypad. Move the keyboard down to Verify New Password item.
5. Edit new password by using numeric keypad.
6. When setting the password, move the joystick left directly to exit. When input an error password, system will display Error at the bottom of the screen. Press CLEAR keypad to exit the display and input password again.
7. Move joystick up or down / right, the system will display CORRECT. Press ENTER to keep and exit. Press CLEAR to cancel and exit.

Note: Causes of unsuccessful modification when modifying password:

- ① The old password is not correct
- ② The new password and confirmed password are not the same.
- ③ The new password include non-numeric information (Besides 0-9 keypads)
- ④ New password is the same as old password.

5.1.3.2 Keyboard Users

Keyboard Users

=====

Keyboard ID : 01

Keyboard Name: UserName 001

New Password: *****

Verify New : *****

=====

Number:

07-15-04 16:45:12

Figure 10 Keyboard Users

Setting procedure in Keyboard Users item: as figure 10 shows, familiar with the Administrator item.

5.1.3.3 Computer Users

Computer Users

=====

PC User ID : 01

PC User Name: UserName 001

New Password: *****

Verify New : *****

=====

Number:

07-15-04 16:45:12

Figure 11 Computer Users

Setting procedure in Computer Users item: as figure 11 shows, familiar with the Administrator item.

5.1.4 Video Mode

Enter Video Mode item: Move the joystick up or down in the System Setup menu to let the flashing cursor point to the No.4 item. Move the joystick right or press 4 directly to enter Video Mode. As figure 12 shows:

Video Mode Setup

=====

Mode: PAL

07-15-04 16:45:12

Figure 12 Video Mode Setup

Setting procedure in Video Mode Setup item:

1. Two modes are available: PAL or NTSC
2. Move joystick up or down to set. After setting, turn joystick left to return to the upper menu.

5.1.5 Language Setup

Enter Language item: Move the joystick up or down in the System Setup menu to let the flashing cursor point to the No.5 item. Move the joystick right or press 5 directly to enter Language. As figure 13 shows.

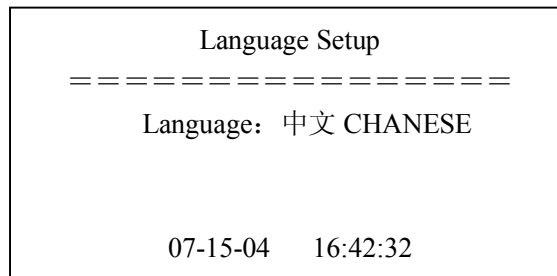


Figure 13 Language Setup

Setting Procedure in Language Setup:

1. Two kinds of language are available: Chinese and English
2. Move joystick up or down to set. After setting, turn joystick left to return to the upper menu.

5.1.6 Ethernet Adapter

Enter Ethernet Adapter item: Move the joystick up or down in the System Setup menu to let the flashing cursor point to the No.6 item. Move the joystick right or press 6 directly to enter Ethernet Adapter. It includes following 5 items: 1. Physical Address 2. Matrix IP Address 3. Subnet Mask 4. Gateway 5. DNS Server. As figure 14 shows

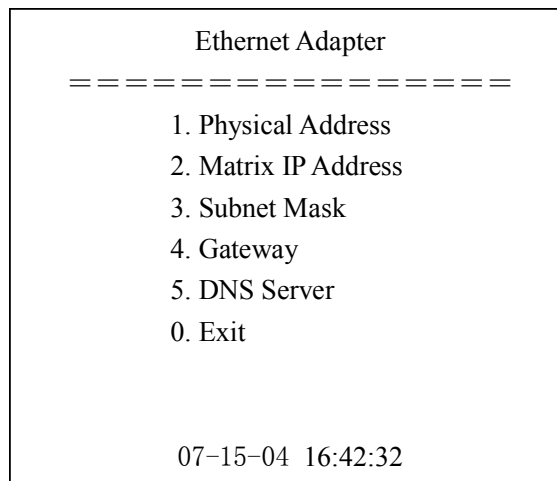


Figure 14 Ethernet Adapter

Setting Procedure in Ethernet Adapter:

1. Move the joystick up or down to let the flashing cursor point to the desired item. Move the joystick right or press desired item number directly.
2. If there is no other item to edit, move the joystick left to return to the upper menu. Press 0 or move the joystick up or down to let the flashing cursor point to the item 0, turn joystick right to exit system menu.

5.1.6.1 Physical Address

Enter Physical Address: Move the joystick up or down in the Ethernet Adapter menu to let the flashing cursor point to the No.1 item. Move the joystick right or press 1 directly to enter Physical Address. As figure 15 shows:

Physical Address

=====

Old Physical Address

002. 004. 006. 240. 000. 021

New Physical Address

000. 000. 000. 000. 000. 000

07-15-04 16:42:32

Figure 15 Physical Address

Setting procedure in Physical Address:

1. Old physical address indicates current physical address. User can change it by setting new physical address.
2. Turn joystick left or right to the desired item. Press numeric keypad directly to set.
3. Press ENTER to confirm and return to the upper menu automatically or press CLEAR if necessary to cancel and return to the upper menu automatically.

5.1.6.2 Matrix IP Address

Enter Matrix IP Address: Move the joystick up or down in the Ethernet Adapter menu to let the flashing cursor point to the No.2 item. Move the joystick right or press 2 directly to enter Matrix IP Address. As figure 16 shows:

Matrix IP Address

=====

Old Matrix IP Address

010. 000. 003. 001

New Matrix IP Address

000. 000. 000. 000

07-15-04 16:42:32

Figure 16 Matrix IP Address

Setting procedure in Matrix IP Address:

1. Old Matrix IP Address indicates current Matrix IP. User can change it by setting new IP.
2. Turn joystick left or right to the desired item. Press numeric keypad directly to set.
3. Press ENTER to confirm and return to the upper menu automatically or press CLEAR if necessary to cancel and return to the upper menu automatically.

5.1.6.3 Subnet Mask

Enter Subnet Mask: Move the joystick up or down in the Ethernet Adapter menu to let the flashing cursor point to the No.3 item. Move the joystick right or press 3 directly to enter Subnet Mask. As figure 17 shows:

Subnet Mask

=====

Old Subnet Mask

255. 000. 000. 000

New Subnet Mask

000. 000. 000. 000

07-15-04 16:42:32

Figure 17 Subnet Mask

Setting procedure in Subnet Mask:

1. Old Subnet Mask indicates current subnet mask. User can change it by setting new subnet mask.
2. Turn joystick left or right to the desired item. Press numeric keypad directly to set.
3. Press ENTER to confirm and return to the upper menu automatically or press CLEAR if necessary to cancel and return to the upper menu automatically. .

5.1.6.4 Gateway

Enter Gateway: Move the joystick up or down in the Ethernet Adapter menu to let the flashing cursor point to the No.4 item. Move the joystick right or press 4 directly to enter Gateway. As figure 18 shows:

Gateway

=====

Old Gateway IP

010. 000. 000. 070

New Gateway IP

000. 000. 000. 000

07-15-04 16:42:32

Figure 18 Gateway

Setting procedure in Gateway:

1. Old gateway IP indicates current gateway IP. User can change it by setting new gateway IP.
2. Turn joystick left or right to the desired item. Press numeric keypad directly to set.
3. Press ENTER to confirm and return to the upper menu automatically or press CLEAR if necessary to cancel and return to the upper menu automatically.

5.1.6.5 DNS Server

Enter DNS Server: Move the joystick up or down in the Ethernet Adapter menu to let the flashing cursor point to the No.5 item. Move the joystick right or press 5 directly to enter DNS Server. As figure 19 shows:

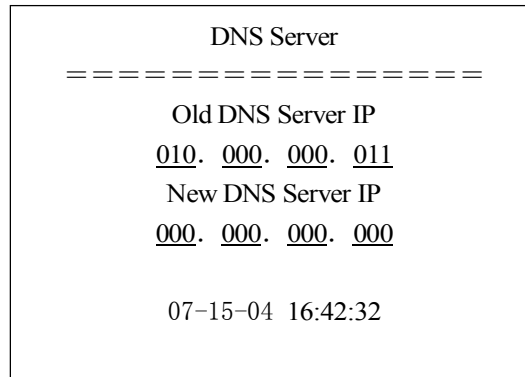


Figure 19 DNS Server

Setting procedure in DNS Server:

1. Old DNS server IP indicates current DNS server IP. User can change it by setting new DNS server IP.
2. Turn joystick left or right to the desired item. Press numeric keypad directly to set.
3. Press ENTER to confirm and return to the upper menu automatically or press CLEAR to cancel and return to the upper menu automatically if necessary.

5.1.7 System Basic Config

Enter System Basic Config: Move the joystick up or down to let the cursor point to the No.7 item in the System Setup menu. Move the joystick right or press 7 directly to enter the setting. As figure 20 shows:

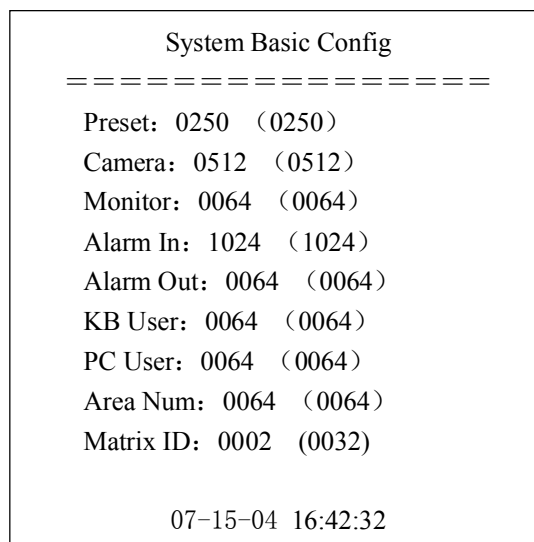


Figure 20 System Basic Config

Setting Procedure in System Basic Config:

1. Modify value by press numeric keypad.
2. Move joystick up or down to enter another editing area.
3. After setting, turn joystick left. The screen will display PRESS ENTER TO UPDATE or PRESS CLEAR TO CANCEL. Do as the indication.

Note:

1. The maximum value of the editing area is no more than the value in the right bracket
2. The number of monitors should be the multiple of 16. If not, system will change the value to the multiple of 16 automatically.
3. The number of KB user and PC user must be more than current user ID. If not, system will change the ID to current user's ID when update.

