INSTRUCTION MANUAL

SYSTEM CONTROLLER

GSS-2000
GSS-2000

GSS-2000

GSS-1000

WARNING

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 OTHER OPENINGS ON THE EQUIPMENT.

CAUTION

EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral 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

FCC 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.

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.

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General Descriptions

The GSS-2000 /GSS-1000 are pan/tilt controller and it allows operators to perform the following functions :

• Controls camera functions such as pan, tilt, zoom, and focus.

• Sets and calls camera preset positions

• Activates pre-programmed group presets, tour and group sequences.

The LCD is used to display current status as well as to provide a menu system for setting operational parameters.

Controller is designed for desktop operation; interface connectors are located in the Junctions box outer of the unit.

Features

• Recalls up to 255 cameras from one keyboard.

• Multiple protocol supported in each channel (Pelco D, DRX-502)

• Preset position control.

• Variable manual control speed from 1°/sec to 90°/sec

• Maximum speeds are proportional to zoom ratio.

• Recalls programmed guard tours from each dome camera.

• Recalls Auto-Swing from selected dome camera.

• Built-in Graphic LCD monitor with blue screen.(GSS-2000)

• Programmable user preferences. (preset, tour, group, etc.).

• User password support.

• Supported DVR protocol (Need to be modified)

• Easy upload programmed data via serial communication port of computer.

• Slave Keyboard support.

Installation

UNPACKING
Unpack the equipment and make sure all listed items are included in the box.

Keyboard controller …… 1
Junction box …… 1
3m 6p cable RJ-11…… 1
Instruction manual …….. 1

1. CONNECTIONS

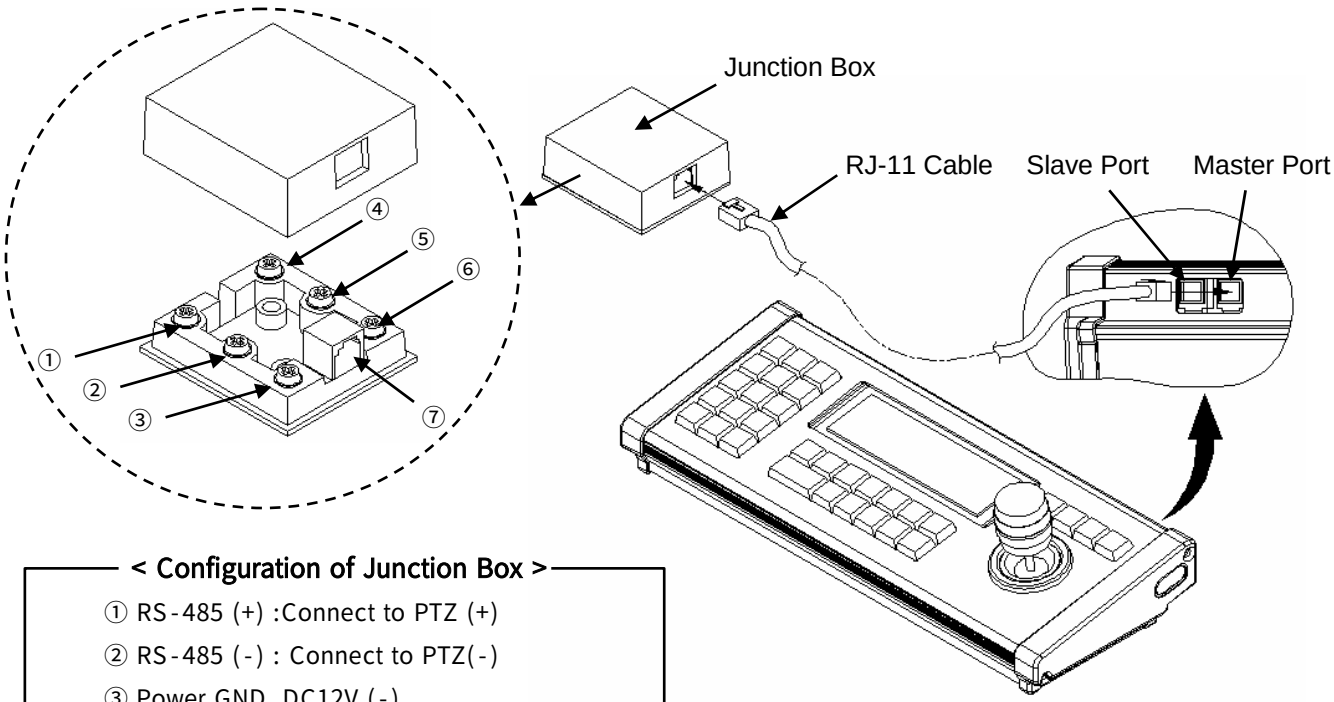
There are two connectors on the controller. These connectors are RJ connector for Master and Slave control.

