

Cyber Controller



INSTRUCTION MANUAL

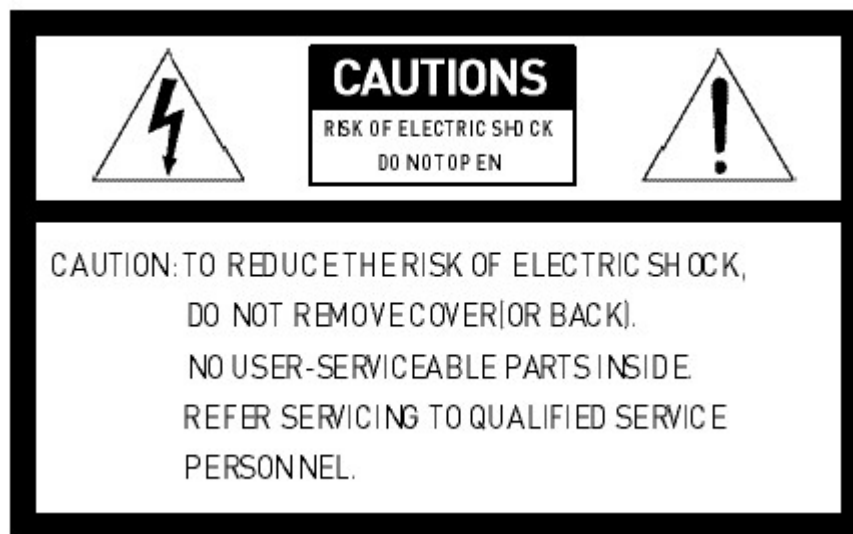
Please read this manual thoroughly before use and keep it handy for future reference.

WARNINGS and CAUTIONS

WARNINGS

- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK.
 - DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.
 - DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHERS OPENINGS ON THE EQUIPMENT.

CAUTIONS



EXPLANATION OF GRAPHICAL SYMBOLS



The lighting flash with arrowhead symbol, within a triangle, is intended to alert the user to the presence of un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

COMPLIANCE STATEMENT

FCC INFORMATION : THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION : CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMERIQUE DE LA CLASSE A EST CONFORME A LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING

THIS IS A CLASS A PRODUCT. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

IMPORTANT SAFEGUARDS

- ◆ Please install the product on a completely flat floor.
 - Always check the strength and stability of the installation location.
 - Do not drop the appliance on the floor. This may result in damage or injury.
- ◆ Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers.
 - There are no user-serviceable parts inside. Contact qualified service personnel for maintenance.
- ◆ Stop using the appliance if there appears to be any operational problem.
 - Immediately turn the power off to the appliance if there is any abnormal condition such as smoke or unusual smells.
 - Continuing to use the appliance under abnormal conditions may result in serious damage.
- ◆ Always use the recommended power.
 - Using incorrect power source ratings may result in fire, electric shock, or damage.
- ◆ Always handle the connection cable with care.
 - Never damage or modify the connection cable.
 - Do not pull, expose to heat, or place heavy objects on the connection cable.
 - Non-observance of these warnings may result in fire, electric shock or damage.
- ◆ Never use the appliance in places where there are flammable materials.
 - Never use the appliance in places where flammable materials such as gas are used. This may result in fire, explosion, and other serious accidents.
- ◆ Never touch un-insulated parts with wet hands.
 - Touching un-insulated parts with wet hands may result in serious electric shock.
- ◆ Never expose the appliance to water or moisture.
 - If the appliance gets wet, immediately turn the power off.
 - Stop using the appliance if it gets wet. Contact the manufacturer immediately.
- ◆ Use the appliance indoors only.
 - Do not place the appliance outdoors or expose it to rain or moisture.
 - If dropped in water, the appliance may be corroded and damage.
- ◆ Do not use the appliance where there is excessive dust, smoke, or moisture.
 - Using the appliance under such conditions may result in fire, electric shock or serious damage.
- ◆ If the controller body gets dirty, turn the power off and wipe the surface with a soft cloth.
 - Do not use chemical agents such as alcohol or benzene.

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1. INTRODUCTION

The Cyber Controller, Cyber Scan Dome, Video Matrix System & Digital Video Recorder make up the building blocks for any surveillance/security system. Using a multiple Cyber Controller and multiple dome cameras, no place is too large for monitoring and recording. Extendable and flexible architecture facilitates remote control functions for a variety of external switching devices such as DVR, Matrix System and Cyber Scan Dome Camera.

FEATURES

- * 128 Monitor Control, 255 DVR Control, 999 Camera Control
- * Built in Jog shuttle for easy playback
- * Built in joystick for easy control of Zoom In/Out, Pan/Tilt
- * Multi Protocol Built In (Cyber Scan (I,II) / P-D / P-P)
- * Easy extension up to 6 different slave controller (Recommendable)
- * RS-485/422 Communications (Max. 1.2Km)
- * LED indicator for power, alarm, communication input etc.

How to operate with Cyber Controller?

1) Cyber Scan Dome Camera

- * Built in 3 Axis Joystick
- * Built in Pan/Tilt, Zoom In/Out Controls
- * Focus Near/Far, IRIS Open/Close
- * Main Menu Set Up Available
- * Preset, Auto Scan, Tour and Pattern Controls
- * RS-485 or RS-422 Operation
- * Easy Wiring Connection and Operation
- * Quick Preset Set Up and Recall

2) DVR Control (4Ch, 9Ch and 16Ch)

- * Built in Jog shuttle
- * Various Function Key to control DVR
- * Image Sequence/Multi Screen/Freeze/ESC/Menu Available
- * Control REC, STOP, Reverse Playback, Play Button
- * Main Menu Set Up Available
- * Multi Camera Control Available (Max. 999)
- * Direct Connection from Junction box for easy wiring
- * Slave Controller Extendable

1. INTRODUCTION

3) Video Matrix System (16Ch, 32Ch)

- * 16Ch Input 4 Monitor Output / 32Ch Input 8 Monitor Output
- * 16Ch Alarm Input (1U, Alarm Device as an accessory)
- * 32Ch Alarm Input (2U, Built in the case)
- * Direct Connection with DVR, VDA etc
- * Easy extension using RJ-45 Cable
- * RS-422/485 PTZ Connection and RS-232 PC Control
- * Equal video strength for all outputs
- * Color or B&W compatible

Precautions for proper Operation

- * Do not install the unit a place subject to direct sunlight, excessive moisture, dust or vibrations where ventilation is poor.
- * Please use the unit in the range of a guarantee temperature and humidity of operation.
- * Please set ID of a camera as the same number as the input channel to DVR.

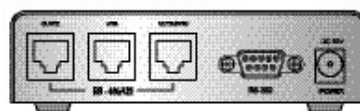
2. PACKAGE CONTENTS

The Cyber Controller contains the following.