5.2 Camera Setup

Enter Camera Setup: Move the joystick up or down to let the cursor point to the No.2 item in the System Menu. Move the joystick right to enter the setting or press 2 directly to enter Camera Setup. It includes following items: 1. Camera Enable 2. Camera Title 3. Camera Protocol 4. Camera Phase 5.Camera Data. As figure 21 shows:

Camera Setup										
=====										
1. Camera Enable										
2. Camera Title										
3. Camera Protocol										
4. Camera Phase										
5. Camera Data										
0. Exit										

Figure 21 Camera Setup

Setting Procedure in Camera Setup:

1. Move the joystick up or down to let the flashing cursor point to the desired item. Move the joystick right or press the item number directly to enter Camera Setup.
2. If there is no other item to edit, press 0 or move the joystick up or down to let the flashing cursor point to 0, and then turn joystick right to exit system menu.

5.2.1 Camera Enable

Enter Camera Enable: Move the joystick up or down to let the cursor point to the No.1 item in Camera Setup. Move the joystick right or press 1 to enter Camera Enable directly. As figure 22 shows:

Camera Enable										
=====										
S/N	1	2	3	4	5	6	7	8	9	10
0000	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0010	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0020	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0030	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0040	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0050	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0060	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0070	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0080	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0090	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
07-15-04 16:42:32										

Figure 22 Camera Enable

Setting Procedure in Camera Enable:

1. Press PREV or NEXT to page down or page up. Turn joystick clockwise to enter the editing area. As figure 23 shows:
2. Move the joystick up or down / right and left to select desired camera. After selecting, turn joystick

- clockwise or anticlockwise / press WIDE or TELE to set it.
3. After setting, press ENTER to confirm and return to the upper menu automatically or press CLEAR if necessary to cancel and return to the upper menu automatically.

Camera Enable										
=====State=====										
S/N	1	2	3	4	5	6	7	8	9	10
0000	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0010	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0020	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0030	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0040	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0050	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0060	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0070	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0080	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
0090	1	1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
07-15-04 16:42:32										

Figure 23 Camera Enable

5.2.2 Camera Title

Enter Camera Title: Move the joystick up or down in camera setup to let the cursor point to the No.2 item. Move the joystick right or press 2 to enter Camera Title directly. As figure 24 shows:

Camera Title	
=====	
Camera ID: 0001	
Camera Title: *Camera Title 0001*	
=====	
Number:	
07-15-04 16:42:32	

Figure 24 Camera Title

Operating Introduction in Camera Enable: According to appendix of Chinese input.

5.2.3 Camera Protocol

Enter Camera Protocol: Move the joystick up or down to let the cursor point to the No.3 item in Camera Setup. Move the joystick right or press 3 to enter Camera Protocol directly. As figure 25 shows

Camera Protocol										
=====										
S/N	1	2	3	4	5	6	7	8	9	10
0000	0	0	0	0	0	0	0	0	0	0
0010	0	0	0	0	0	0	0	0	0	0
0020	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0
0050	0	0	0	0	0	0	0	0	0	0
0060	0	0	0	0	0	0	0	0	0	0
0070	0	0	0	0	0	0	0	0	0	0
0080	0	0	0	0	0	0	0	0	0	0
0090	0	0	0	0	0	0	0	0	0	0
07-15-04 16:42:32										

Figure 25 Camera Protocol

Setting Procedure in Camera Protocol:

1. Press PREV or NEXT to page down or page up. Turn joystick clockwise to enter the editing area. As figure 26 shows:
2. Move the joystick up or down / right and left to select desired camera. After selecting, turn joystick clockwise and anticlockwise / press WIDE and TELE to set.
3. After setting, press ENTER to confirm and return to the upper menu automatically or press CLEAR to cancel and return to the upper menu automatically.

Camera Protocol										
=====SAE=====										
S/N	1	2	3	4	5	6	7	8	9	10
0000	0	0	0	0	0	0	0	0	0	0
0010	0	0	0	0	0	0	0	0	0	0
0020	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0
0050	0	0	0	0	0	0	0	0	0	0
0060	0	0	0	0	0	0	0	0	0	0
0070	0	0	0	0	0	0	0	0	0	0
0080	0	0	0	0	0	0	0	0	0	0
0090	0	0	0	0	0	0	0	0	0	0
07-15-04 16:42:32										

Figure 26 Camera Protocol

5.2.4 Camera Phase

Enter Camera Phase: Move the joystick up or down to let the cursor point to the No.4 item in Camera Setup. Move the joystick right or press 4 to enter Camera Phase directly. As figure 27 shows:

Camera Phase										
=====										
S/N	1	2	3	4	5	6	7	8	9	10
0000	0	0	0	0	0	0	0	0	0	0
0010	0	0	0	0	0	0	0	0	0	0
0020	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0
0050	0	0	0	0	0	0	0	0	0	0
0060	0	0	0	0	0	0	0	0	0	0
0070	0	0	0	0	0	0	0	0	0	0
0080	0	0	0	0	0	0	0	0	0	0
0090	0	0	0	0	0	0	0	0	0	0
07-15-04 16:42:32										

Figure 27 Camera Phase

Setting Procedure in Camera Phase:

1. Press PREV or NEXT to page down or page up. Turn joystick clockwise to enter the editing area. As figure 28 shows:
2. Move the joystick up or down / right or left to select desired camera. After selecting, turn joystick clockwise or anticlockwise / press WIDE or TELE to set it.
3. After setting, press ENTER to confirm and return to the upper menu automatically or press CLEAR to cancel and return to the upper menu automatically.

Camera Phase										
=====0 DEGREE=====										
S/N	1	2	3	4	5	6	7	8	9	10
0000	0	0	0	0	0	0	0	0	0	0
0010	0	0	0	0	0	0	0	0	0	0
0020	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0
0050	0	0	0	0	0	0	0	0	0	0
0060	0	0	0	0	0	0	0	0	0	0
0070	0	0	0	0	0	0	0	0	0	0
0080	0	0	0	0	0	0	0	0	0	0
0090	0	0	0	0	0	0	0	0	0	0
07-15-04 16:42:32										

Figure 28 Camera Phase

5.2.5 Camera Data

Enter Camera Data: Move the joystick up or down to let the cursor point to the No.5 item in Camera Setup. Move the joystick right or press 5 to enter Camera Data directly. As figure 29 shows:

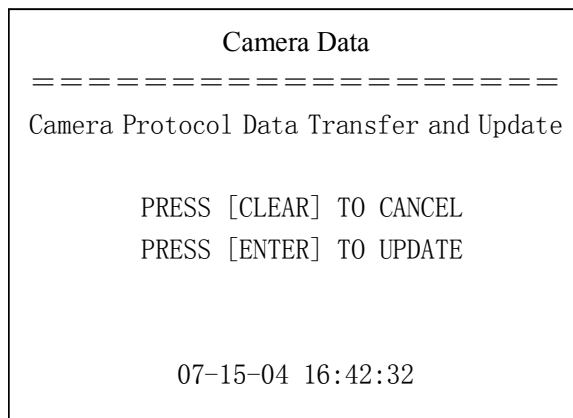


Figure 29 Camera Data

Setting Procedure in Camera Data:

1. Press ENTER to confirm. The protocol data transmits to distributor and return to the upper menu.
2. Press CLEAR to cancel and return to the upper menu at the mean while.

5.3 Monitor Setup

Enter Monitor Setup: Move the joystick up or down to let the cursor point to the No.3 item in System Menu. Move the joystick right or press 3 directly to enter Monitor Setup. It includes following items: 1. Font Size 2. Position. As figure 30 shows:

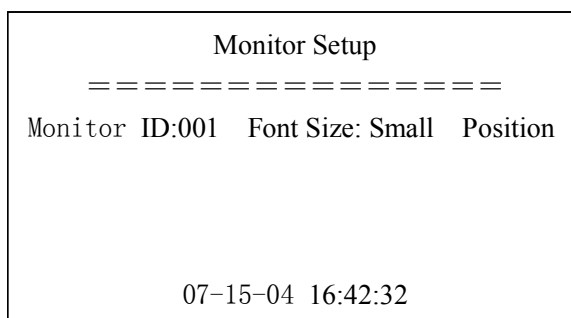


Figure 30 Monitor Setup

Setting procedure in Monitor Setup:

1. Move the joystick up or down to let the flashing cursor point to the desired item
2. Choose large or small font in Font Size item. Choose state position by move joystick up or down / left or right. As figure 31 shows.
3. Monitor ID: Edit by move joystick up or down. When the ID number is the max monitor number (system set) plus 1, it indicates that current operation is effective to all the monitors.
4. Press <ENTER> to update and exit, and then to exit menus by moving joystick left sequentially.

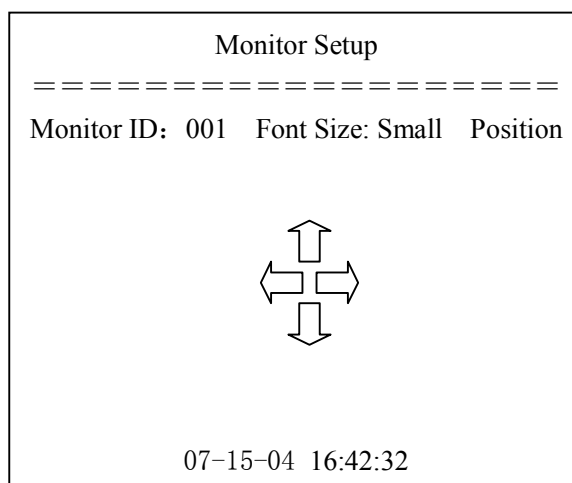


Figure 31 Monitor Setup

5.4 Users Setup

Select<Users Setup>from<System Setup Menu>: Move the joystick up and down at the<System Setup Menu>, move the cursor to 4, then enter<Users Setup> by moving the joystick right or input number 4 directly at <System Setup Menu>; <Users Setup>menu includes 1<Keyboard Users>, 2<Computer Users>. As figure 32 shows.

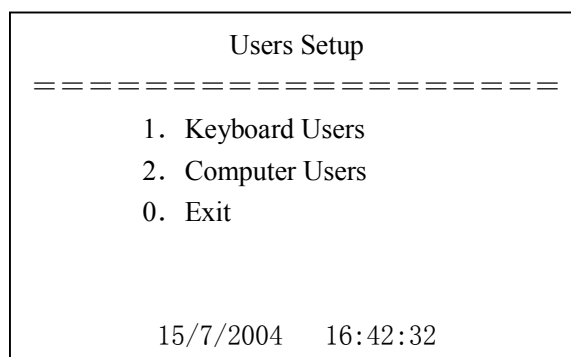


Figure 32 Users Setup

Setting at <Users Setup>:

1. Move the joystick up and down, move the cursor to the selected item, then move the joystick right or input the selected item number directly to enter the setting.
2. If no item needs to be changed, move the joystick up and down, move the cursor to 0 key, move joystick right to exit or input 0 directly to exit.

5.4.1 Keyboard Users

<Keyboard Users>submenu has 6 setups, including 1<KB Control Monitor>, 2<KB Control Camera>, 3<KB Control Tour>, 4<KB Control Salvo>, 5<KB Control Fortify>, 6<KB Control Prior>. As figure 33 shows.