1.1 Open the junction box cover and connect the 12VDC power to the junction box number 3 and 6. (DC 12V, 500mA, Power adaptor is not included in the system box).

1.2 Connect 6-pin multi-wired cable between junction-box and keyboard.

1.3 Connect PTZ communication wires (RS-485, 2-wires) to the junction box number of 1 and 2.

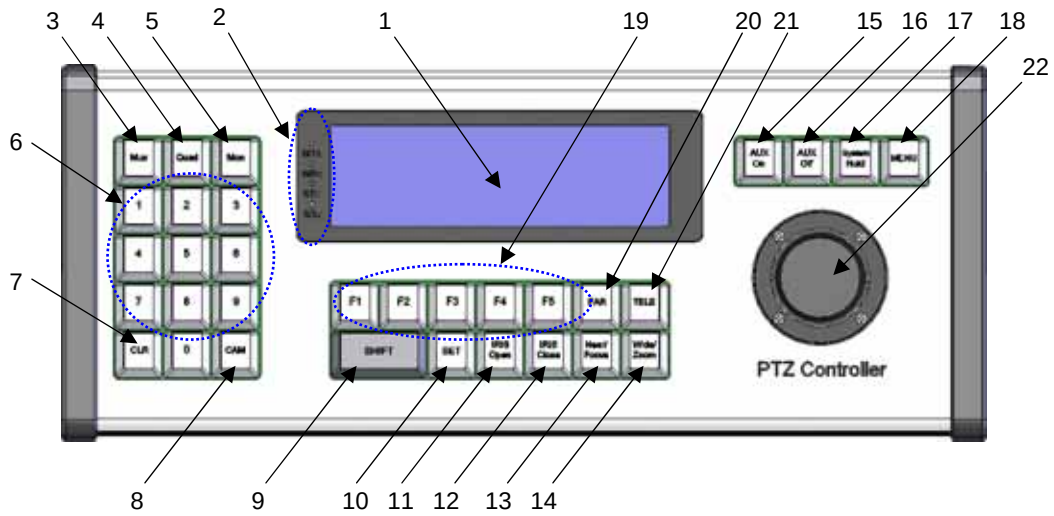
1.4 Turn on the power , then you will get into the starting mode.



< Configuration of Junction Box >

① RS-485 (+) :Connect to PTZ (+)
② RS-485 (-) : Connect to PTZ(-)
③ Power GND ,DC12V (-)
④ Not used
⑤ Not used
⑥ Power input :DC12V (+)
⑦ RJ-11 Modular Jack : Connect to Controller

Parts name & functions (GSS-2000)



1. LCD Display: Displays numeric input, system status, function status, general status, etc.
2. Shows the communication status (Master / Slave)
3. Mon : Select output channel of Matrix Switcher. (TBD)
4. Quad : Select channel of Quad.(TBD)
5. Mux : Select channel of Mux.(TBD)
6. 0~9 :Numeric keypad :
7. CLR : Cancel key .
8. CAM :Select address of Camera, Mux, Quad and Matrix Switcher.
9. SHIFT : Key for special function (Customize).
10. SET : Connected equipment setting and system information setting.