① Cyber Controller Unit ----- 1



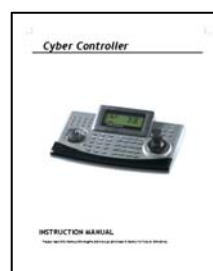
② Junction Box ----- 1



③ RJ-45 Cable ----- 2

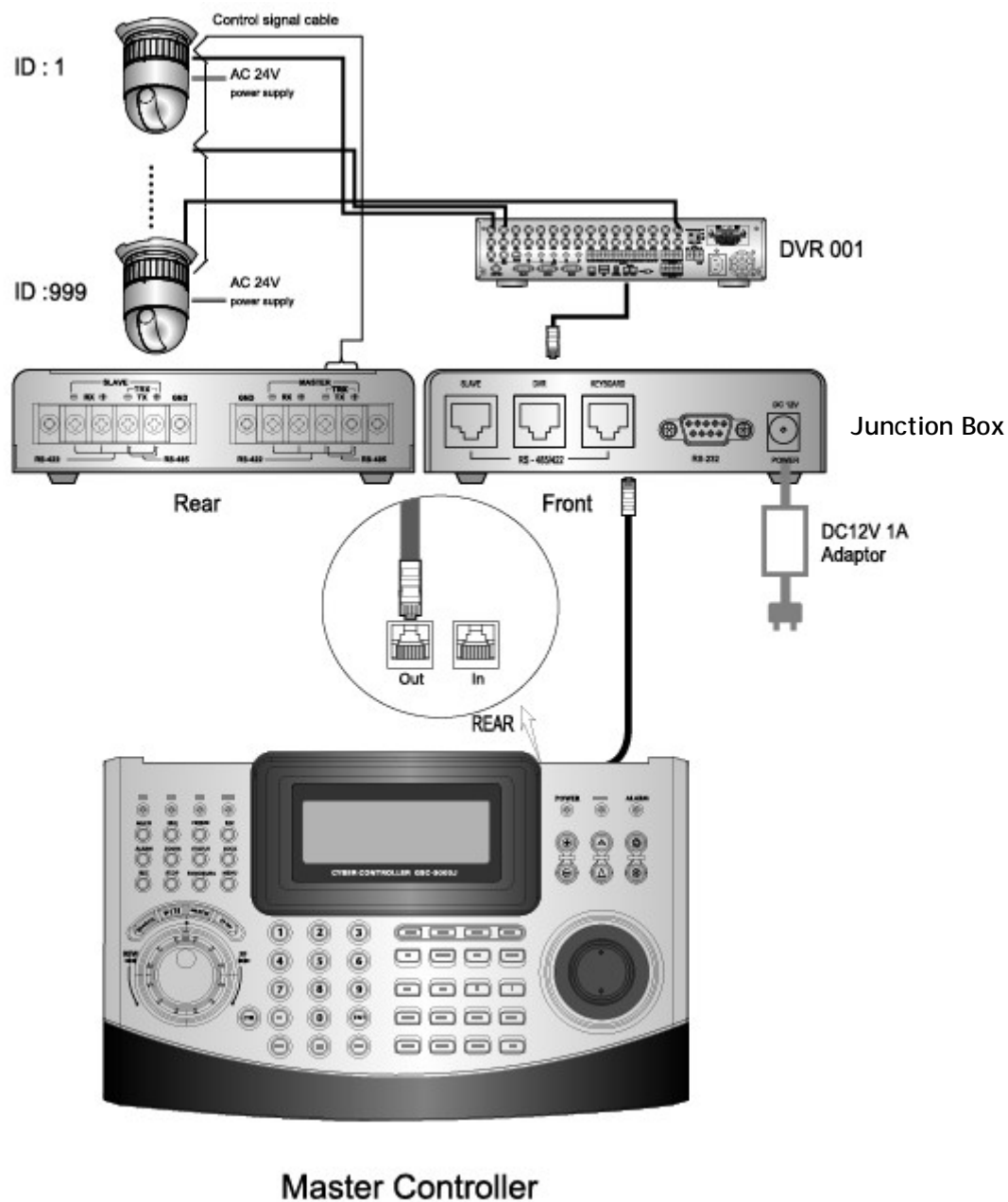


④ Instruction Manual ----- 1



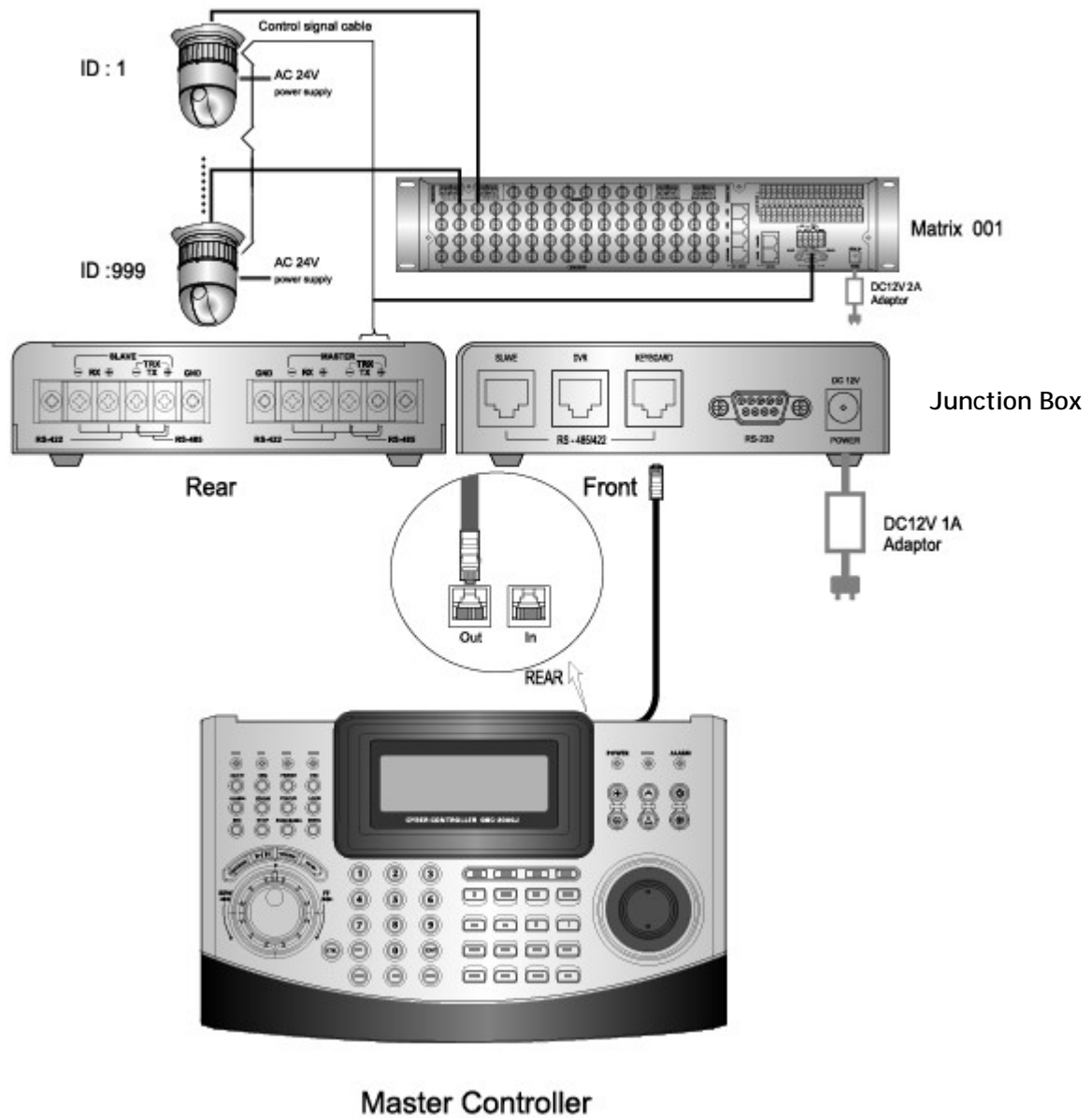
3. INSTALLATION & CONFIGURATION

3.1 Basic Configuration of DVR & Cyber Controller



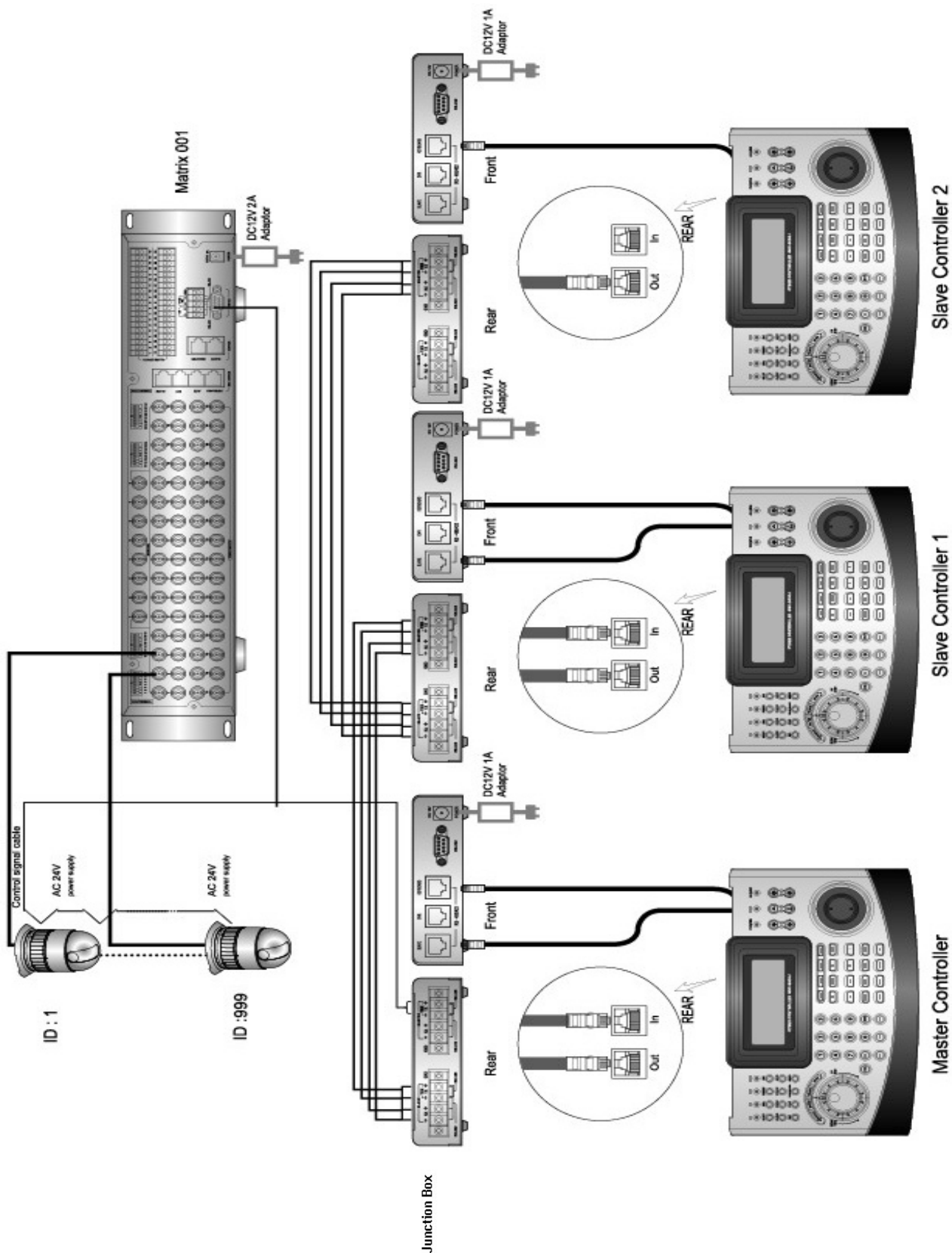
3. INSTALLATION & CONFIGURATION

3.2 Basic Configuration of Matrix System & Cyber Controller



3. INSTALLATION & CONFIGURATION

3.3 The Example of Multi Configuration



4. OPERATING CONTROLS

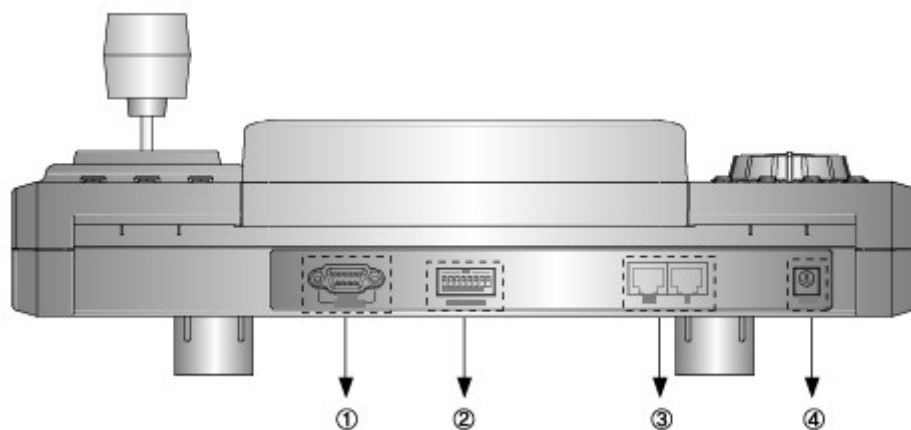
4.1 Front View



- | | |
|------------------|---------------------|
| ① LED Indicator | ⑨ PTZ Keypad |
| ② DVR Keypad | ⑩ Joy Stick |
| ③ DVR Playback | ⑪ Controller Keypad |
| ④ Jog Shuttle | ⑫ SHIFT Button |
| ⑤ CTRL Button | ⑬ Zoom/Focus/IRIS |
| ⑥ Numeric Button | ⑭ 4 Line LCD |
| ⑦ Special Key | ⑮ Brand Logo |
| ⑧ Matrix Keypad | |

4. OPERATING CONTROLS

4.2 Rear View