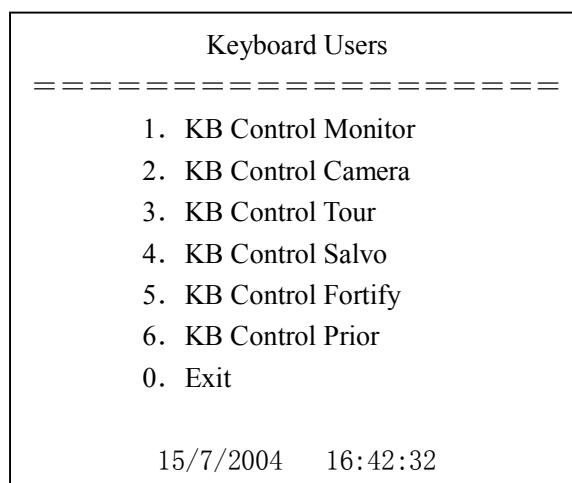


Figure 33 Keyboard Users Setup

5.4.1.1 Keyboard Control Monitor

Select<KB Control Monitor>from<Keyboard Users>submenu: move the joystick up and down at <Keyboard Users>submenu, move the cursor to 1, then enter<KB Control Monitor> by moving the joystick right or input number 1 directly at<Keyboard Users>submenu. As figure 34 shows.

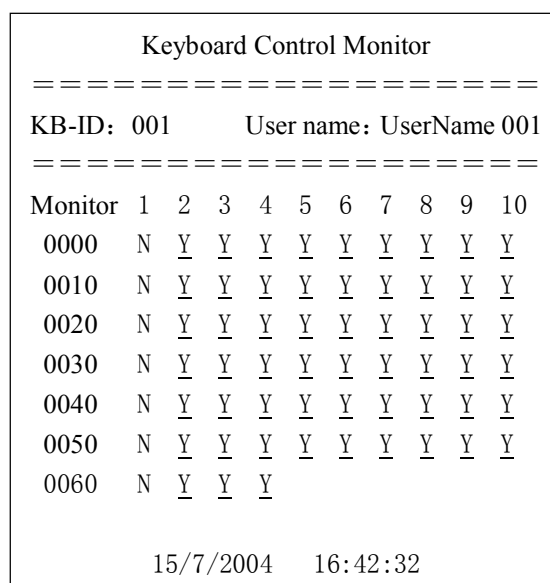


Figure 34 Keyboard Control Monitor

Setting at<KB Control Monitor>:

1. Select the KB-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Monitor ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

Note: There are two numerical values in the editing area: Y means controllable; N means uncontrollable.

5.4.1.2 Keyboard Control Camera

Select<KB Control Camera>from<Keyboard Users>submenu: move the joystick up and down at <Keyboard Users>submenu, move the cursor to 2, then enter<KB Control Camera > by moving the joystick right or input number 2 directly at<Keyboard Users>submenu. As figure 35 shows:

Keyboard Control Monitor										
=====										
KB-ID: 001				User name: UserName 001						
=====										
Monitor	1	2	3	4	5	6	7	8	9	10
0000	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0010	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0020	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0030	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0040	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0050	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0060	N	<u>Y</u>	<u>Y</u>	<u>Y</u>						
15/7/2004 16:42:32										

Figure 35 Keyboard Control Camera

Setting at<KB Control Camera>:

1. Select the KB-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Camera ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

Note: Keyboard users have 3 limitations for Camera.

- ① Invalid (have no right to control the speed dome)
- ② View-Ima (image allowable)
- ③ Valid (image and controlling allowable)

5.4.1.3 Keyboard Control Tour

Select<KB Control Tour>from<Keyboard Users>submenu: move the joystick up and down at<Keyboard Users>submenu, move the flashing cursor to 3, then enter<KB Control Tour>by moving the joystick right or input number 3 directly at<Keyboard Users>submenu. As figure 36 shows:

Keyboard Control Tour										
=====										
KB-ID: 001			User name: UserName 001							
=====										
Tour	1	2	3	4	5	6	7	8	9	10
0000	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0010	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0020	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0030	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0040	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0050	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0060	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0070	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
15/7/2004					16:42:32					

Figure 36 Keyboard Control Tour

Setting at<KB Control Tour>:

1. Select the KB-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Tour ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

5.4.1.4 Keyboard Control Salvo

Select<KB Control Salvo>from<Keyboard Users>submenu: move the joystick up and down at<Keyboard Users>submenu, move the flashing cursor to 4, then enter<KB Control Salvo>by moving the joystick right or input number 4 directly at<Keyboard Users>submenu. As figure 37 shows.

Keyboard Control Salvo						
=====						
KB-ID: 001		User name: UserName 001				
=====						
Salvo	1	2	3	4	5	6
0000	Y	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
15/7/2004 16:42:32						

Figure 37 Keyboard Control Salvo

Setting at<KB Control Salvo>:

1. Select the Salvo ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the KB-ID by moving the joystick up and down, left and right. Turn the joystick clockwise to

- enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
 4. Turn the pages up and down by pressing PREV or NEXT key.

9.1.5 Keyboard control Fortify

Select<KB Control Fortify>from<Keyboard Users>submenu: move the joystick up and down at <Keyboard Users>submenu, move the flashing cursor to 5, then enter<KB Control Fortify>by moving the joystick right or input number 5 directly at<Keyboard Users>submenu. As figure 38 shows.

Keyboard Control Fortify										
=====										
KB-ID: 001			User name: UserName 001							
=====										
Area	1	2	3	4	5	6	7	8	9	10
0000	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0010	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0020	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0030	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0040	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0050	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0060	N	<u>Y</u>	<u>Y</u>	<u>Y</u>						
15/7/2004					16:42:32					

Figure 38 Keyboard Control Fortify

Setting at<KB Control Fortify>:

1. Select the KB-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Salvo ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

9.1.6 Keyboard Control Prior

Select<KB Control Prior>from<Keyboard Users>submenu: move the joystick up and down at<Keyboard Users>submenu, move the flashing cursor to 6, then enter<KB Control Prior>by moving the joystick right or input number 6 directly at<Keyboard Users>submenu. As figure 39 shows:

Keyboard Control Prior	
=====	
KB-ID: 001	User name: UserName 001
=====	
Prior: 09	
15/7/2004	16:42:32

Figure 39 Keyboard Control Prior

Setting at<KB Control Prior>:

1. Select the KB-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Set the Prior by moving the joystick up and down or input the number (1-8) directly. The Prior can be set as 9, 10, 11 when the KB-ID are 1, 2, 3. (11 is the highest, 1 is the lowest)
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

5.4.2 Computer Users

The<Computer Users>submenu also has 6 setups, including 1<PC Control Monitor>, 2<PC Control Camera>, 3<PC Control Tour>, 4<PC Control Salvo>, 5<PC Control Fortify>, 6<PC Control Prior>. As figure 40 shows:

Computer Users
=====
1. PC Control Monitor
2. PC Control Camera
3. PC Control Tour
4. PC Control Salvo
5. PC Control Fortify
6. PC Control Prior
0. Exit
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Figure 40 Computer Users

9.2.1 Computer Control Monitor

Select<PC Control Monitor>from<Computer Users>: Move the joystick up and down at<Computer Users>submenu. Move the flashing cursor to 1, then enter<PC Control Monitor>by moving the joystick right or input number 1 directly at<Computer Users>submenu. As figure 41 shows.

Computer Control Monitor										
=====										
PC-ID: 001 User name: UserName 065										
=====										
Monitor	1	2	3	4	5	6	7	8	9	10
0000	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0010	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0020	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0030	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0040	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0050	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0060	N	<u>Y</u>	<u>Y</u>	<u>Y</u>						
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Figure 41 Computer Control Monitor

Setting at<PC Control Monitor>:

1. Select the PC-ID moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Monitor ID by moving the joystick up and down. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

Note: There are two numerical values in the editing area: Y means controllable; N means uncontrollable.

5.4.2.2 Computer Control Camera

Select<PC Control Camera>from<Computer Users>: Move the joystick up and down at<Computer Users>submenu. Move the flashing cursor to 2, then enter<PC Control Camera>by moving the joystick right or input number 2 directly at<Computer Users>submenu. As figure 42 shows.

Computer Control Camera										
=====										
PC-ID: 001 User name: UserName 065										
=====										
Camera	0	1	2	3	4	5	6	7	8	9
0000	0	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0010	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0020	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0030	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0040	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0050	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0060	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
0070	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
15/7/2004 16:42:32										

Figure 42 PC Control Camera

Setting at<PC Control Camera>:

1. Select the PC-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Camera ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

Note: Computer users have 3 limitations for Camera.

- ① Invalid (have no right to control the speed dome)
- ② View-Ima (image allowable)
- ③ Valid (image and controlling allowable)

5.4.2.3 Computer Control Tour

Select<PC Control Tour>from<Computer Users>: Move the joystick up and down at<Computer Users> submenu. Move the flashing cursor to 3, then enter<PC Control Tour>by moving the joystick right or input number 3 directly at<Computer Users>submenu. As figure 43 shows.

Computer Control Tour										
=====										
PC-ID: 001 User name: UserName 065										
=====										
Tour	1	2	3	4	5	6	7	8	9	10
0000	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0010	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0020	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0030	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0040	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0050	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0060	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0070	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
15/7/2004					16:42:32					

Figure 43 PC Control Tour

Setting at<PC Control Tour>:

1. Select the PC-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Tour ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

5.4.2.4 Computer Control Salvo

Select<PC Control Salvo>from<Computer Users>: Move the joystick up and down at<Computer Users> submenu. Move the flashing cursor to 4, then enter<PC Control Salvo>by moving the joystick right or input number 4 directly at<Computer Users>submenu. As figure 44 shows:

Computer Control Salvo						
=====						
PC-ID: 001		User name: UserName 065				
=====						
Salvo	1	2	3	4	5	6
0000	Y	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
15/7/2004 16:42:32						

Figure 44 PC Control Salvo

Setting at<PC Control Salvo>:

1. Select the PC-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Salvo ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

5.4.2.5 Computer Control Fortify

Select<PC Control Fortify>from<Computer Users>: Move the joystick up and down at<Computer Users> submenu. Move the flashing cursor to 5, then enter<PC Control Fortify>by moving the joystick right or input number 5 directly at<Computer Users>submenu. As figure 45 shows.