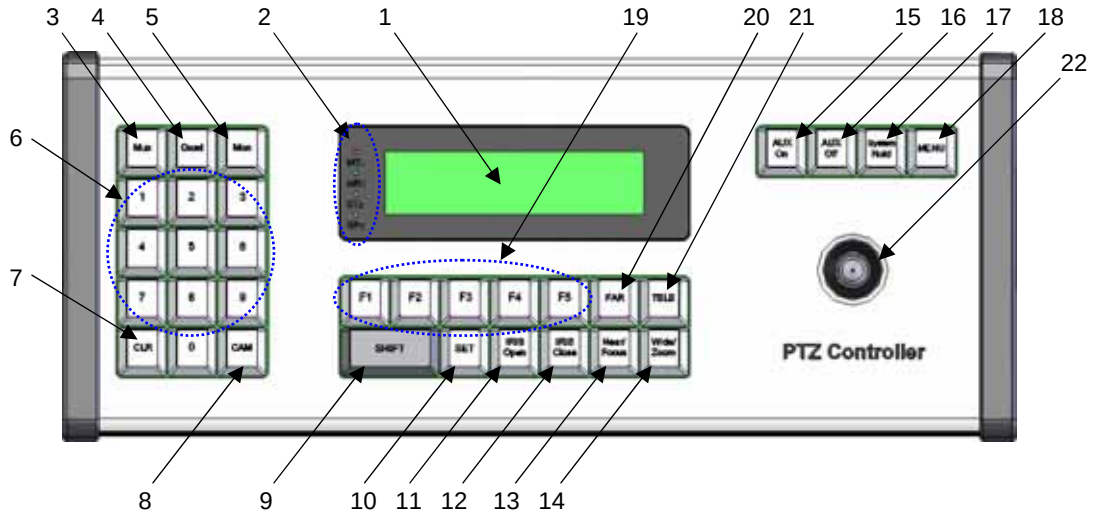
11.12. IRIS Open ,12. IRIS Close :Camera Iris control.

13. 20. Near / Far Focus: Camera focus control.

14.21. Wide / Tele Zoom : Camera zoom control.

15. AUX On : AUX On of Receiver unit.
16. AUX Off : AUX Off of Receiver unit.
17. System Hold : Used for system hold
18. Menu : Used for Camera (Pan/Tilt) Menu adjustment.
19. F1 ~ F5 : Function Keys (Preset, Group, Tour, Pattern, Swing, Auto).
22. Telemetry Joystick – It allows precise control of Pan/Tilt/Zoom & Moving to menu

Parts name & functions (GSS-1000)



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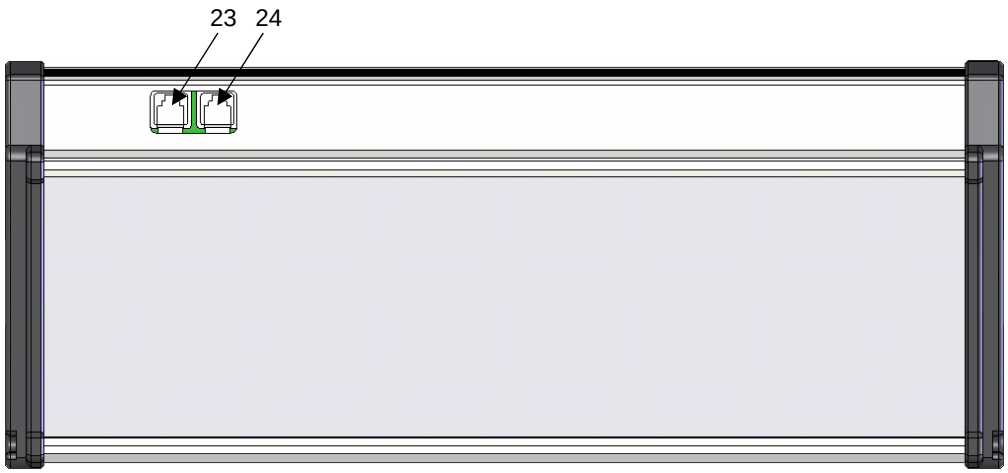
22. Stick – It allows precise control of Pan/Tilt/Zoom & Moving to menu

Parts name & functions (Bottom)