- ① RS-232 : This connector port is provided to connect the external modem for remote monitoring, configuration and software upgrades. Use a modem cable with ADB-9S(female) connector to connect to the Cyber controller.



Notice : A Modem cable not supplied so make certain you have the correct cable when you connect to the Cyber controller.

- ② ID DIP Switch : It is used to select Cyber controller ID.
- ③ RJ-45 JACK (IN/OUT)
IN : Data Input port from the slave controller.
OUT : Data output port to the another devices, dome camera, matrix, DVR etc.
- ④ DC 12V Jack : DC 12V/1A Power Input jack.

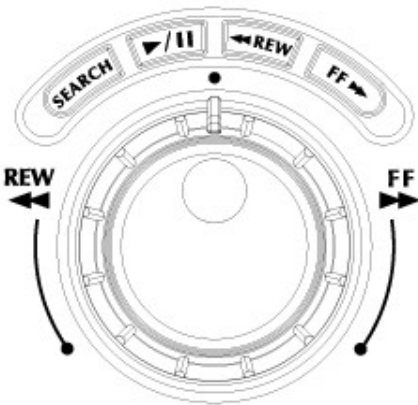



Note : - You must use the adaptor provided with the product. Otherwise it would not work.
(DC 12V, 1A)
- We do not provide the power cord.

4. OPERATING CONTROLS

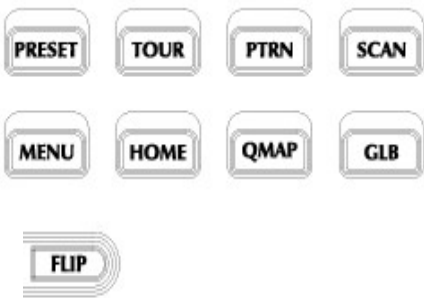
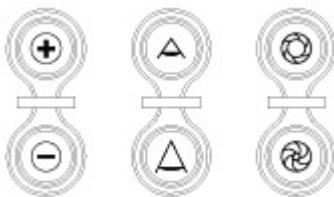
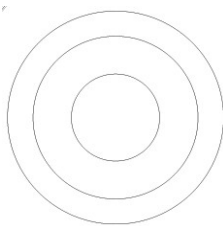
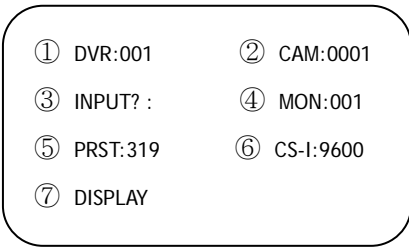
4.3 Operation by Part

