

NOTE: To connect RS-485 code line to SECUPRO matrix system, Be sure to connect DATA- to A, DATA+ to B. For other system, if it doesn't work, connect A to B, B to A.

Picture 22

## Chapter 4 Function and operation Instruction

These operating instructions cover the basic operation of the dome and its features. When the dome is used with other manufacturers control system, please regard the system controller instruction as standard. In the event of special requirements outside the scope of this document it is advisable to contact your local distributor.

## 4.1 Control and automatic adjustment

The dome can be manually controlled from the control system by using the joystick on the control keyboard to move the camera up and down, right and left to follow objects under observation.

In default AUTO IRIS and AUTO FOCUS setting, camera will automatically adjust iris and focus to get a best picture.

## 4.2 Zoom-Speed Interaction

In manual control applications, the high pan speed of the dome makes it very difficult to view images when the lens is zoomed to longer focal lengths. To improve the ergonomics of control the dome has a zoom-pan speed interaction function this will continually decreases pan and tilt speeds in proportion to depth of zoom. This feature automatically produces very good image control under manual pan operation.

## 4.3 Auto Flip at bottom

This feature is used to automatically allow the tilt to operate through 180 degrees whilst maintaining the image orientation. This function comes into operation when the tilt is operated to the bottom and controlling is continued. Once camera tilt reaches bottom, after a short delay the camera will pan automatically 180 degree then tilt up to achieve a vertical full view.

## 4.4. Set and call presets

Preset function is that dome stores current horizontal angle and title angle of pan/Tilt, zoom and position parameters into the memorizer. When necessary dome calls these parameters and adjusts Pan/Tilt and camera to that position. Operator can store and call presets easily and promptly by using controller.

Refer to control keyboard manual for setting and calling of presets.

NOTE: Preset memory is not applicable to digital zoom.

### 4.5 Camera Function

#### 1) Auto Focus

System defaults Auto Focus mode in which the camera will automatically adjust the focus to give the best image.

Focus can also be controlled manually from the controller if required. Press FOCUS NEAR or FOCUS FAR key to manual focus.

In following condition object picture maybe not clear,

Object is not in the center of image

Objects are too big some part too near and some part too far.

Object is strong light object. Such as spotlight etc

Object is behind the glass with water drop or dust

Object moves too fast

Flat object without detail such as wall

Object is too dark or mistiness

#### 2) Auto Iris

System default AUTO IRIS. Camera can adjust immediately according to the illumination so that a lightness steady image can be achieved.

#### 3 ) Auto Back-light Compensation

In a strong light background, camera will auto compensate the darker object and adjust light input from the lighter area to avoid a mass image which usually presents a sharp contrast of brightness and darkness.

#### 4) Auto White Balance

Camera can automatically adjust white balance according to the picture to give a good looking color image.

# 5) Day/Night Function (Only for camera module with this function)

The IR cut filter of camera module will be removed when it is dark, so that the camera change from color to mono .The picture is clear even if the illumination is as low as 0.01 Lux.

## 4.6 Auxiliary Function

There are two auxiliary relay in dome, they can be controlled by keyboard.

For SECUPRO keyboard of matrix system, control fan and heater as follow:

Press 1+AUX+ON/OFF to turn AUX1 on/off.
Press 2+AUX+ON/OFF to turn AUX2 on/off.

#### 4.7 Presets Tour

The presets can be programmed to be recalled in a sequence. This sequence can be set to automatically cycle from one preset to the next at a setting time. This feature is called Preset Tour.

This dome supports up to 64 presets, 5 Preset Tour, 16 presets in a Preset Tour sequence. Dwell time can be set.

The operating speed between presets is defaulted at maximum.

Setting: Refer to chapter 5

Calling:

Just press  $9+(4\sim9)+SHOT$  for preset tour  $1\sim6$ 

#### 4.8 Auto Pan

Set left and right limit of the desired view area beforehand and make the dome pan between the two limits, pan speed can be set.

For SECUPRO keyboard of matrix system, setting Auto Pan as follow:

1. Call the speed dome to the monitor

2.Set start point: 9+AUX+ON

3.Toggle the joystick with the pan speed you want to set to the end point.

4.Set end point: 9+AUX+OFF

#### 4.9 Fan and Heater

For outdoor speed dome, these two device are controller automatically by temperature sensor.

When temperature reaches 0 degree centigrade the heater start to work, when temperature is over 0 degree, it stop work.

When temperature reaches 40 degree centigrade the fan start to work, when temperature is below 40 degree, it stop work.