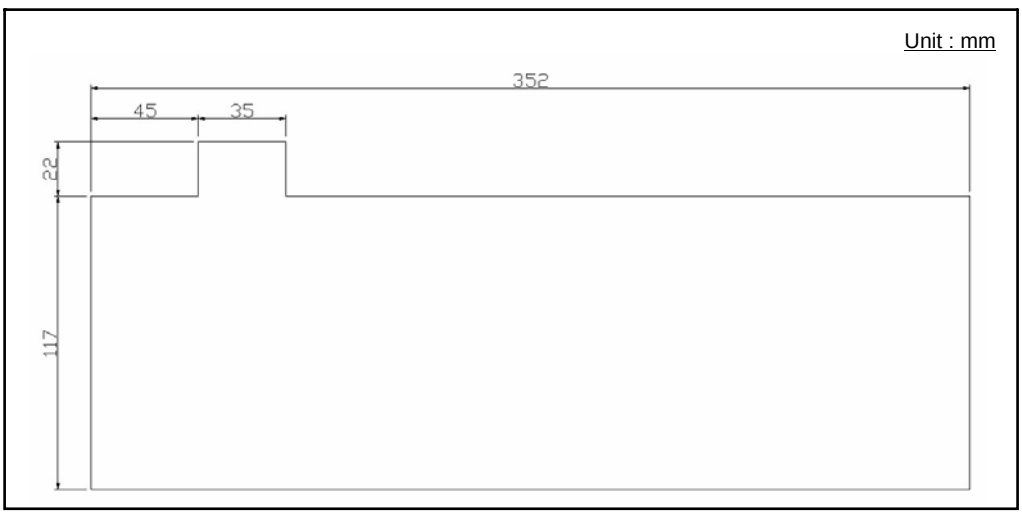


23. Slave Port : Connect to Slave Communication Port.
24. Master Port : Connect to Master Communication Port

Drawing of Console Desk

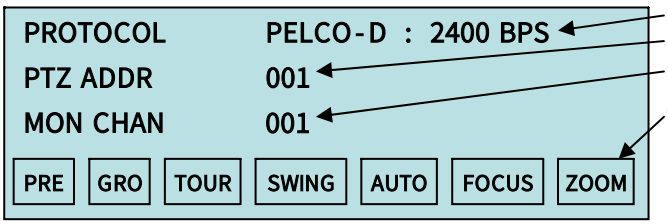
GSS-2000/1000 is designed to use on the console desk.

When you install the keyboard on the console desk , please make holes as below drawing.

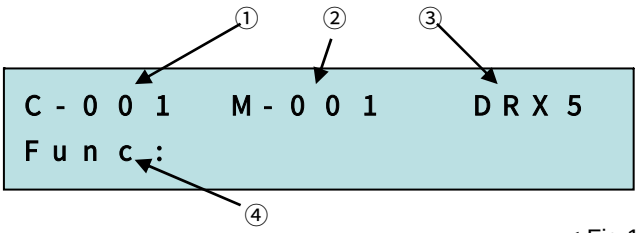


Display LCD window

(1) Initial display



1. C-001 : Shows the current camera No. (Address).
2. M-001 : Displays output channel of Matrix Switcher. (TBD)
3. DRX5 : Shows the selected camera protocol.
4. Func : Displays entered Key.



1. PROTOCOL : Shows the selected protocol & speed.
2. PTZ ADDR : Shows the selected camera address.
3. MON CHAN : Displays output channel of Matrix Switcher. (TBD)
4. Indicate Function Key of Speed dome camera

< Fig 1.1 >

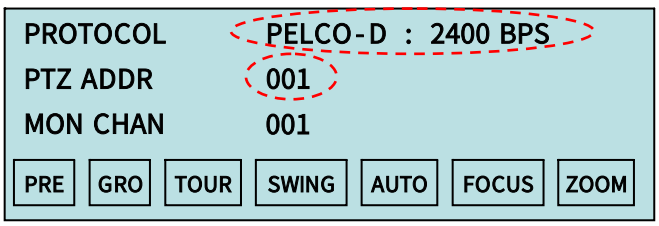
Accessing to the camera menu :

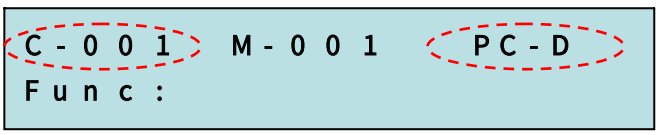
This function is only for the speed dome camera

Select and control the camera

1) How to select Address Number 1 camera with Pelco-D protocol?