LEDs Part	
	<p>CAM : The Camera status indication.</p> <p>DVR : The DVR status Indication.</p> <p>MON : The Monitor(Matrix switcher) status Indication.</p> <p>TX/RX : Communication status indication.</p> <p>POWER : Turned on while the power is supplied.</p> <p>SHIFT : Turned on when SHIFT button is pressed.</p> <p>ALARM : Turned on when an alarm is activated.</p>
DVR Function Part	
	<p>MULTI : It is used to select the Quad screen. Whenever this button is pressed, the live screen status varies. In addition, the user can operate the live screen to move to his/her desired mode. A channel selection button is used to move from the Quad screen to the full screen.</p> <p>It is used to move to the Window mode and Full-Screen mode during playback.</p> <p>SEQ : It is used to move automatically from the live screen to each channel in a sequential manner. In this case, Menu sets the transition time for each channel.</p> <p>FREEZE : It is used to bring the live screen to a temporary stop in the full-screen mode or in the Quad mode.</p> <p>ESC : It is used to escape from the OSD menu to an upper mode or exit the present menu.</p> <p>It is used to exit the Search mode.</p> <p>It is used to exit the PTZ mode.</p> <p>ALARM : This key will reset the alarm buzzer from the DVRs.</p> <p>ZOOM : it is used to enlarge or reduce images.</p> <p>PANORAMA : It is used to sequentially search screens per frame in the Playback mode.</p> <p>MENU : It is used to set DVR configurations.</p> <p>REC : It allows for recording</p> <p>STOP : It is used to exit the Playback mode.</p> <p>F1/F2 : Function 1,2</p>

4. OPERATING CONTROLS

DVR Search Part	
	<p>SEARCH : It is used to search the stored video data.</p> <p>>/ II : It is used to activate the searched video data or bring them to a temporary stop.</p> <p><<REW : It allows data to be wound in the reverse direction during retrieval.</p> <p>FF>> : It allows searched data to be played out at higher speeds than the normal speed.</p> <p>Jog : It is used to search by 1 Frame.</p> <p>Shuttle : Same with REW,FF button</p>
Miscellaneous Buttons Part	
	<p>CTRL : Combination button for another function</p> <p>Numeric : Select Camera ID, DVR ID or Monitor No.</p> <p>CLR : Clear/Erase previous input.</p> <p>ENT : It is used to select for set up Menu.</p> <p>CAM : It is used to select the Camera No.</p> <p>DVR : It is used to select the DVR No.</p> <p>MON : It is used to select the Monitor No.</p>
Controller Function Part	
	<p>SHIFT : Combination button for another function</p> <p>SETUP : It is used to setup the Controller's configurations.</p> <p>LOCK : It is used to lock all Controller functions.</p>
Matrix Function Part	
	<p>CH : It is used to select the channel.</p> <p>GROUP : It is used for the Group function or Page Up in menu.</p> <p>SEQ : It is used for the Sequence function or Page Down in menu.</p> <p>MENU : It is used to set Matrix Switcher's configurations.</p> <p>ENT : It is used to save & exit or go to next menu</p> <p>ESC : It is used to exit without saving in menu or go to previous menu.</p> <p>+/- : It is used to change values.</p>

4. OPERATING CONTROLS

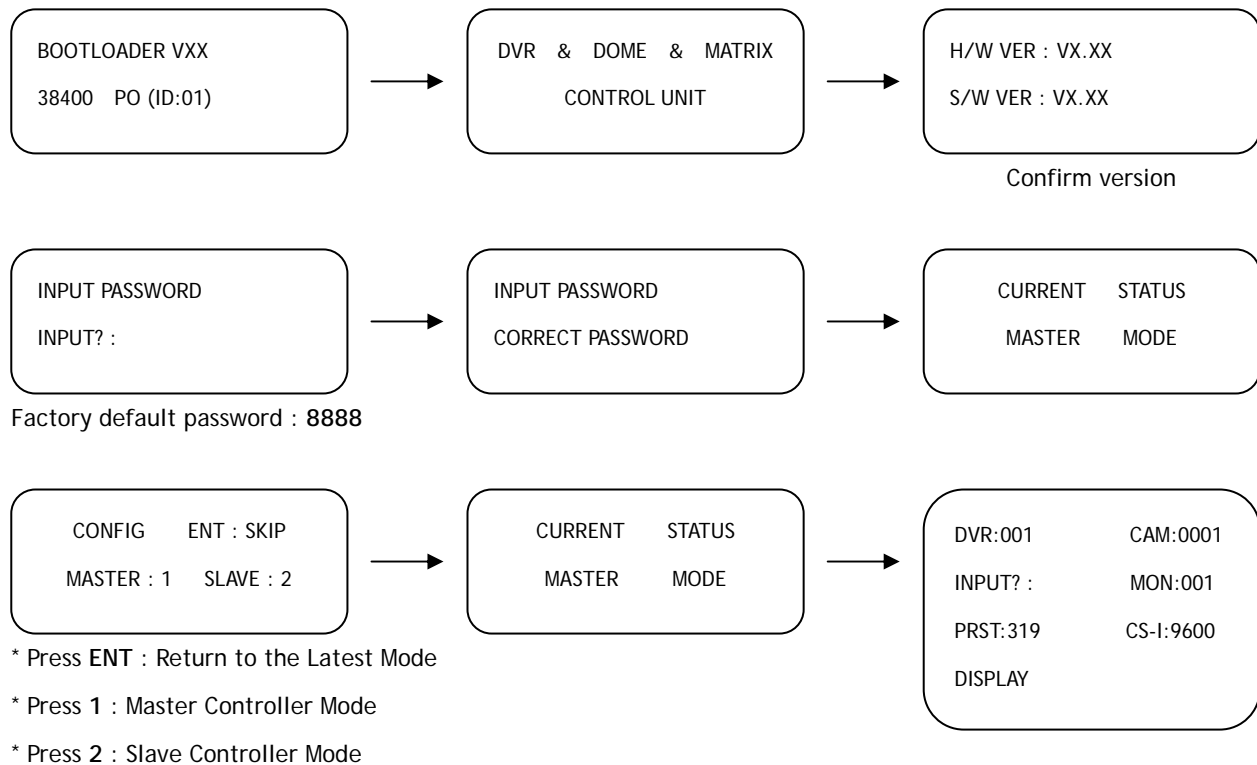
PTZ Camera Function Part	
	<p>PRESET : It is used to set the Preset function.</p> <p>TOUR : It is used to set the Tour function.</p> <p>PTRN : It is used to set the Pattern function.</p> <p>SCAN : It is used to set the Auto Scan function.</p> <p>MENU : It is used to select the Set up Menu. It is also used to execute or close Menu.</p> <p>HOME : It is used to set the Home function.</p> <p>QMAP : Quick Mapping function. It is used to call a User Defined function.</p> <p>GLB : It is used to call the Global function.</p> <p>FLIP : Rotate PAN by 180 degree.</p>
ZOOM/FOCUS/IRIS Part	
	<p>ZOOM In/Out : It is used to enlarge or reduce images by adjusting the lens.</p> <p>FOCUS Near/Far : It is used to adjust the Focus.</p> <p>IRIS Open/Close : It is used to adjust the IRIS.</p>
Joystick Part	
	<p>User can pan/tilt cameras by moving Joy Stick up/down and twist.</p> <p>Once user enters Menu, Joy Stick can be used to scroll the sub-menu.</p>
LCD Part	
	<p>① Indication of DVR ID</p> <p>② Indication of CAM ID</p> <p>③ Status Indication of INPUT</p> <p>④ Indication of MON ID</p> <p>⑤ Status Indication of PRST/TOUR/PTRN/SCAN/HOME</p> <p>⑥ Indication of Protocol/Baud Rate</p> <p>⑦ Status Indication of DVR</p>

5. OPERATION

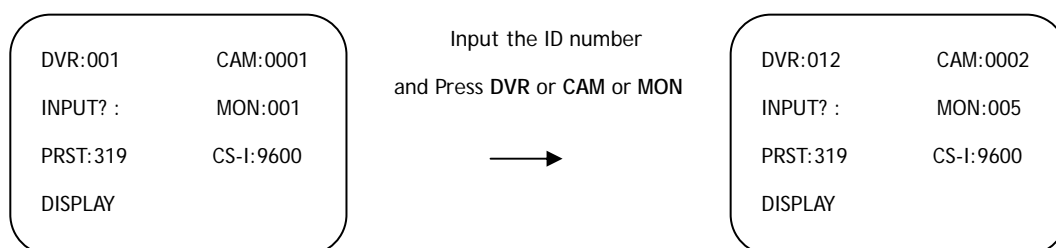
5.1 Power

Turn on the controller power after all domes have initialized (wait at least 30 seconds)

1. Input 12VDC 1A to the Cyber controller & junction box
2. Connect Cyber controller and the junction box by RJ-45 Cable.