Computer Control Fortify										
=====										
PC-ID: 001		User name: UserName 065								
=====										
Area	1	2	3	4	5	6	7	8	9	10
0000	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0010	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0020	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0030	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0040	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0050	N	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>
0060	N	<u>Y</u>	<u>Y</u>	<u>Y</u>						
15/7/2004 16:42:32										

Figure 45 PC Control Fortify

Setting at <PC Control Fortify>:

1. Select the PC-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Select the Tour ID by moving the joystick up and down, left and right. Turn the joystick clockwise to enter setting after selected.
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

5.4.2.6 Computer Control Prior

Select<PC Control Prior>from<Computer Users>: Move the joystick up and down at<Computer Users> submenu. Move the flashing cursor to 6, then enter<PC Control Prior>by moving the joystick right or input number 6 directly at<Computer Users>submenu. As figure 46 shows.

Computer Control Prior ===== PC-ID: 001 User name: UserName 065 ===== Prior: 09 15/7/2004 16:42:32
--

Figure 46 PC Control Prior

Setting at<PC Control Prior>:

1. Select the PC-ID by moving the joystick up and down or input the number directly. Turn the joystick clockwise to enter setting.
2. Move the joystick up and down or input the number (1-8) directly to set up. The Prior can be set as 9, 10, 11 when the KB-ID are 1, 2, 3. (11 is the highest, 1 is the lowest)
3. After setting, press CLEAR key to give up and exit, press ENTER key to update, save and go back to step 2. If other item needs to be modified, repeat the upper steps to complete. If no item needs to be changed, move the joystick left to go back the upper menu.
4. Turn the pages up and down by pressing PREV or NEXT key.

5.5 Tour Setup

Select<Tour Setup>from<System Setup Menu>: Move the joystick up and down at the <System Setup Menu>, move the flashing cursor to 5, then enter<Tour Setup>by moving the joystick right or input number 5 directly at the<System Setup Menu>; As figure 47 shows.

Tour Setup			
=====			
Group: <u>01</u>	Length(MAX): 0064		
Page: <u>001</u>	Length: <u>0008</u>		
Steps	CAM ID	Preset	Dwell
0001	<u>0001</u>	<u>003</u>	<u>002</u>
0002	<u>0002</u>	<u>012</u>	<u>002</u>
0003	<u>0003</u>	<u>020</u>	<u>002</u>
0004	<u>0004</u>	<u>003</u>	<u>002</u>
0005	<u>0005</u>	<u>004</u>	<u>002</u>
0006	<u>0006</u>	<u>005</u>	<u>002</u>
0007	<u>0007</u>	<u>006</u>	<u>002</u>
0008	<u>0008</u>	<u>070</u>	<u>002</u>
15/7/2004		16:42:32	

Figure 47 Tour Setup

Setting at<Tour Setup>:

1. After entering the <Tour Setup> menu, user can find the GROUP number flashes. Select group number (01-88) by moving the joystick up and down or input the number directly. Note: The MAX LENGTH changes according to the form 1.

Group	MAX Length
01--64	64 Steps
65--80	128 Steps
81--84	256 Steps
85--88	512 Steps

Form 1 Tour Steps Instruction

2. Move the joystick right to enter the program sequence. Note: if the sequence has been edited (with steps), the steps will be displayed. If the sequence has not been edited, only Length 0000 will be displayed (no steps); if press ENTER key at this time, user can add one step with default setting as 001 000 000 000; the Length is displayed as Length 0001.
3. After entering the step setting, just move the joystick up and down to select Step number. Turn the joystick clockwise to enter the setting of Camera ID (figure), Dwell, Preset.
4. Move the joystick left and right, move the flashing cursor to the corresponding item, then change the numerical value by moving the joystick up and down or input numbers directly.
5. Move the joystick left to exit this setup.
6. Insert: move the joystick to select the insert position. For example, at Step 0005, press ENTER key to insert a Step 0006 after Step 0005. The Step 0005 and the above steps remain unchanged. The original numbers of all the steps after Step 0005 will be changed by adding 1. But the contents of all the steps remain unchanged. The inserted Step 0006 has the original data as 0006 (STEP), 000(CAM), 000(DWELL), 000(PRE). So the user should set the CAM, DWELL, PRE data. After the insertion, the LENGTH number

will be changed by adding 1.

7. Delete: move the joystick to the step which is to be deleted. For example, to delete Step 0005, just press CLEAR key to delete. 4 steps before the original Step 0005 remain unchanged. The step numbers after the original Step 0005 will be changed by decreasing 1.
8. After completing all the above settings, turn the joystick anticlockwise to return to the GROUP number selection menu.
9. If there is other group to be edited, select the group number and repeat the upper steps to complete the program. Move the joystick left to exit.

5.6 Salvo Setup

Select<Salvo Setup>from<System Setup Menu>: Move the joystick up and down at the <System Setup Menu>menu, move the flashing cursor to 6, then enter<Salvo Setup>by moving the joystick right or input number 6 directly at the<System Setup Menu>. As figure 48 shows.

Salvo Setup		
=====		
Group: <u>01</u>	MAX Len: 64	
Page: <u>01</u>	Steps: <u>01</u>	Length: <u>01</u>
Monitor	CAM ID	Preset
0001	<u>0001</u>	<u>00</u>
0002	<u>0002</u>	<u>01</u>
0003	<u>0003</u>	<u>02</u>
0004	<u>0004</u>	<u>03</u>
0005	<u>0005</u>	<u>04</u>
0006	<u>0006</u>	<u>05</u>
0007	<u>0007</u>	<u>06</u>
0008	<u>0008</u>	<u>07</u>
15/7/2004 16:42:32		

Figure 48 Salvo Setup

Setting at<Salvo Setup>:

1. Group number will flash after entering salvo setup. Move the joystick up and down to select the Group number (1-10).
2. Move the joystick right to enter steps length setup. Switch steps flash and then move the joystick up and down to select the switch serial number (01-64).
3. If the sequence has been edited, the details will be displayed; If it is a new sequence, only Steps: 00 Length: 00 display (no content in the list).
4. Move the joystick up and down, left and right to select Monitor ID, Camera ID, and Preset. Move the flashing cursor to the corresponding item, move the joystick up and down or input number directly to change the numerical value.
5. Insert: enter step setting, switch steps flash, move the joystick up and down to select insert position. For example at Step 05, press ENTER key, Step 06 has been inserted into the selected position. The Step 05

and the above steps remain unchanged. The original numbers of all the steps after Step 05 will be changed by adding 1. The inserted step will be Step 06. After the insertion, the Length number will be changed by adding 1.

6. Delete: move the flashing cursor to the step which is to be deleted. For example, to delete Step 05, just press CLEAR key on keyboard to delete. 4 steps before the original Step 05 remain unchanged. The step numbers after the original Step 05 will be changed by decreasing 1. The Length number will be changed by decreasing 1.
7. After completing all the above settings, turn the joystick anticlockwise to return to the GROUP number selection menu.
8. If other GROUP needs to be edited, select the GROUP number and repeat the upper steps to complete the program. Move the joystick left to exit.

5.7 Fortify Setup

Select<Fortify Setup>from<System Setup Menu>: Move the joystick up and down at the <System Setup Menu>, move the flashing cursor to 7, then enter<Fortify Setup>by moving the joystick right or input number 7 directly at the<System Setup Menu>; <Fortify Setup>includes four setups: 1<Probe Config>, 2<Fortify Mode>, 3<Fortify Area>, 4<Fortify Form Setup> As figure 49 shows.

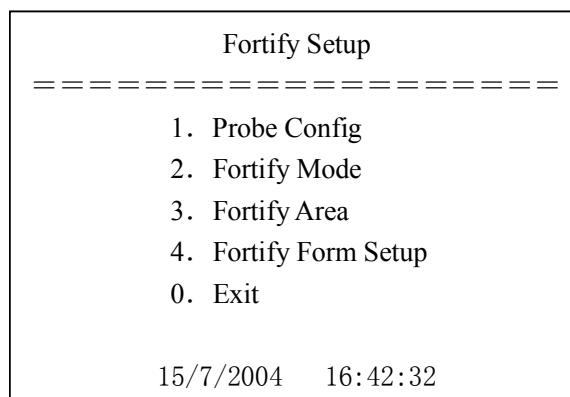


Figure 49 Fortify Setup

Setting at<Fortify Setup>menu:

1. Move the flashing cursor to the selected item by moving the joystick up and down. Enter the selected item by moving the joystick right or input the selected item number directly.
2. If no item needs to be changed, move the flashing cursor to 0, then move the joystick right to exit or input 0 directly to exit.

5.7.1 Probe Configuration

Select<Probe Config>from<Fortify Setup>: Move the joystick up and down at the<Fortify Setup>menu, move the flashing cursor to 1, then enter<Probe Config>by moving the joystick right or input number 1 directly at the<Fortify Setup>submenu. As figure 50 shows:

Probe Configuration	
=====	
Probe ID :	0001
Probe Title:	* Probe Title 0001*
Probe state:	Connected
=====	
Number	
15/7/2004	16:42:32

Figure 50 Probe Configuration

Setting at<Probe Config>:

1. Turn the joystick anticlockwise or clockwise to select alarm probe; move the joystick down to enter the probe title edit after selected.
2. Refer to the appendix I Letter Input when edit the probe title(up to 16 characters), Move the joystick down to enter Probe enable edit, move the joystick up to save the title.
3. Turn the joystick anticlockwise or clockwise to setup the probe state. Move the joystick up to enter the probe title edit.
4. Move the joystick up to go back step 1 after setup. If probe title or state has any change, screen will appear: "PRESS<CLEAR>TO CANCEL; PRESS<ENTER>TOUPDATE", exit according to the request. If no item needs to be changed, turn the joystick anticlockwise to go back the upper menu. If other setups need to be modified, repeat the upper steps.

5.7.2 Fortify Mode

Select<Fortify Mode>from<Fortify Setup>: Move the joystick up and down at the<Fortify Setup>menu, move the flashing cursor to 2, then enter<Fortify Mode>by moving the joystick right or input number 2 directly at the<Fortify Setup>menu. As figure 51 shows:

Fortify Mode	
=====	
Area ID: 001	Name: *Area Title A0001*
=====	
Mode:	<u>Manual</u>
15/7/2004	16:42:32

Figure 51 Fortify Mode

Setting at<Fortify Mode>:

1. Move the joystick up and down or input the number directly, then turn the joystick clockwise to enter Fortify Mode editing.
2. Fortify mode: move the joystick up and down to set the fortify mode (total 2 fortify modes).
3. Press <ENTER> key to save the setup and exit; Press <CLEAR> key to give up and exit.