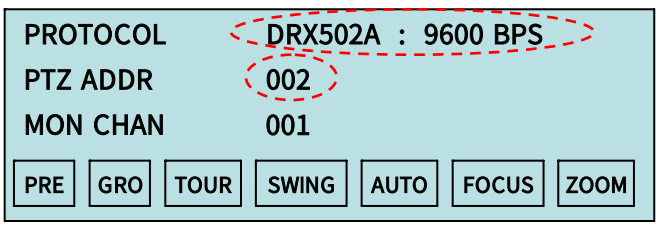
Camera Address | Press CAM button | Move to next item by using joystick

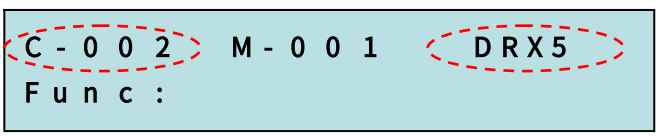




2) How to select Address Number 2 camera with DRX-502 protocol?

Camera Address | Press CAM button | Move to next item by using joystick

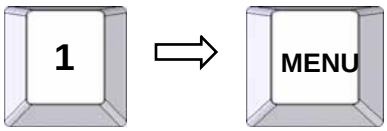




• Control and Setting of PTZ Camera Functions

1. Setting to the camera functions

① Camera Setting Menu



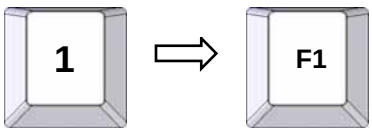
<Pressing keypad "1" and holding the "MENU" key for approximately 2 seconds>

Each menu page is provided with a highlighted cursor which can be moved around the page using the Up, Down Left & Right cursor keys with Joystick.

**** Note: Dome camera menu is different according to camera manufacturers.**
Please be noted dome camera instruction manual in detail menu explanation.

2.Accessing to the camera functions

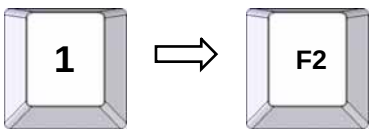
① Preset



Preset number PRE KEY

Press the preset number and PRE key(F1) on the keyboard. The Monitor will show you the function name and you are operating now.

① Group



Group number GRO KEY

Press the preset number and GRO key(F2) on the keyboard. The Monitor will show you the function name and you are operating now.

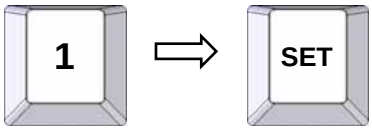
※ To using Preset, Group, Tour, Swing, Auto pan, Focus, Zoom functions of keyboard, user should store these functions on the camera Menu in advance.

These functions are different according to manufacturer. GSS series support DRX-502 and Pelco D protocol.

• System Controller (Keyboard) Functions setting

1. System functions setting

PTZ Camera (Rx) and Protocol setting.