5.2 DVR, Camera ID & Monitor NO. Selection



- * DVR ID : Input DVR ID number and Press **DVR** button.
- * Camera ID : Input Camera ID number and Press **CAM** button.
- * Monitor NO. : Input Monitor ID number and Press **MON** button.

5. OPERATION

* How to control On-Screen Menu Utility

Action	Function
SETUP button	Call the controller SETUP menu.
Joystick right	Go into the sub-menu items or select current item.
Joystick up/down	Navigate the cursor up or down. Go to previous or next item.
Twist the Joystick	Up count/down count
CLR,ESC button	Exit without saving. Go to previous menu.
ENT button	Save & Exit

5.3 SYSTEM SETUP

Press **SETUP** button to setup the system of the controller. Below screen shows the controller setup menu.

1. SYSTEM INFO
2. PASSWORD SETUP
3. BACKLIGHT TIME
4. FACTORY DEFAULT
5. SYSTEM RESET
6. CAMERA SETUP
7. DVR SETUP

* Push the joystick to the up/down and
Push the joystick to the right.

5.3.1 SYSTEM INFO

The Cyber controller's SETUP menu provides essential information about the Cyber controller. When you see the screen, you can determine the controller type, software version.

SN : GXXXXXX
ID : 001
H/W : VX.XX
S/W : VX.XX

SN : Serial Number
ID : Controller Address(ID)
H/W : Hardware Version
S/W : Software Version

5. OPERATION

5.3.2 PASSWORD SETUP

When you want to change the password, you can change the password in password setup menu. The unit requires the initial password before operation. The factory default password is 8888.

CURRENT PASSWORD
INPUT? :

① Input the current password and Press ENT button.



NEW PASSWORD
INPUT? :

② Input the new password and Press ENT button.



CONFIRM PASSWORD
INPUT? :

③ Input the new password again and Press ENT button.

5. OPERATION

5.3.3 BACKLIGHT TIME SETUP

BACKLIGHT TIME: 011
(11~255 SECS)
INPUT? :
1: SAVE 2: EXIT

You may determine backlight turn-on time.

While the Cyber controller is in idle mode,
The backlight will be turned off automatically
after backlight time.

5.3.4 FACTORY DEFAULT

DO YOU WANT TO
INITIALIZE ALL DATA?
1: YES 2: NO

This all data is initialized.

Note : Be careful to select this mode since you can not
revert the current data forever.

5.3.5 SYSTEM RESET

DO YOU WANT TO
RESTART THE SYSTEM?
1: YES 2: NO

The controller restarts the system. But all saved data is not
initialized.

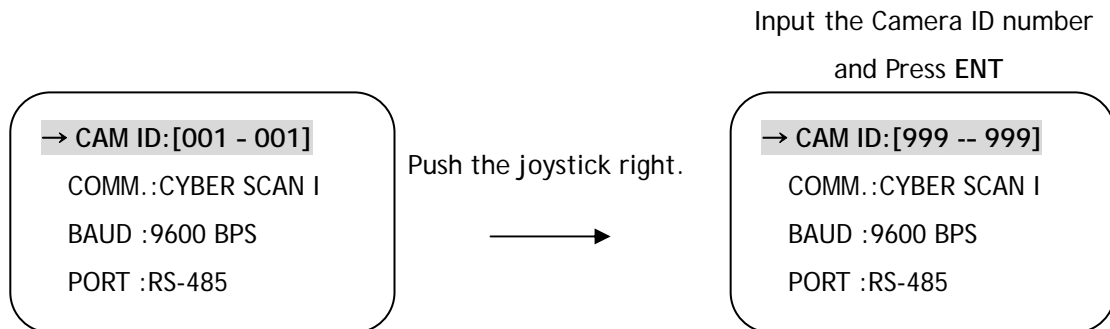
5. OPERATION

5.3.6 CAMERA SETUP

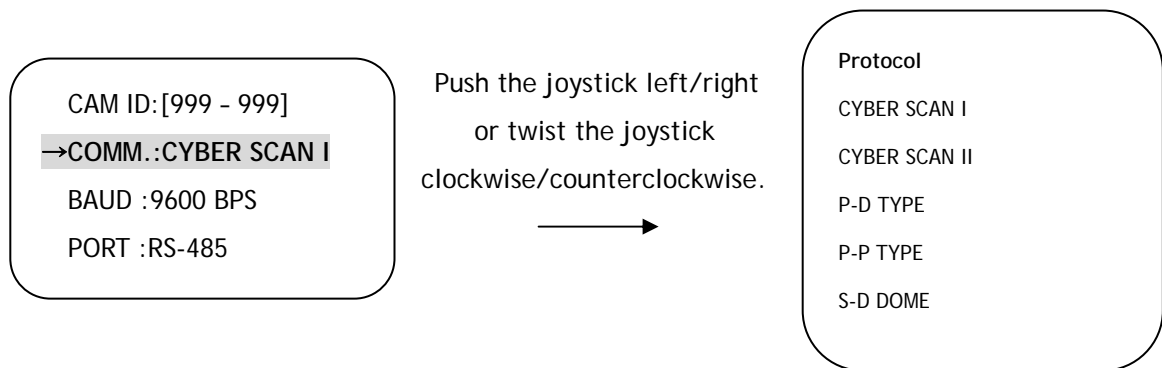
Set up Camera ID Range, the Protocol , Baud Rate of the Camera, and Output Port.

You can select Individual Setup or Whole Setup. Navigate the Cursor by pushing the joy stick up or down. Cursor moves to the desired position.

- ① **CAM ID Setting:** You can select the camera ID which you need to choose from CAM ID to CAM ID.

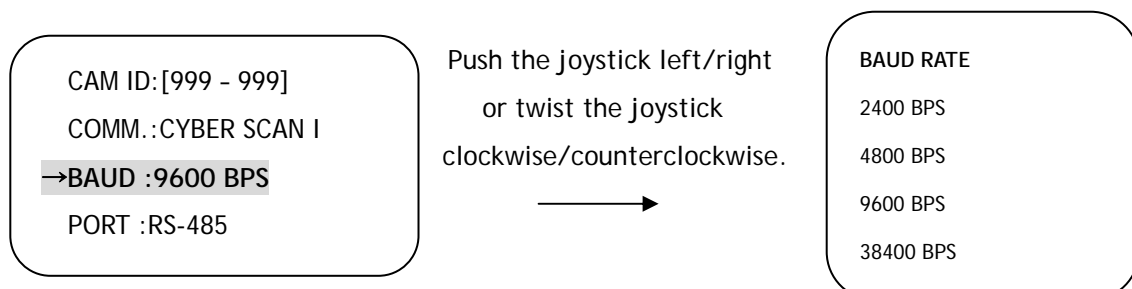


- ② **COMMUNICATION PROTOCOL Setting:** In the Camera ID Range, You should choose the Communication Protocol. To navigate and choose the communication protocol, push the joystick left/right or twist the joy stick clockwise/counterclockwise.