5.7.3 Fortify Area

Select<Fortify Area>from<Fortify Setup>: Move the joystick up and down at the<Fortify Setup>menu, move the flashing cursor to 3, then enter<Fortify Area>by moving the joystick right or input number 3 directly at the<Fortify Setup>menu. As figure 52 shows:

Fortify Area							
=====							
Area ID : 001 Name: *Area Title A 0001*							
Week : Mon Tues Wed Thu Fri Sat Sun							
Table : 01 02 03 04 05 06 07							
=====							
Page: 01 Length: 016 Len(MAX): 128							
ID: 1 2 3 4 5 6 7							
000 ► 0001 0002 0003 0004 0005 0006 0007							
007 0008 0009 0010 0011 0012 0013 0014							
014 0015 0016							
15/7/2004 16:42:32							

Figure 52 Fortify Area

Setting at<Fortify Area>:

1. Move the joystick up and down or input the number directly. Turn the joystick clockwise to enter Area setup.
2. Refer to the appendix 6 Letter Input when edit the Area name(up to 16 characters). Move the joystick down to enter the periodic table choice.
3. Turn the joystick anticlockwise and clockwise or input the number directly to select the Area number. Move the joystick left and right to select the period. Move the joystick down to enter probe page.
4. Probe page: Turn the joystick anticlockwise and clockwise or input the number directly to select probe pages. Move the joystick down to select the serial number.
5. Serial number: Move the joystick up and down to select the serial number. Turn the joystick clockwise to enter the editing area while turn left to exit to <ID>. Edit next one according to the upper method.
6. Exit: Move the joystick up, then the screen will appear: "PRESS<CLEAR>TO CANCEL; PRESS<ENTER>TO UPDATE".
7. Note: When edit the <ID>, the MAX length per page is 128. It can be edited until 128. Press ENTER key to add a serial number, press CLEAR key to delete a serial. If the input number has been in the Table, screen will appear "Probe 0000 is assigned 00 area". Press CLEAR key to cancel the NOTE and input the serial number again.

Note:

1. Total 10 auto Tables
2. A probe only can be set at a corresponding area.
3. Everyday needs an appointed Table.
4. Each Tables corresponding to 64 Area Time Slices.

5.7.4 Fortify Form

Select<Fortify Form>from<Fortify Setup>: Move the joystick up and down at the<Fortify Setup>menu, move the flashing cursor to 4, then enter<Fortify Form>by moving the joystick right or input number 4 directly at the<Fortify Setup>submenu. As figure 53 shows:

Fortify Form		
=====		
Table <u>01</u>	Total: 10 sheets	
Area	Time Slice 1	Time Slice 2
01	<u>00:01</u> → <u>02:30</u>	<u>13:00</u> → <u>06:30</u>
02	<u>14:00</u> → <u>07:30</u>	<u>13:00</u> → <u>06:30</u>
03	<u>15:00</u> → <u>08:30</u>	<u>13:00</u> → <u>06:30</u>
04	<u>16:00</u> → <u>09:30</u>	<u>13:00</u> → <u>06:30</u>
05	<u>17:00</u> → <u>10:30</u>	<u>13:00</u> → <u>06:30</u>
06	<u>18:00</u> → <u>11:30</u>	<u>13:00</u> → <u>06:30</u>
07	<u>19:00</u> → <u>12:30</u>	<u>13:00</u> → <u>06:30</u>
08	<u>20:00</u> → <u>13:30</u>	<u>13:00</u> → <u>06:30</u>
09	<u>20:00</u> → <u>13:30</u>	<u>13:00</u> → <u>06:30</u>
15/7/2004		16:42:32

Figure 53 Fortify Form

Setting at<Fortify Form>:

1. Move the joystick up and down to select the Table, then move the joystick right to enter the setup.
2. Move the joystick up and down to select different area (1-64), while 8 areas per page. When the flashing cursor moved to the front or end of each page, page can be turned automatic by moving the joystick up and down or pressing PREV key and NEXT key.
3. After selected the area number, turn the joystick clockwise to enter the time setup of this area's fortify.
4. Move the joystick left and right to select the position needed to be modified. Move the joystick up and down or input the number directly to modify.
5. Turn the joystick anticlockwise to exit the setup. Repeat the upper steps if other item needs to be modified.

Note:

1. Time tables can't cross within the same day and must be set clockwise
2. Time setup can't cross the other day: each day has a time tables, it can record any time period from 0:0 to 23:59.
3. The set items corresponding to the auto fortify area only be effective when area setup is auto fortify.

5.8 Alarm Setup

Select<Alarm Setup>from<System Setup Menu>: Move the joystick up and down at the<System Setup Menu>, move the flashing cursor to 8, then enter<Alarm Setup>by moving the joystick right or input number 8 directly at the<System Setup Menu>; <Alarm Setup>includes two setups: 1. <Alarm Mode Setup>, 2. <Alarm Export Form>. As figure 54 shows.

Alarm Setup	
=====	
1. Alarm Mode Setup	
2. Alarm Export Form	
0. Exit	
15/7/2004 16:42:32	

Figure 54 Alarm Setup

Setting at<Alarm Setup>menu:

1. Move the flashing cursor to the selected item by moving the joystick up and down. Move the joystick right to enter the item or input the selected item number directly to enter.
2. If no item needs to be changed, move the flashing cursor to 0 by moving the joystick up and down, move the joystick right to exit or input 0 directly to exit.

5.8.1 Alarm Mode Setup

Select<Alarm Mode Setup>at<Alarm Setup>menu: move the joystick up and down at<Alarm Setup>menu, move the flashing cursor to 1, then enter <Alarm Mode Setup>by moving the joystick right or input number 1 directly. As figure 55 shows:

Alarm Mode Setup	
=====	
Area ID: 001	Name: *Area Title A0001*
=====	
Alarm Mode: Fixed Dis 4	
Monitor1 Monitor 2 Monitor 3 Monitor 4	
=====	
Clearance : Manual ACK	
ACK-Time: OFF	
User ID: 001	
=====	
15/7/2004	16:42:32

Figure 55 Alarm Mode Setup

Setting at<Alarm Mode Setup>menu:

1. Move the joystick up and down or input the area number directly (total 64 areas), then turn the joystick clockwise to enter Alarm Mode.
2. Select Alarm Mode by moving the joystick up and down, then move the joystick right to enter Monitor Editing.
3. Select monitor ID by moving the joystick up and down or input the number key directly, then move the joystick right to next monitor edit. Setup method is the same as upper steps. Move the joystick right to enter the Clearance mode.
4. Move the joystick up and down to select the Clearance mode: Manual ACK/ Auto ACK; ACK-Time can be edited when at the Auto ACK state.
5. Move the joystick up and down or input number directly to setup the ACK-Time, move the joystick right to enter User ID.
6. Move the joystick up and dome or input number directly to select the User ID.
7. Exit: turn the joystick anticlockwise to go back area ID.

Note: When the probes over 128 in an area, another area can be distributed to the user. But all the Alarm Mode setup of these two areas should be the same.

5.8.2 Alarm Export Form

Select<Alarm Export Form>at<Alarm Setup>menu: move the joystick up and down at<Alarm Setup>menu, move the flashing cursor to 2, then enter<Alarm Export Form>by moving the joystick right or input number 2 directly. As figure 56 shows:

Alarm Export Form				
=====				
Page: 001			Total:128	
ID	CAM	PRE	DWE	AUX
<u>0001</u>	<u>0001</u>	<u>000</u>	<u>001</u>	<u>000</u>
<u>0002</u>	<u>0002</u>	<u>001</u>	<u>002</u>	<u>001</u>
<u>0003</u>	<u>0003</u>	<u>002</u>	<u>003</u>	<u>002</u>
<u>0004</u>	<u>0004</u>	<u>003</u>	<u>004</u>	<u>003</u>
<u>0005</u>	<u>0005</u>	<u>004</u>	<u>005</u>	<u>004</u>
<u>0006</u>	<u>0006</u>	<u>005</u>	<u>006</u>	<u>005</u>
<u>0007</u>	<u>0007</u>	<u>006</u>	<u>007</u>	<u>006</u>
<u>0008</u>	<u>0008</u>	<u>007</u>	<u>008</u>	<u>007</u>
15/7/2004		16:42:32		

Figure 56 Alarm Export Form

Setting at<Alarm Export Form>:

1. Move the joystick up and down or input the page number directly, move the joystick right to enter probe ID.
2. Move the joystick up and down to select probe ID, turn the joystick clockwise to enter editing area.
3. Move the joystick up and down or input number directly to select camera ID, move the joystick right in turns to enter a setup. The setting is the same as Camera setup.
4. Turn the joystick anticlockwise to go back probe editing, move the joystick left to go back page number editing, then move the joystick left to exit the setting. If no item needs to be changed, move the joystick left to go back the upper menu.

Note: The value of AUX is corresponding to the alarm input port.

5.9 System Information

Select<System Info>from<System Setup Menu>: Move the joystick up and down at the<System Setup Menu>, move the flashing cursor to 9, then enter<System Info>by moving the joystick right or input number 9 directly at the<System Setup Menu>; <System Info>includes 9 information: 1. System Config 2. Hardware Connect 3. Video Switch 4. Video Loss 5. Probe Setup 6. Probe State 7. Fortify State 8. Fortify Record 9. Alarm Record, as figure 57 shows:

Note: it can be look over by pages if each submenu over one page. Move the joystick up and down to select the page or input the page number directly.

System Information	
=====	
1. System Config	
2. Hardware Connect	
3. Video Switch	
4. Video Loss	
5. Probe Setup	
6. Probe State	
7. Fortify State	
8. Fortify Record	
9. Alarm Record	
0. Exit	
15/7/2004	16:42:32

Figure 57 System Info

5.9.1 System Configuration

Select<System Config>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 1, then enter<System Config>by moving the joystick right or input number 1 directly at the<System Info>submenu. As figure 58 shows, the content showed are the basic information of the Matrix system. Move the joystick left to exit, go back to the upper menu.

SAE- M8000 System	
=====	
Net card: 002	004 006 240 001 195
System IP: 010	000 003 001
GatewayIP: 010	000 003 070
Server IP: 010	000 003 011
Sub mask: 255	000 000 000
Preset: 250	Alarm Out: 064
Camera: 0512	KB Users: 064
Monitor: 064	PC Users: 064
Tours: 088	Version: Ver2.00
Salvo: 010	Video: PAL
Alarm In: 1024	Language: English
15/7/2004	16:42:32

Figure 58 System Configuration

5.9.2 Hardware Connect

Select<Hardware Connect>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 2, then enter<Hardware Connect>by moving the joystick right or input number 2 directly at the<System Info>submenu. As figure 59 shows. Move the joystick left to exit, go back to the upper menu.

Hardware Connect	
=====	
1. KB Users	
2. PC Users	
3. Distributor	
4. Alarm-In Box	
5. Alarm-Out Box	
0. Exit	
15/7/2004	16:42:32

Figure 59 Hardware Connect

5.9.2.1 Keyboard Users

Select<KB Users>from<Hardware Connect>: Move the joystick up and down at the <Hardware Connect>, move the flashing cursor to 1, then enter<KB Users>by moving the joystick right or input number 1 directly at the<Hardware Connect>. As figure 60 shows. Move the joystick left to exit, go back to the upper menu.