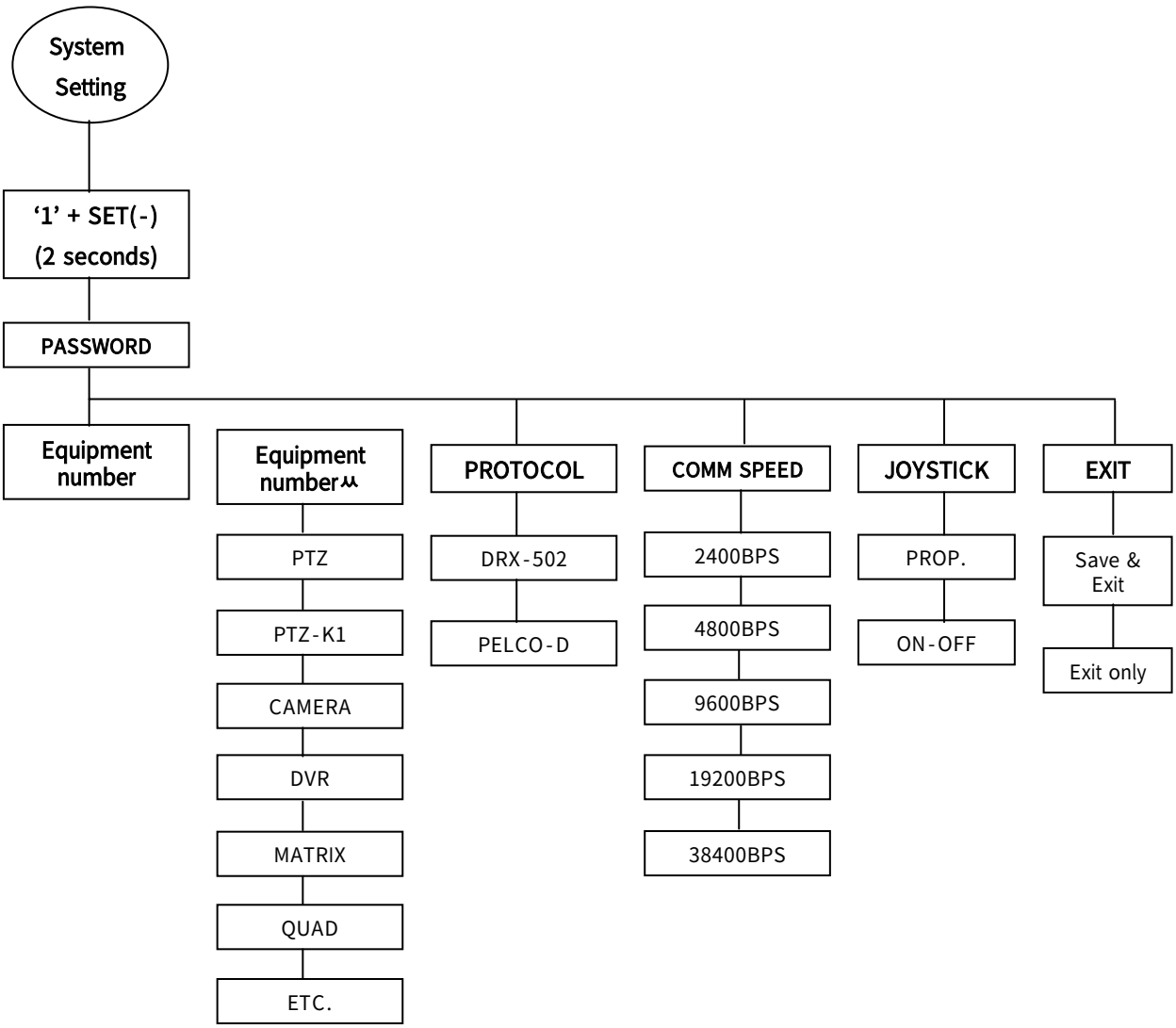
① 

<Pressing keypad "1" and holding the "SET" key for approximately 2 seconds>

② You will be prompted for a password if one has previously been set (factory default is "0000".)

③ Set the information as LCD show you by using joystick.

④ PTZ Configuration is as below.



GSS-2000

```
PROTOCOL      PELCO-D : 2400 BPS
PTZ ADDR      001
MON CHAN      001

PRE GRO PATT SWING AUTO FOCUS ZOOM
```

```
PASSWORD?
```

```
1.   NO.          001
2.   TYPE         PTZ
3.   PROTOCOL     DRX-502
4.   COMM SPEED   2400 BPS
```

```
5.   JOYSTICK     PROP
6.   EXIT
```

Accessing the system setup menu

Pressing keypad 1 and then holding the SET key for approximately 2 seconds.
It provides access to the system setup menu system.

Note: You will be prompted for a password if one has previously been set
(factory default is “0000”)

NO. : Select camera address to be changed.

TYPE : Select camera type.

PROTOCOL : Protocol select.

COMM SPEED : Select communication speed
** DRX-502 : 9600 bps
** Pelco D : 2400 bps

JOYSTICK: Select the way of Joystick control.