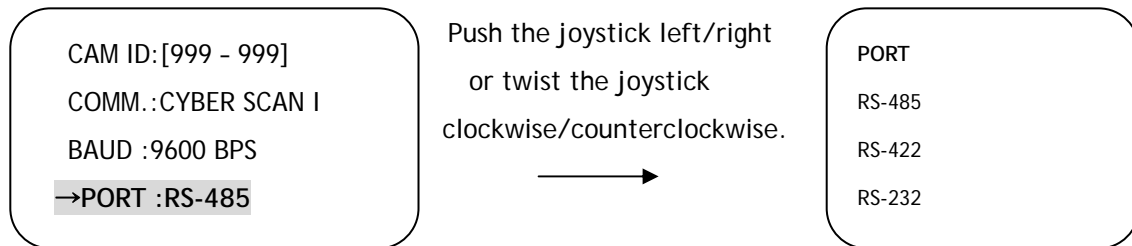
- ③ **BAUD RATE Setting:** In the Camera ID Range, You need to decide the Baud Rate.

To navigate and choose the Baud Rate, push the joystick left/right or twist the joy stick clockwise/counterclockwise.

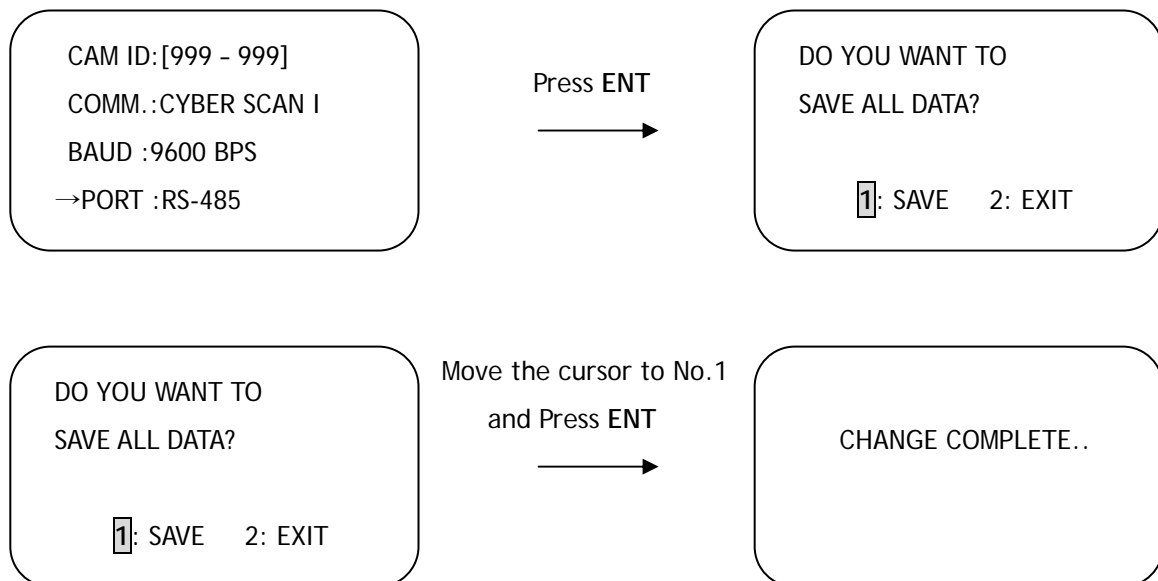


5. OPERATION

- ④ **PORT Setting:** In the Camera ID Range, You need to select the port. To navigate and choose the Baud Rate, push the joystick left/right or twist the joy stick clockwise/counterclockwise. If you set the controller to RS-232, controller sends the data through the RS-232 port. If you choose RS-485/422, it sends the Communication protocol through the OUT port.



⑤ STORE THE CAMERA SETUP



5. OPERATION

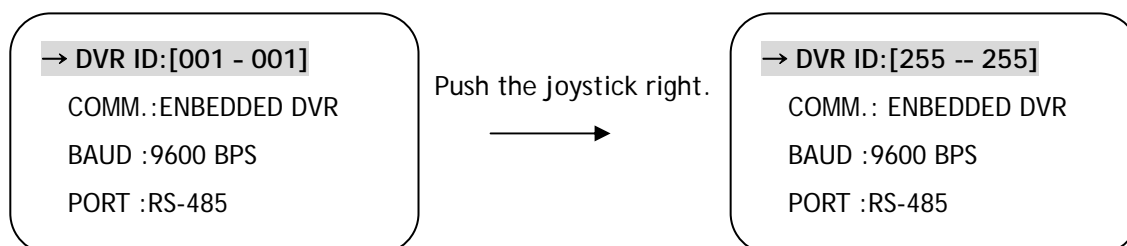
5.3.7 DVR SETUP

Set up DVR ID Range, the Protocol , Baud Rate of the DVR, and Output Port.

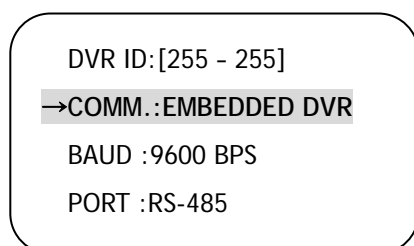
You can select Individual Setup or Whole Setup. Navigate the Cursor by pushing the joy stick up or down. Cursor moves to the desired position.

- ① **DVR ID Setting** : You can select the DVR ID which you want to set from DVR ID to DVR ID.

Input the Camera ID number
and Press ENT

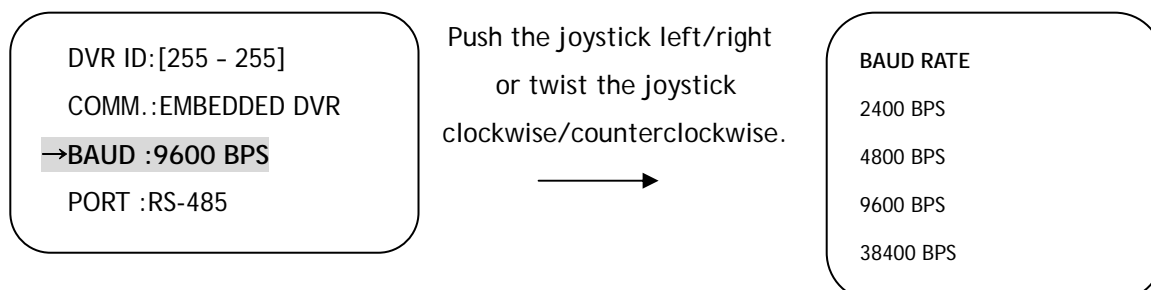


- ② **COMMUNICATION PROTOCOL Setting** : There is only Embedded DVR protocol.



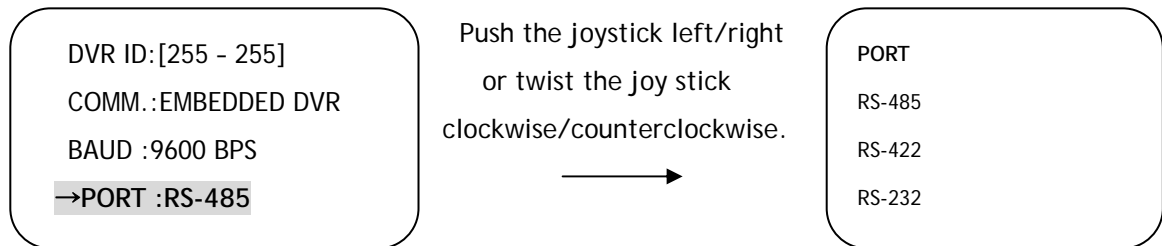
- ③ **BAUD RATE Setting** : In the DVR ID Range, You need to decide the baud rate.

To navigate and choose the baud rate, push the joystick left/right or twist the joy stick clockwise/counterclockwise.