Keyboard Users								
=====								
Online Units: 002				MAX Users: 064				
=====								
Users ID	1	2	3	4	5	6	7	8
0000	Y	Y	N	N	N	N	N	N
0008	N	N	N	N	N	N	N	N
0016	N	N	N	N	N	N	N	N
0024	N	N	N	N	N	N	N	N
0032	N	N	N	N	N	N	N	N
0040	N	N	N	N	N	N	N	N
0048	N	N	N	N	N	N	N	N
15/7/2004				16:42:32				

Figure 60 Keyboard Users

Note: when keyboard connects to the matrix, the corresponding ID is Y.

5.9.2.2 PC Users

Select<PC Users>from<Hardware Connect>: Move the joystick up and down at the <Hardware Connect>, move the flashing cursor to 2, then enter<PC Users>by moving the joystick right or input number 2 directly at the<Hardware Connect>. As figure 61 shows. Move the joystick left to exit, go back to the upper menu.

Computer Users								
=====								
Online Units: 002				MAX Users: 064				
=====								
Users ID	1	2	3	4	5	6	7	8
0000	Y	Y	N	N	N	N	N	N
0008	N	N	N	N	N	N	N	N
0016	N	N	N	N	N	N	N	N
0024	N	N	N	N	N	N	N	N
0032	N	N	N	N	N	N	N	N
0040	N	N	N	N	N	N	N	N
0048	N	N	N	N	N	N	N	N
15/7/2004				16:42:32				

Figure 61 PC Users

Note: when users register, the corresponding ID is Y.

5.9.2.3 RS485 Distributor

Select<RS485 Distributor>from<Hardware Connect>: Move the joystick up and down at the <Hardware Connect>, move the flashing cursor to 3, then enter<RS485 Distributor>by moving the joystick right or input number 3 directly at the<Hardware Connect>. As figure 62 shows. Move the joystick left to exit, go back to the upper menu.

RS485 Distributor				
=====				
Online Units: 001		MAX Units: 004		
=====				
Units ID	1	2	3	4
0000	Y	N	N	N
15/7/2004		16:42:32		

Figure 62 RS485 Distributor

Note: whenRS485 distributor connects to the matrix, the corresponding ID is Y.

5.9.2.4 Alarm-In Box

Select<Alarm-In Box>from<Hardware Connect>: Move the joystick up and down at the <Hardware Connect>, move the flashing cursor to 4, then enter<Alarm-In Box>by moving the joystick right or input number 4 directly at the<Hardware Connect>. As figure 63 shows. Move the joystick left to exit, go back to the upper menu.

Alarm-In Box								
=====								
Online Units: 002				MAX Units: 016				
=====								
Units ID	1	2	3	4	5	6	7	8
0000	Y	Y	N	N	N	N	N	N
0008	N	N	N	N	N	N	N	N
15/7/2004				16:42:32				

Figure 63 Alarm-In Box

Note: when Alarm Input Box connects to the matrix, the corresponding ID is Y.

5.9.2.5 Alarm-Out Box

Select<Alarm-Out Box>from<Hardware Connect>: Move the joystick up and down at the <Hardware Connect>, move the flashing cursor to 5, then enter<Alarm-Out Box>by moving the joystick right or input number 5 directly at the<Hardware Connect>. As figure 64 shows. Move the joystick left to exit, go back to the upper menu.

Alarm-Out Box				
=====				
Online Units: 001			MAX Units: 004	
=====				
Units ID	1	2	3	4
0000	Y	N	N	N
15/7/2004		16:42:32		

Figure 64 Alarm-Out Box

Note: when Alarm Output Box connects to the matrix, the corresponding ID is Y.

5.9.3 Video Switch

Select<Video Switch>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 3, then enter<Video Switch>by moving the joystick right or input number 3 directly at the<System Info>submenu. As figure 65 shows. Move the joystick left to exit, go back to the upper menu.

Video Switch			
=====			
Page: 01			
MONITOR	CAMERA	MONITOR	CAMERA
001	--> 0001	002	--> 0001
003	--> 0001	004	--> 0001
005	--> 0001	006	--> 0001
007	--> 0001	008	--> 0001
009	--> 0001	010	--> 0001
011	--> 0001	012	--> 0001
013	--> 0001	014	--> 0001
015	--> 0001	016	--> 0001
15/7/2004		16:42:32	

Figure 65 Video Switch

Note: The showed content is camera ID of each monitor switch currently.

5.9.4 Video Loss

Select<Video Loss>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 4, then enter<Video Loss>by moving the joystick right or input number 4 directly at the<System Info>submenu. As figure 66 shows. Move the joystick left to exit, go back to the upper menu.

Video Loss									
Page: 01=====									
Block	Probe	1	2	3	4	5	6	7	8
01	0000	Y	Y	N	N	N	N	N	N
	0008	N	N	N	N	N	N	N	N
02	0016	N	N	N	N	N	N	N	N
	0024	N	N	N	N	N	N	N	N
03	0032	N	N	N	N	N	N	N	N
	0040	N	N	N	N	N	N	N	N
04	0048	N	N	N	N	N	N	N	N
	0056	N	N	N	N	N	N	N	N
05	0064	N	N	N	N	N	N	N	N
	0072	N	N	N	N	N	N	N	N
15/7/2004		16:42:32							

Figure 66 Video Loss

Note: The showed content is the corresponding input video signal test result of each video input board. Y means having video input.

5.9.5 Probe Setup

Select<Probe Setup>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 5, then enter<Probe Setup>by moving the joystick right or input number 5

directly at the<System Info>submenu. As figure 67 shows. Move the joystick left to exit, go back to the upper menu.

Probe Setup										
Page: 01	=====									
Probe	1	2	3	4	5	6	7	8	9	10
0000	1	1	1	1	1	1	1	1	1	1
0010	1	1	1	1	1	1	1	1	1	1
0020	1	1	1	1	1	1	1	1	1	1
0030	1	1	1	1	1	1	1	1	1	1
0040	1	1	1	1	1	1	1	1	1	1
0050	1	1	1	1	1	1	1	1	1	1
0060	1	1	1	1	1	1	1	1	1	1
0070	1	1	1	1	1	1	1	1	1	1
0080	1	1	1	1	1	1	1	1	1	1
0090	1	1	1	1	1	1	1	1	1	1
15/7/2004					16:42:32					

Figure 67 Probe Setup

Note: The showed content is the setup sate of the probe. 1 means ON (Normal close valid), 0 means OFF (Normal open valid).

5.9.6 Probe State

Select<Probe State>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 6, then enter<Probe State>by moving the joystick right or input number 6 directly at the<System Info>submenu. As figure 68 shows. Move the joystick left to exit, go back to the upper menu.

Probe state										
Page: 01	=====									
Probe	1	2	3	4	5	6	7	8	9	10
0000	1	1	1	1	1	1	1	1	1	1
0010	1	1	1	1	1	1	1	1	1	1
0020	1	1	1	1	1	1	1	1	1	1
0030	1	1	1	1	1	1	1	1	1	1
0040	1	1	1	1	1	1	1	1	1	1
0050	1	1	1	1	1	1	1	1	1	1
0060	1	1	1	1	1	1	1	1	1	1
0070	1	1	1	1	1	1	1	1	1	1
0080	1	1	1	1	1	1	1	1	1	1
0090	1	1	1	1	1	1	1	1	1	1
15/7/2004					16:42:32					

Figure 68 Probe State

Note: The showed content is the sate information of the probe, which corresponding to the setup information above. It will alarm if the corresponding position not the same.

5.9.7 Fortify State

Select<Fortify State>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 7, then enter<Fortify State>by moving the joystick right or input number 7 directly at the<System Info>submenu. As figure 69 shows. Move the joystick left to exit, go back to the upper menu.

Fortify State										
Page: 01=====										
Probe	1	2	3	4	5	6	7	8	9	10
0000	Y	Y	N	N	N	N	N	N	N	N
0010	N	N	N	N	N	N	N	N	N	N
0020	N	N	N	N	N	N	N	N	N	N
0030	N	N	N	N	N	N	N	N	N	N
0040	N	N	N	N	N	N	N	N	N	N
0050	N	N	N	N	N	N	N	N	N	N
0060	N	N	N	N	N	N	N	N	N	N
0070	N	N	N	N	N	N	N	N	N	N
0080	N	N	N	N	N	N	N	N	N	N
0090	N	N	N	N	N	N	N	N	N	N
15/7/2004					16:42:32					

Figure 69 Fortify State

Note: The showed content is the fortify sate of the probe. Alarm signal only can effect at Y (fortify state) .

5.9.8 Fortify Record

Select<Fortify Record>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 8, then enter<Fortify Record>by moving the joystick right or input number 8 directly at the<System Info>submenu. As figure 70 shows. Move the joystick left to exit, go back to the upper menu.

Fortify Record										
=====										
Page: 0001 Total: 0256 Item: 2046										
Area	Y/N	Date	Time	Description						
****	N	04-06-06	05:05	All-No						
****	Y	04-06-06	06:05	All-Yes						
01	N	04-06-06	07:05	*Area TitleA0001*						
01	Y	04-06-06	08:05	*Area TitleA0001*						
0001	N	04-06-06	08:05	*Probe Title0001*						
0002	Y	04-06-06	09:05	* Probe Title 0001*						
15/7/2004					16:42:32					

Figure 70 Fortify Record

Note: The showed content is the fortify time record of each probes, fortify area and all the area. The front event is the event happened recently.

5.9.9 Alarm Record

Select<Alarm Record>from<System Info>submenu: Move the joystick up and down at the<System Info>, move the flashing cursor to 9, then enter<Alarm Record>by moving the joystick right or input number 9 directly at the<System Info>submenu. As figure 71 shows. Move the joystick left to exit, go back to the upper menu.

Alarm Record			
=====			
Page: 0001 Total: 0257 Item: 2048			
Probe	Date	Time	Description
0004	04-06-06	05:05	All-No
0003	04-06-06	06:05	All-Yes
0002	04-06-06	07:05	*Probe TitleA0001*
0001	04-06-06	08:05	*Probe TitleA0001*
15/7/2004 16:42:32			

Figure 71 Alarm Record

Note: The showed content is the alarm time record message of each probe. The front event is the event happened recently.

Appendix I SAE-M8000matrixletterInputintroduction

M8000 matrix system has five input methods, including Number input, Character input, Lowercase input, Uppercase input and Chinese pinyin input. (There has no Spelling input in the English edition.) Turn the joystick anticlockwise or clockwise /press WIDE or TELE key to switch input method during the input states.

Modify the flashing cursor state: flashing cursor has two states as below

- 1、flicker without underline, it means editing and covering state.
- 2、flicker with underline, it means editing and inserting state.

Switch these two states by pressing Shift key.