PROP : Proportional speed control.

ON-OFF : Fixed speed control.

EXIT

GSS-1000

```
C-001          < Set Mode >
1. TYPE : PTZ                 ->
```

```
C-001          < Set Mode >
2 PROT : DRX5                 ->
```

```
C-001          < Set Mode >
3 COMM : 9600                 ->
```

```
C-001          < Set Mode >
4 JOYS : PROP                 ->
```

```
C-001          < Set Mode >
5 EXIT                        ->
```

Accessing the system setup menu

Pressing keypad 1 and then holding the SET key for approximately 3 seconds.
It provides access to the system setup menu system.

Note: You will be prompted for a password if one has previously been set
(factory default is “0000”)

NO: Select camera address to be changed.

TYPE: Select camera type.

PROTOCOL: Protocol select.

COMM SPEED: Select communication speed
** DRX-502 : 9600 bps
** Pelco D : 2400 bps

JOYSTICK: Select the way of Joystick control.

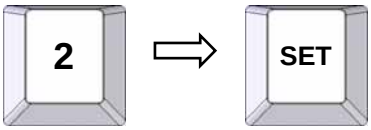
PROP : Proportional speed control.

ON-OFF : Fixed speed control.

EXIT

2.Hidden command

This hidden menu performs to operator to change PASSWORD and others.