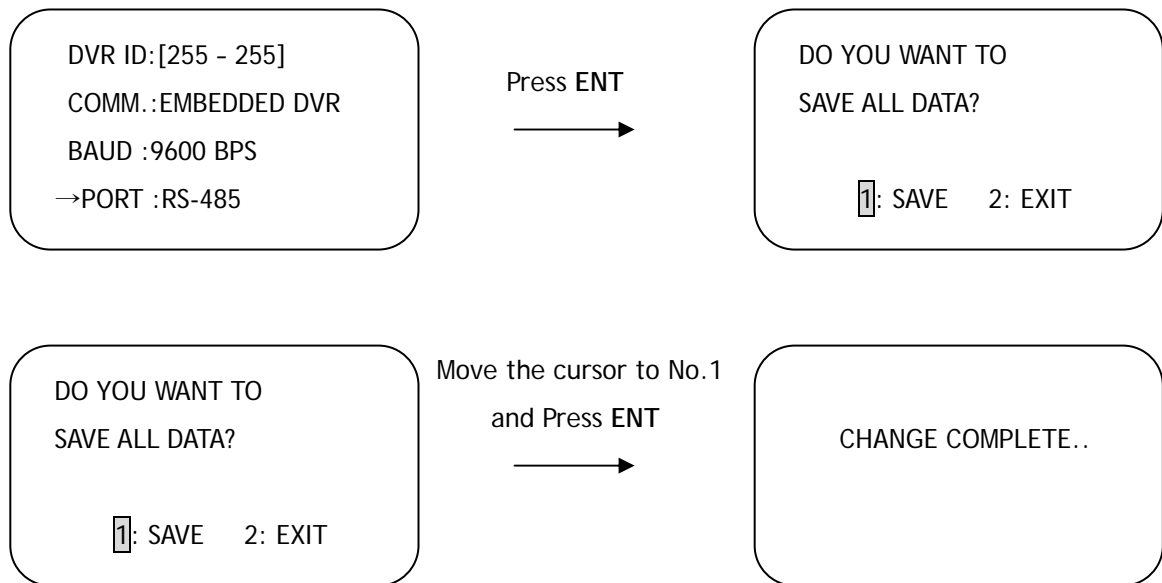


5. OPERATION

- ④ **PORT Setting** : In the DVR ID Range, You need to select the port. To navigate and choose the Baud Rate, push the joystick left/right or twist the joy stick clockwise/counterclockwise. If you set the controller to RS-232, controller sends the protocol through the RS-232 port. If you choose RS-485/422, it sends the Communication protocol through the OUT port.



⑤ STORE THE DVR SETUP

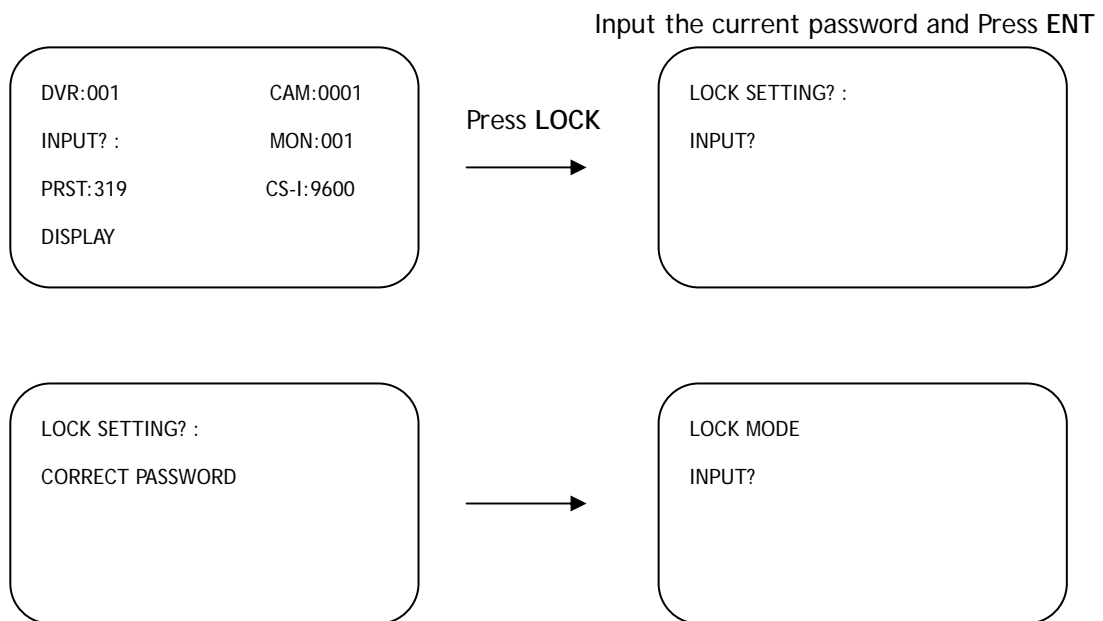


5. OPERATION

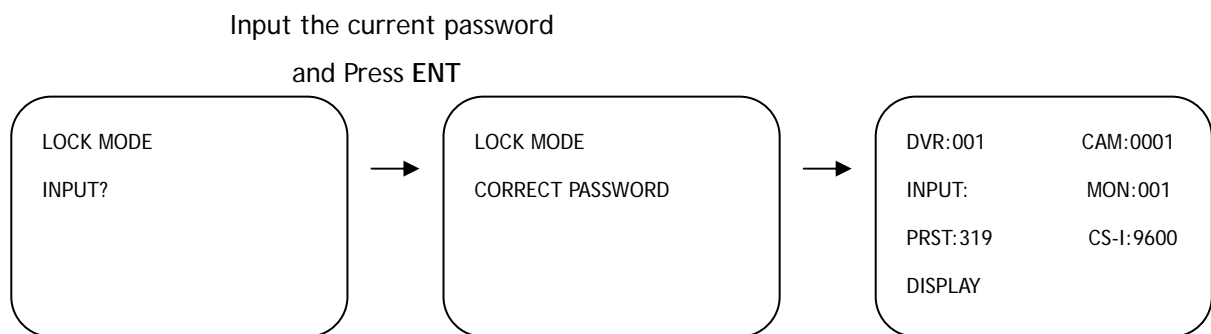
5.4 LOCK

If you don't want another person (not authorized) to manipulate the controller, you can lock the Cyber controller by pressing **LOCK** button.