1. Number Input

Input numbers directly. As figure I shows :

Administrators	Camera titles
=====	=====
Admin ID: 01	camera ID: 0001
Admin Name : UserName *01	Camera title : *Camera Title0001*
Old password : *****	=====
New password : *****	
Verify New : *****	
=====	
Number	Number
15/07/2004 16:42:32	15/07/2004 16:52:32

Figure I Number Input

2. Character Input

Press any number key, there will appear characters to be selected at the screen as figure II. Press PREV or NEXT key to turn the page up or down; When the character appear at the screen, select the number before the character or move the flashing cursor to the character and then press ENTER key.

Administrators	Camera titles
=====	=====
Admin ID: 01	camera ID: 0001
Admin Name : UserName *01	Camera title : *Camera Title 0001*
Old password : *****	=====
New password : *****	
Verify New : *****	
=====	
1, 2. 3! 4? 5: 6; 7@ 8# 9\$	1, 2. 3! 4? 5: 6; 7@ 8# 9\$
Character	Character
15/07/2004 16:44:32	15/07/2004 16:54:32

Figure II Character Input

3. Lowercase Input

26 Lowercases distribute averagely at the number keys 1-9 by order. Each of the number keys 1-8 includes 3 characters, while number key 9 includes 2 characters. Press the corresponding number key of the selected character, the screen will appear 3 or 2 letters as figure III shows. When the character appears at the screen, select the number before the character or move the flashing cursor to the character and then press ENTER key.

Administrators	Camera titles
=====	=====
Admin ID: 01	camera ID: 0001
Admin Name : UserName *01	Camera title : *Camera Title 0001*
Old password : *****	=====
New password : *****	
Verify New : *****	
=====	
1 a 2 b 3 c	1 a 2 b 3 c
Lowercase	Lowercase
15/07/2004 16:46:32	15/07/2004 16:56:32

Figure III Lowercase Input

4. Uppercase Input

26 Uppercase distribute averagely at the number keys 1-9 by order. Each of the number keys 1-8 includes 3 characters, while number key 9 includes 2 characters. Press the corresponding number key of the selected character, the screen will appear 3 or 2 letters as figure IV shows. When the character appears at the screen, select the number before the character or move the flashing cursor to the character and then press ENTER key.

Administrators	Camera titles
=====	=====
Admin ID: 01	camera ID: 0001
Admin Name : UserName *01	Camera title : *Camera Title 0001*
Old password : *****	=====
New password : *****	
Verify New : *****	
=====	
1 A 2 B 3 C	1 A 2 B 3 C
Uppercase	Uppercase
15/07/2004 16:48:32	15/07/2004 16:58:32

Figure IV Uppercase Input

Appendix II Precautions & requirement of SAE-M8000 matrix systems engineering

1. System wiring

- 1.Communication cable: The wiring between matrix host, control keyboard, RS485 distributor, alarm input/out box and Hub use twisted-pair.
- 2.Video cable: The input/output video cable of matrix host use 75 Ω video coaxial cable.

2.Thunder proof system

With the arrival of information age, traditional thunder proof has changed. The threatener of the thunder to information network is more and more outstanding. The thunder and lightning discharge will form a very strong electric magnetic field in the twinkling of an eye when happened in the space. The energy of this electric magnetic field will spread into the equipment through various kinds of signal lines. This will cause the equipment damage or the data mistakes. Lightning rod of building will flow through heavy electric current when it's working. The electric current will cause two aftereffects. One is producing a strong electric magnetic field around the Lightning rod grounding line. The other is increasing electric potential making in a split second (1000V at most). Both the aftereffects will cause the equipment damage or the data mistakes.

Use the thunder proof measure as below in order to prevent the threat to the equipment of the thunder and lightning.

1. Install power supply arrester at the power input port.

The thunder and lightning shock wave energy can intrude and damage power equipment from the power supply circuitry easily, even damage the whole equipment and system. Thunder suffering analysis indicate about (70-80)% thunder suffering enter from power supply circuitry. Power circuitry thunder proof is the most important tache of the electric equipment, even the whole thunder proof system. Therefor, we advice users who have qualification to install power arrester at the system power input port.

2. Connecting the special-purpose signal arrester on the line between each terminal decoder and matrix host. Arrester is needed especially using the outdoor terminal decoder. Each route needs two when installing the arrester. One is near the matrix host while the other is near the decoder.
3. Install the television camera arrester between each outdoor camera and matrix video cable when using the outdoor camera. Install an arrester respectively to the matrix host and close to camera. Multimedia computer and control keyboard can uninstall arrester for they are near matrix host. But it's should install arrester if they are far from matrix host.

3. System grounding

SAE-M8000 series surveillance system matrix host grounding port (system grounding) is the lightning strike place. It must connect to the mother earth. The lightning strike protective grounding of the “System grounding” is the guarantee of the system running normally, safely and unfailingly. The lightning strike protective grounding should use copper wire when burying at outdoor specially. In this condition it can endure tens and thousands Ampere strike electric current. Unstable grounding may cause system thunder proof protect circuit invalidation or some other deviant phenomena to happen.

4. SAE-M8000 series surveillance system power supply must use hot line, neutral line and grounding line. Matrix host power supply must use three related core power. The connecting between matrix host crust and system grounding must be stable.

Appendix III Functions of SAE-M8000

1. MANUAL SWITCH

1.1 To display a video on current monitor

Operation: Press X+CAM

(X: Camera ID; X= 1~1024; 1-CAM0001, 1024-CAM1024)

EXAMPLE: To display CAM4 on current monitor

Operation: Press 4+CAM

1.2 To set current monitor

Operation: Press X+MON

(X: Monitor ID; X=1~64; 1-MON01, 256- MON64)

EXAMPLE: To set MON4 as current Monitor

Operation: Press 4+CAM

2. VIDEO SWITCH

2.1 To display previous video on current monitor

Operation: Press **PREV**

2.2 To display next video on current monitor

Operation: Press **NEXT**

3. AUTO SEQUENTIAL SCAN

3.1 To set scan range

Operation: X+PREV+Y+NEXT

(X: Start Camera ID; Y: End Camera ID)

X=Y Invalid Command

X>Y Scan from X, one by one to Y with a reverse sequential turn, lastly go back to X and cycle

X<Y Scan from X, one by one to Y with a forward sequential turn, lastly go back to Y and cycle

Note: X,Y must be set together. If not, system will adopt the default number 1~1024

EXAMPLE: To switch from CAM3 to CAM8

Operation: Press 3+PREV+8+NEXT

3.2 To activate auto sequential scan

Operation: SHIFT +X+SCAN

(X: dwell time of each camera video, 1-255 second)

EXAMPLE: to run auto sequential scan on current monitor with dwell time of 3 seconds.

Operation: SHIFT+3+SCAN

3.3 To stop auto sequential scan

Operation: Press SHIFT+0+SCAN

4. SALVO SWITCH

Activate programmed salvo switch

4.1 To set dwell time

Operation: SHIFT+X+DWELL

(X: dwell time of each step, 1~255 second)

Note: Default time is 2 second; It is valid for 1~10 salvo switch groups; Even if a salvo switch sequence is running, user can set the dwell time.

4.2 To run salvo switch

Operation: SHIFT+X+PATTERN

(X: salvo switch group number, 1~10)

Note: The salvo switch group must be programmed.

4.3 To stop salvo switch

Operation: SHIFT+0+PATTERN

5. SEQUENCE SWITCH

5.1 To run programmed sequence switch

To activate a programmed sequence switch on a monitor

(Refer to 10. for Tour setup)

Operation: Press N+MON+SHIFT+X+TOUR

(N: monitor ID, X: sequence ID)

EXAMPLE: to run sequence3 on MON2

Operation: Press 2+MON+SHIFT+3+TOUR

Note: The sequence group must be programmed.

5.2 To stop sequence switch

Operation: Press N+MON+SHIFT+0+TOUR

EXAMPLE: To stop running sequence switch on MON2.

Operation: 2+MON+SHIFT+0+TOUR

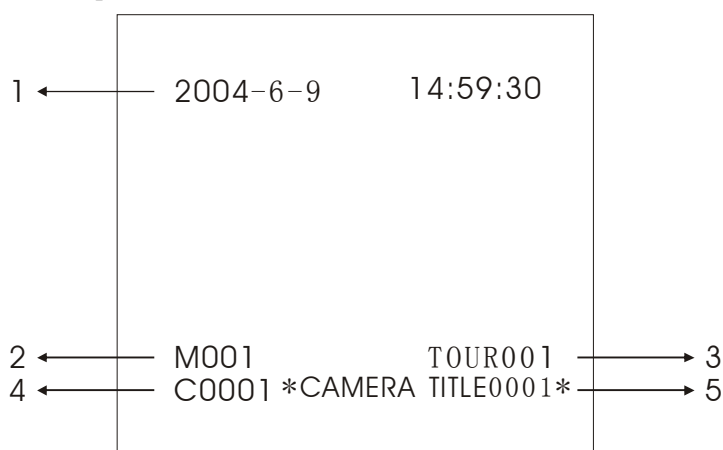
Note: Set sequence ID to 0 to stop running sequence switch

6. VIDEO LOSS

VIDEO LOSS used to examine the state of current video input. Y stands for video signal; N stands for no video signal.