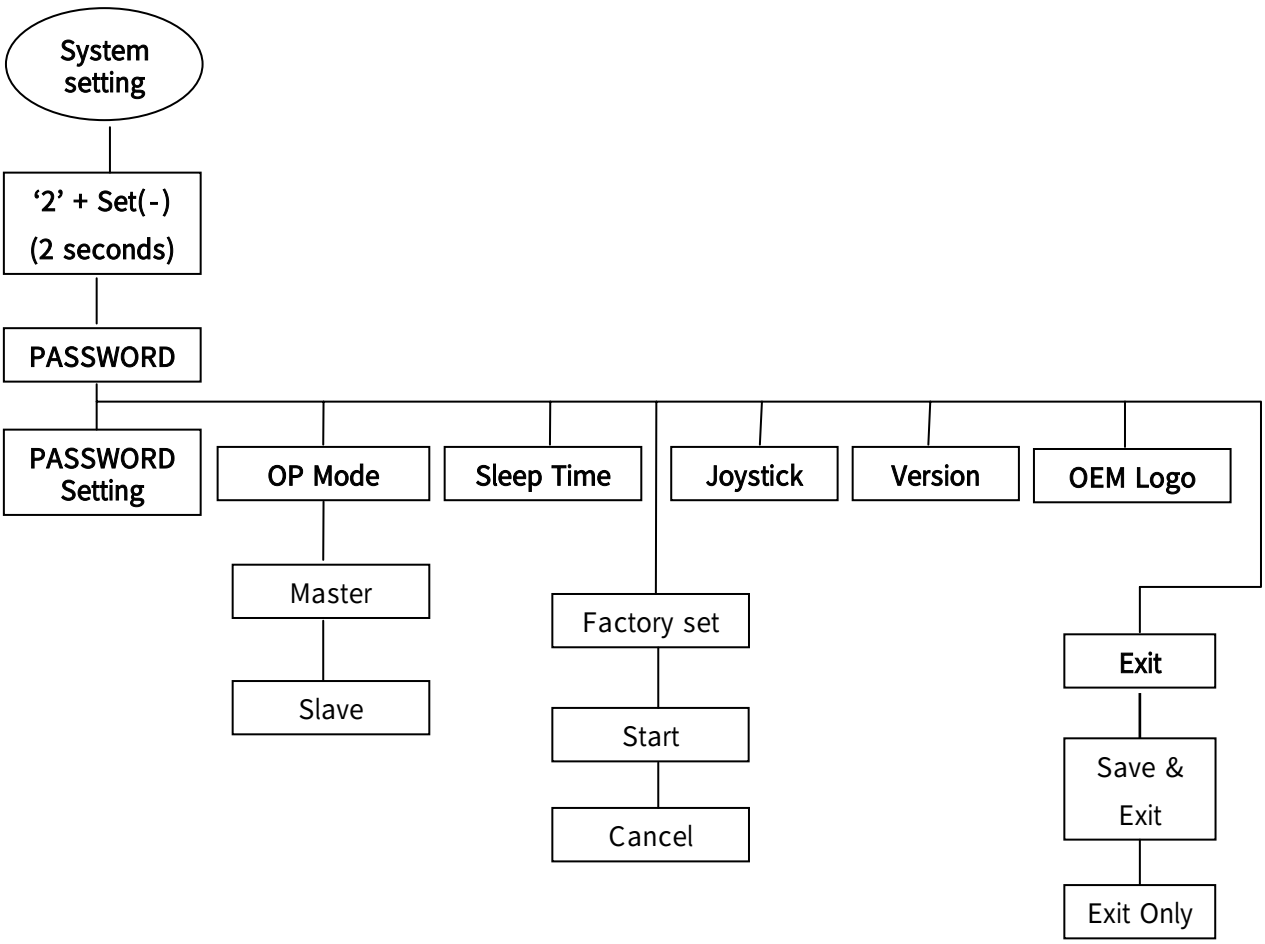
① 

<Pressing keypad "2" and holding the "SET" key for approximately 2 seconds>

② You will be prompted for a password if one has previously been set (factory default is "0000".)

③ Set the information as LCD show you by using joystick.

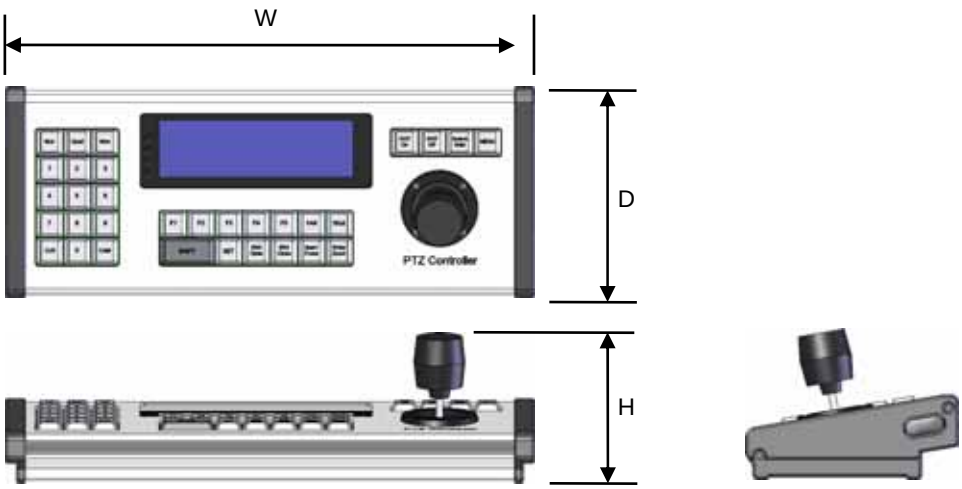
④ PTZ Configuration is as below.



Specifications

Model		GSS-1000, GSS-2000
Keyboard Communication		Pan/Tilt interface: RS-485
		DVR interface: RS-485
		Pan/Tilt operating distance: 4000 ft (1029m) on 24AWG wire
		Protocol: Multiple
Connector Type Data		RJ-11 6-pin modular
Keyboard Keypad		PC Keyboard button
		Numeric keypad and camera function keys.
Joystick	GSS-1000	Stick 2-axis, variable-speed with zoom
	GSS-2000	Three-axis, vector solving, with twisting, return-to-center head
Input Voltage		12V DC±2V
Power Consumption		Max.450mA
LCD Display		Graphic display (GSS-2000) 240 x 64dots. Display 4-linex30-character alphanumeric LCD display with blue backlight. 20 character x 2 lines (GSS-1000)
Operating Temperature		0℃ to 45℃
Humidity		10% -70% non-condensing
Dimensions & Weight	GSS-1000	372(W) x 103(H) x 145(D), 1.4Kg
	GSS-2000	372(W) x 103(H) x 145(D), 1.4Kg

Dimensions



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