5.4.1 Lock Setting

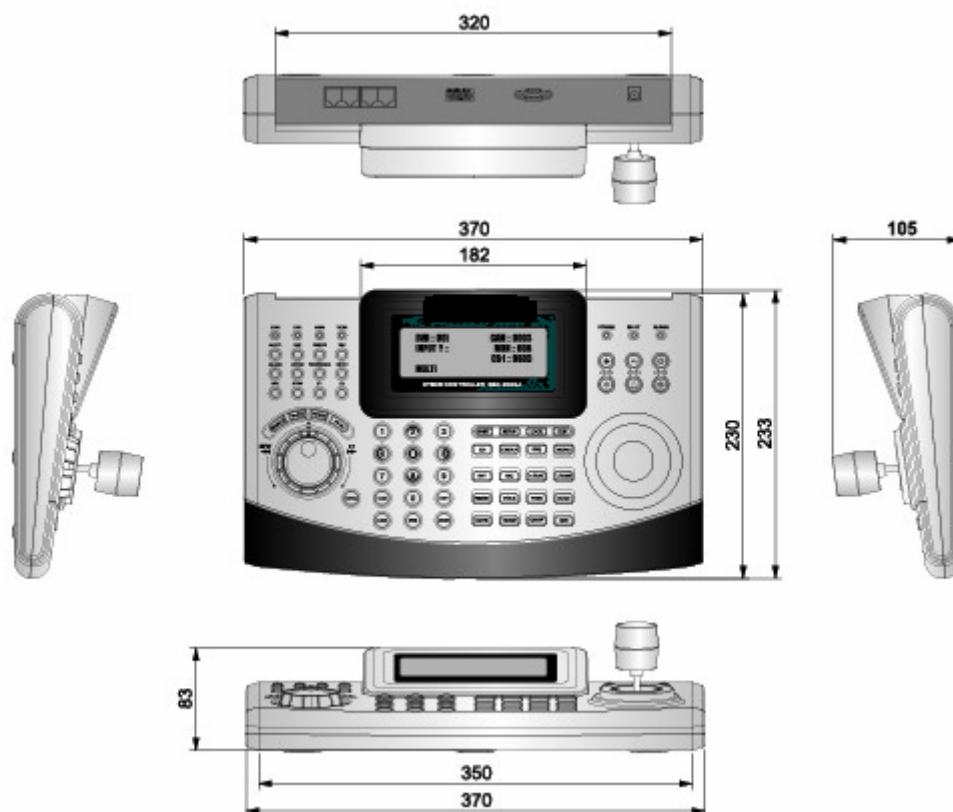


5.4.2 Lock Cancel

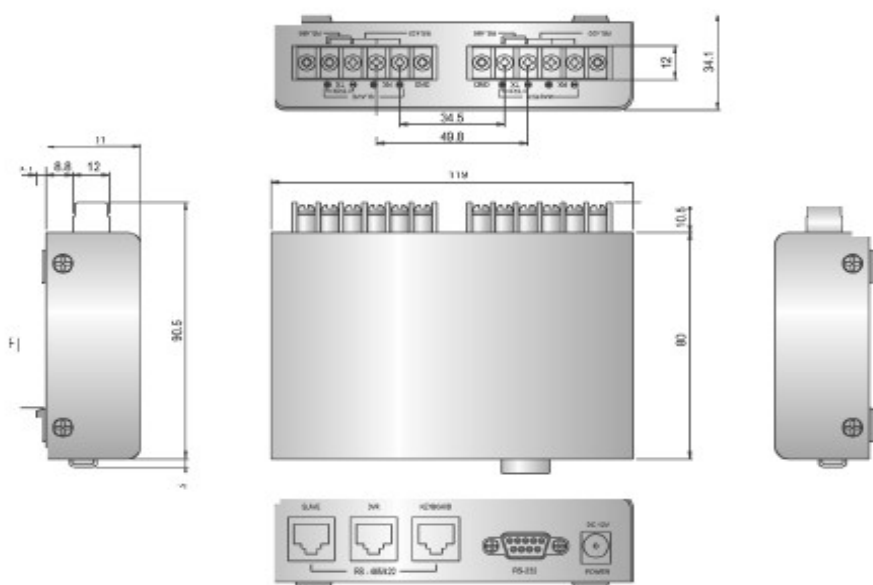


6. DIMENSION

A. Cyber Controller



B. Junction Box



7.SPECIFICATION

Model Name	Cyber Controller
Screen	4 Line LCD
Jog Shuttle	Built-In
Controls	3X Axis Joy Stick Built In
Pan/Tilt	Pan : Left/Right, Tilt : Up/Down
Key Features	Zoom In/Out, Focus Near/Far, IRIS Open/Close, DVR / Matrix /Cyber Scan Dome control, Slave Controller Extendable
Multi-Protocol	Cyber Scan (I,II) / P-D / P-P
Connection	RJ-45 Connection via Junction Box or Matrix/DVR
Communication	RS-485 or RS-422
Communication Speed	Baud Rate : 9600bps (OPT : 38400, 4800, 2400)
Operating Distance	1.2Km
PTZ/DVR/MON Control No.	999 / 255 / 128
Power	12VDC 1A
Port	RJ-45 X 2 (In, Out), RS-232 X 1
Material	Plastic Cover
Finish	Sanding and Spray
Temperature	0~50℃ (32~122°F)
Humidity	0~95% RH Non-condensing
Dimension	370(W) X 233(D) X 105(H)
Weight	1,500g

APPENDIX B - The List of GLB(Short) Key

If you use Cyber Scan dome camera and Cyber controller, you can use the following GLB short cut key for the easy operations without accessing the main menu of the dome unit. (Cyber Scan protocol only)

Note : Press GLB button, after press the numeric button. This function is available subject to Global mode on, in the main menu.

GLB Key	Function	On/Off	RMK
1. Camera Function			
11 12	Privacy Zone	Off On	
13 14	Over Tilt	Off On	
20 21 22	Day/Night	Auto Off On	
23 24	Digital Zoom	Off On	
25 26	Back Light	Off On	
27 28 29	WB (White Balance)	ATW Indoor Outdoor	
31 32	Flicker less	Off On	
33 34	Auto Focus	Auto Manual	
35 36	BMB Mode	Off On	
2. Display Functions (OSD)			
71 72	All Display	Off On	
73	Zoom Magnitude	On/Off	Toggle
74	Dome ID	On/Off	Toggle
75	Dome Mode	On/Off	Toggle
76	Pan/Tilt Angle	On/Off	Toggle

APPENDIX B - The List of GLB(Short) Key

77	Area Title	On/Off	Toggle
78	Operation Title	On/Off	Toggle
79	Flag Display	On/Off	Toggle
80	Time Display	On/Off	Toggle
3. Dome Operations Functions			
81	Flip	Off	
82		On	
83	Mirror/Reverse	Off	
84		Flip	

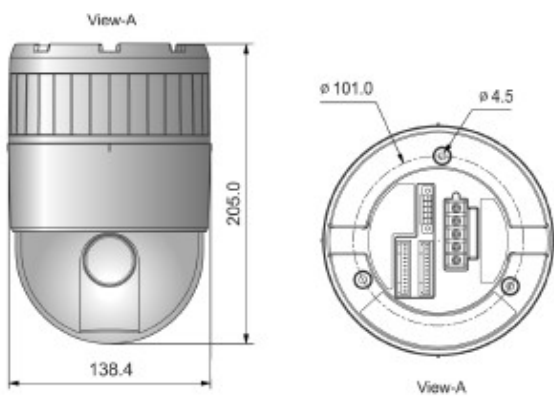
APPENDIX B - Trouble Shooting

If problems occur, verify the installation of the camera with the instructions in this manual and with other operating equipment. Isolate the problem to the specific pieces of equipment in the system and refer to the equipment manual for further information.

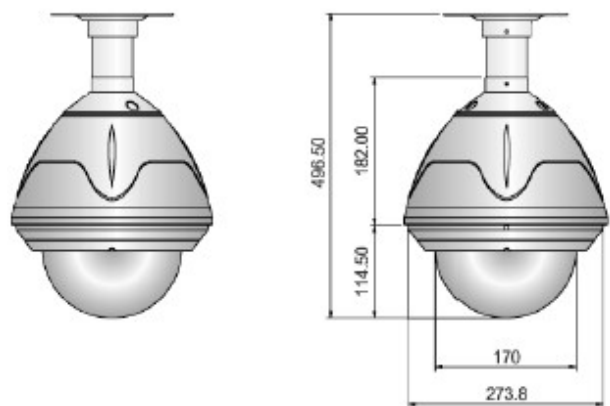
Problem	Possible Solution
If you forget the password	a. Press 5 button then DVR button when you forget the password once the controller is turned off then on. The controller will be initialized to Default Password, 8888.
If the camera is not working	a. Please check the ID, Protocol, Baud Rate and Address of the camera and then clarify of them in the controller. b. Please check the wiring connection between the controller and the junction box.
If the controller is not working	a. Please check the main power and power consumption of the controller unit. b. Please check if the controller is in the lock mode.

APPENDIX C-OPTIONAL ITEM

A. Cyber Scan Dome Camera



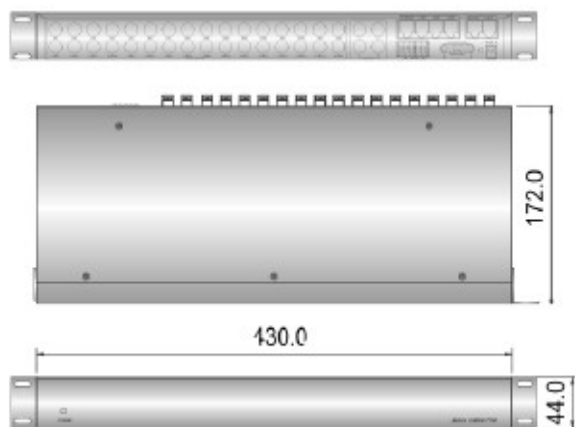
B. Cyber Scan Pre-Pack Dome Camera



C. Digital Video Recorder



D. Video Matrix System



MEMO