7. OSD MENU and VIDEO OVERLAY

Monitor window as below picture shows:



1—DATE/TIME

2—MONITOR ID

3—STATE of CURRENT MONITOR (SEQUENCE SWITCH, SALVO SWITCH AND AUTO SWITCH)

4—CURRENT CAMERA ID

5—CURRENT CAMERA TITLE

7.1 To open or close DATE/TIME

7.1.1 To display date/time

Operation: Press N+MON+SHIFT+1+OPEN

(N: Monitor ID)

EXAMPLE: To display on MON2

Operation: Press 2+MON+SHIFT+1+OPEN

7.1.2 Not to display date/time on a monitor

Operation: Press N+MON+SHIFT+1+CLOSE

(N: Monitor ID)

EXAMPLE: Not to display date/time on MON2

Operation: Press 2+MON+SHIFT+1+CLOSE

7.1.3 To display date/time on all the monitors

Operation: Press SHIFT+1+9+OPEN

7.1.4 Not to DATE/TIME on all the monitors

Operation: Press SHIFT+1+9+CLOSE

7.2 To open/close MONITOR ID

7.2.1 To display monitor ID on a monitor

Operation: Press N+MON+SHIFT+2+OPEN

(N: Monitor ID)

EXAMPLE: to display monitor ID on MON2

Operation: Press 2+MON+SHIFT+2+OPEN

7.2.2 Not to display monitor ID on a monitor

Operation: Press N+MON+SHIFT+2+CLOSE

(N: Monitor ID)

EXAMPLE: Not to display monitor ID on MON2

Operation: Press 2+MON+SHIFT+2+CLOSE

7.2.3 To display date/time on all the monitors

Operation: Press SHIFT+ 2+9+OPEN

7.2.4 Not to display date/time on all the Monitors

Operation: Press SHIFT+2+9+CLOSE

7.3 To open/close STATE (state of current monitor)

7.3.1 To display STATE on a monitor

Operation: Press N+MON+SHIFT+3+OPEN

(N: Monitor ID)

EXAMPLE: To display STATE on MON2

Operation: Press 2+MON+SHIFT+3+OPEN

7.3.2 Not to display STATE

Operation: Press N+MON+SHIFT+3+CLOSE

(N: Monitor ID)

EXAMPLE: Not to display state on MON2

Operation: Press 2+MON +SHIFT+3+CLOSE

7.3.3 To display STATE on all the monitors

Operation: Press SHIFT+3+9+OPEN

7.3.4 Not to display STATE on all the monitors

Operation: Press SHIFT+3+9+CLOSE

7.4 To open/close CAMERA ID

7.4.1 To display CAMERA ID on a monitor

Operation: Press N+MON+SHIFT+4+OPEN

(N: Monitor ID)

EXAMPLE: To display CAMERA ID on MON2

Operation: Press 2+MON+SHIFT+4+OPEN

7.4.2 Not to display CAMERA ID on a monitor

Operation: Press N+MON+SHIFT+4+CLOSE

(N: Monitor ID)

EXAMPLE: Not to display CAMERA ID on MON2

Operation: Press 2+MON+SHIFT+4+CLOSE

7.4.3 To display camera ID on all the monitors

Operation: Press SHIFT+4+9+OPEN

7.4.4 Not to display camera ID on all the monitors

Operation: Press SHIFT+ 4+9+CLOSE

7.5 To open/close CAMERA TITLE on a monitor

7.5.1 To display camera title on a monitor

Operation: Press N+MON+SHIFT+5+OPEN

(N: Monitor ID)

EXAMPLE: To display camera title on MON2

Operation: Press 2+MON+SHIFT+5+OPEN

7.5.2 Not to display camera title on a monitor

Operation: Press N+MON+SHIFT+5+CLOSE

(N: Monitor ID)

EXAMPLE: Not to display camera title on MON2

Operation: Press 2+MON+SHIFT+5+CLOSE

7.5.3 To display camera title on all the monitors

Operation: Press SHIFT+5+9+OPEN

7.5.4 Not to display camera title on all the monitors

Operation: Press SHIFT+5+9+CLOSE

7.6 To open/close all the displays

7.6.1 To open all the displays on a monitor

Operation: Press N+MON+SHIFT+9+OPEN

(N: Monitor ID)

EXAMPLE: To open all the displays on MON2

Operation: Press 2+MON+SHIFT+9+OPEN

7.6.2 To close all the displays on a monitor

Operation: Press N+MON+SHIFT+9+CLOSE

(N: Monitor ID)

EXAMPLE: to close all the displays on MON2

Operation: Press 2+MON+9+CLOSE

7.6.3 To open all the displays on all the monitors

Operation: Press SHIFT+9+9+OPEN

7.6.4 To close all the displays on all the monitors

Operation: Press SHIFT+9+9+CLOSE

7.7 To amplify font size on a monitor

Operation: Press SHIFT+N+TELE

(N: Monitor ID)

EXAMPLE: to amplify font size on MON2

Operation: Press SHIFT+2+TELE

7.8 To decrease font size on a monitor

Operation: Press SHIFT+N+ WIDE

(N: Press SHIFT+N+WIDE

EXAMPLE: to decrease font size on a monitor

Operation: Press SHIFT+2+ WIDE

7.9 To amplify font size on all the monitors

Operation: Press SHIFT+0+ TELE

7.10 To decrease font size on all the monitors

Operation: Press SHIFT+0+WIDE

8 Pre-configured system

Pre-configured system is that we can pre-configure the most reasonable configuration (hardware and software) for different user, different system, at the basic of the modularize design.

9 User limitation administration

You can set the user limitation in the User Limitation sub menu of the System Menu. The return error messages of each operation will display on the keyboard or on the computer control software.

9.1 User control camera

You can set user's three different use limitations for the camera:

- A. Invalid (have no right to control the camera), in this situation, single video switch, call auto scan and camera control command are invalid.
- B. View-Ima (image allowable), in this situation, single video switch and call auto scan are valid while camera control command is invalid.
- C. Valid (image and controlling allowable), in this situation, single video switch, call auto scan and camera control command are valid.

9.2 User control monitor

You can set each user 's limitation for the monitor:

- A. Invalid: if the user limitation set to be invalid, single video switch, call tour group and call auto scan are invalid.
- B. Valid: if the user limitation set to be valid, single video switch, call tour group and call auto scan are valid.

9.3 User control tour

You can set each user 's limitation for the tour:

- A. Invalid: if the user limitation set to be invalid, call tour group is invalid.
- B. Valid: if the user limitation set to be valid, call tour group is valid.

Note: error messages will appear when the tour group number exceeds the system's max group number 88 or call the invalid group numbers.

9.4 User control salvo switch

You can set each user 's limitation for salvo switch:

- A. Invalid: if the user limitation set to be invalid, call salvo switch is invalid.

B. Valid: if the user limitation set to be valid, call salvo switch is valid.

Note: error messages will appear when the salvo group number exceeds the system's max group number 10 or call the invalid group numbers.

9.5 User control fortify

You can set each user's limitation for fortify:

- A. Invalid: if the user limitation set to be invalid, all the arm/disarm in the area and the alarm ACK are invalid.
- B. Valid: if the user limitation set to be valid, all the arm/disarm in the area and the alarm ACK are valid.

9.6 User priority

Different user's operation limitation level is set according to the user priority. M8000 system distributes the user into three priority levels:

- A. Three administrators, they have the highest priority: 12;
- B. 64 keyboard users, they have 1~8 different priority levels, 1 is the lowest level.
- C. 64 PC users, they have 1~8 different priority levels, 1 is the lowest level.

Note: the front three users of keyboard and PC have 9/10/11 priority level, more prior than 1~8 level.

Administrator can setup the user priority, and carry on the operation as below:

9.6.1 Camera operation command

The inferior user must wait when the prior user is operating the camera.

The inferior user can operate the camera if the prior user hasn't operated it within 20 s.

The prior user can operate the camera directly whether the inferior user uses the camera or not.

The same priority level users can operate one camera together, but each of them must wait until the other one hasn't operate within 20s.

9.6.2 System menu operation

Only system administrator who's priority level exceed 9 can enter the system menu. Other administrator can't enter the system menu.

It will exit the main menu setup state automatically when the alarm signals were occur. In this situation, even the system administrator can't enter the main menu.

The front three keyboard and PC users can't enter the main menu if the user's priority is under 9.

10 area administration

The corresponding setups as below are mainly about fortify setup and alarm setup.

10.1 Probe setup

Set the 1024 probes state: Connected/ Dis-Part.

10.2 Fortify mode setup: Manual/ Auto

Manual mode is fortify temporary, auto mode is scheduled fortify according to the auto fortify form.

10.3 Fortify area setup

You can set the probes at the same area if they need to arm/disarm at the same time. In this case, you can setup one fortify area instead of setup every probe.

10.4 Auto fortify form

You can select different fortify area and set the arm/disarm time.

10.5 Alarm switch setup

Include setting the alarm mode and the alarm export form.

11 Alarm function

11.1 Manual fortify

11.1.1 single point arm

Operation: SET + x + CAM. (x: probe number)

For example: number 3 area arm

Operation: SET +3 + CAM

11.1.2 single point disarm

Operation: CLEAR + x + CAM。 (x: Probe number)

For example: number 3 area disarm

Operation: CLEAR + 3 + CAM

11.1.3 area arm

Operation: SET + x + ALARM。 (x: area number)

For example: number 3 area arm

Operation: SET + 3 + ALARM

11.1.4 area disarm

Operation: CLEAR + x + ALARM。 (x: area number)

For example: number 3 area disarm

Operation: CLEAR + 3 + ALARM

11.1.5 all arm

Operation: SET + 0 + ALARM

11.1.6 all disarm

Operation: CLEAR + 0 + ALARM

Note: the alarm messages won't be sent to system if the armless area alarmed.

11.2 Manual alarm ACK

In the manual alarm ACK mode, appoint keyboard ACK the alarm message on the appoint monitor. The appoint monitor means switch the present monitor of the ACK keyboard to the alarm monitor.

11.2.1 Manual ACK present single alarm

Operation: press ALARM

11.2.2 Manual ACK all the alarm on the monitor

Operation: x + ALARM。 (x: monitor number)

11.2.3 Manual ACK all the alarm in the fortify area

Operation: (x + 64) + ALARM。 (x: area number)

11.2.4 Manual ACK all the alarm

Operation: 255 + ALARM

12 power down protection

12.1 Modify the detail of the main menu, then turn the power down, the program data will be protected.

12.2 After manual arm/ disarm and alarm were occur, the records in the system are correct.

Appendix IV Basic Function of The Camera

1 Preset

1.1 Set preset

Operation: SET + P + PRESET. (P: the preset number which is to be set)

1.2 Call preset

Operation: P + PRESET. (P: the preset number which is to be set)

2 Home position

2.1 Set home position

Operation: W + DWELL + P + PRESET. (W: dwell time, P: the preset number which is to be set)

2.2 Delete home position

Operation: 0 + DWELL + P + PRESET. (P: the preset number which is to be set)

3 Tour

3.1 Set tour sequence

Operation: P + DWELL + T + TOUR. (P: the preset number which is to be set, T: tour sequence number (1—4))

3.2 Set tour dwell time

Operation: DWELL + D + TOUR. (D: dwell time on the preset)

3.3 Activate tour

Operation: T + TOUR. (T: tour sequence number (1—4))

3.4 Delete tour sequence

Operation: CLEAR + T + TOUR. (T: tour sequence number (1—4))

4 Auto scan

4.1 Set auto pan left limit

Operation: SET + 1 + SCAN.

4.2 Set auto pan right limit

Operation: SET + 2 + SCAN.

4.3 Activate auto scan

Operation: V + SCAN. (V: Auto scan speed)

5 PATTERN recording

5.1 Activate record

Operation: SET + PN + PATTERN. (PN: PATTERN sequence number)

5.2 Stop recording

Operation: 3SET + 0 + PATTERN. (PN: PATTERN sequence number)

5.3 Pattern replay

Operation: PN + PATTERN. (PN: PATTERN sequence number)

6 Set the camera parameters

Operation: SET + CM + SHIFT+ PR + ENTER. (CM: command number, PR: parameter value)

User Manual

M8000 Video Switching Matrix



① Before use the product, please read this manual carefully.

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