

WITNESSDCQ

CCD observation system

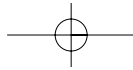
Before operating the unit, please read this manual thoroughly and retain it for future reference.



IMPORTANT SAFEGUARDS

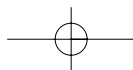
1. Read instructions : All the safety and operating instruction should be read before the appliance is operated.
2. Retain instructions : The safety and operating instruction should be retained for future reference.
3. Head warning : All warnings on the suppliance and in the operating instructions should be adhered to.
4. Follow instructions : All operating and use instructions should be followed.
5. Cleaning : Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments : Do not use attachments not recommended by the video product manufacturer as they may cause hazards.
7. Water and moisture : Do not use this video product near water - for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool and the like.
8. Accessories : Do not place this video product on an unstable cart, stand, tripod, bracket or table. The video product may fall, causing serious injury to a child, stand, tripod, bracket or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
- 8A. An appliance and cart combinations should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
9. Ventilation : Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these opening must not be blocked or covered. The openings should never be places near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power sources : This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video products intended to operate from battery power, or other source, refer to the operating instructions.

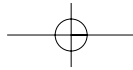




Built-in Quad & P/T Control 14" Color Observation System

11. Power-cord protection : Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. Lighting : For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the video product due to lightning and power-line surges.
13. Over loading : Do not over load wall outlets and extension cords as this can result in a risk of fire or electric shock.
14. Object and liquid entry : Never push objects of any kind into video product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
15. Servicing : Do not attempt to service this video product yourself as openings or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. Damage requiring service : Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power-supply cord or plug is damaged.
 - B. If liquid has been spilled, or objects have fallen into the video product.
 - C. If the video product has been exposed to rain or water.
 - D. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
 - E. If the video product has been dropped or the cabinet has been damaged.
 - F. When the video product exhibits a distinct change in performance this indicates a need for service.
17. Replacement : When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as original part. Unauthorized substitutions may result in fire, electric or other hazards.
18. Safety check : Upon completion of any service or repairs to this video product, ask the service technician to perform safety or repair to this video product, ask the technician to perform safety checks to determine that the video product is in proper operating condition.





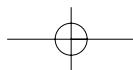
PRIOR TO USE

This is the basic manual for Built-in Quad & P/T Control 14" Color Observation System user. The content of this manual is focused on product introduction, installing method, connecting method with other devices, using method of various functional buttons, and system setting method with the setup menu.

Before using this equipment, this manual should be read not only by first users, but also by the users who are already familiar with this system or any other similar device in accordance with the precautions stated within the manual.

Before getting started with this equipment, it should be emphasized that the user must consult and receive help from the dealer where the product was purchased when opening the case and fixing the internal parts of the system for upgrade or repair.

And also if you have any further questions related to using this equipment or think you have a problem with the product, please consult your dealer.



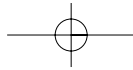
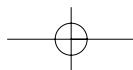


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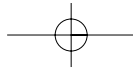


INTRODUCTION

This equipment can display the signals of up to 4 camera on one VCR, frame-by frame, in sequential recording, and on designated channels selectively. Also, it can directly control Pan/Tilt Dome Camera, without any extra controller.

FUNCTIONS AND FEATURES

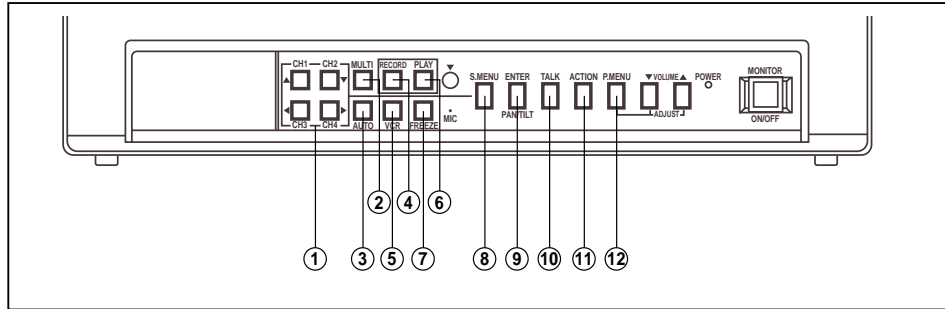
- **Built-In Quad & PIP, POP, Auto Switcher.**
- **Built-In Digital Multi Comb Filter(NTSC/PAL)**
- **Built-In Pan/Tilt Dome Camera Control(Multi(Din) Jack)**
- **Built-In Camera Vertical GEN-Lock(Multi(Din) Jack)**
- **12 Fields Picture Event/Alarm Digital Memory & Play**
- **Alarm In/Out & Two Way Talk**
- **Horizontal Resolution 420TV Lines**
- **Free Voltage (AC 90V ~ 240V, 50/60Hz)**
- **On Screen Menu Control & Digital Picture Menu Control**



PART NAMES AND FUNCTIONS

Prior to installing the this equipment, review the names and functions of the switches and buttons located on both the front and rear

Front View



1. Channel Select buttons

- In Live / P.B mode : When desired channel button is pressed, a full screen of the channel is displayed.
- Menu(S.MENU) mode
 - ▲▼ Button : To move throughout each item of the Main Menu or that of the sub menu to set it up.
 - ◀▶ Button : To increase or decrease the value of each item.
- Pan/Tilt Dome Camera Control

2. Multi button

This function enables you to display the picture in Quad, POP & PIP.

3. Auto button

Sequentially displays the cameras one by one, and the quad screen.

4. Record button

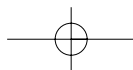
Automatically records an event frame by frame via digital memory the recording intervals can be set-up by going into the main menu.

5. VCR button

Press to review recorded pictures from VCR. If there is no signal from VCR then "L" will appear on the screen. Each quadrant can be zoomed (2x2 zoom) to view as full picture, by selecting CH-1, CH-2, CH-3 or CH-4.

6. Play button

This is used to play back the recorded pictures in Digital memory.



7. Freeze button

With this function you are able to freeze a selected image. Once the image is frozen "F" will appear on the screen. Use the freeze button to disable function. To freeze an image in quad, press the freeze button and then the desired channel (CH-1, CH-2, etc). "F" will appear in the selected quadrant.

8. S. Menu(System Menu) button

If user presses this button, it will display the setup menu. User can change the various functional settings of this system from the setup menu. Use the arrow buttons(▲▼◀▶) to move from menu to menu, or change the value of the sub menu.

9. Enter / Pan/Tilt button

- Menu(system set-up) mode : When the modification of each Sub Menu item is complete, press this button to save the settings. Use this button to enter a Sub Menu of the Main Menu or to return to the Main Menu from Sub Menu by pressing this button on "EXIT"
- Pan/Tilt On/Off button. Assuming that Pan/Tilt dome camera is connected to any channel, if user selects the channel and presses this button, the Pan/Tilt control mode will be started. And using the arrow buttons(▲▼◀▶), user can freely control the Pan/Tilt dome camera to its taste.
(If a user uses more than two Pan/Tilt dome camera, each pressing the Pan/Tilt button will select from CH1 to CH4, to control the each camera.)

10. Talk button

Press and hold this button to talk through to the camera and release it to receive.

11. Action button

This function can be used to activate other devices such as a lock release to open a door Action terminals are at rear of monitor. (Sends trigger signal only).

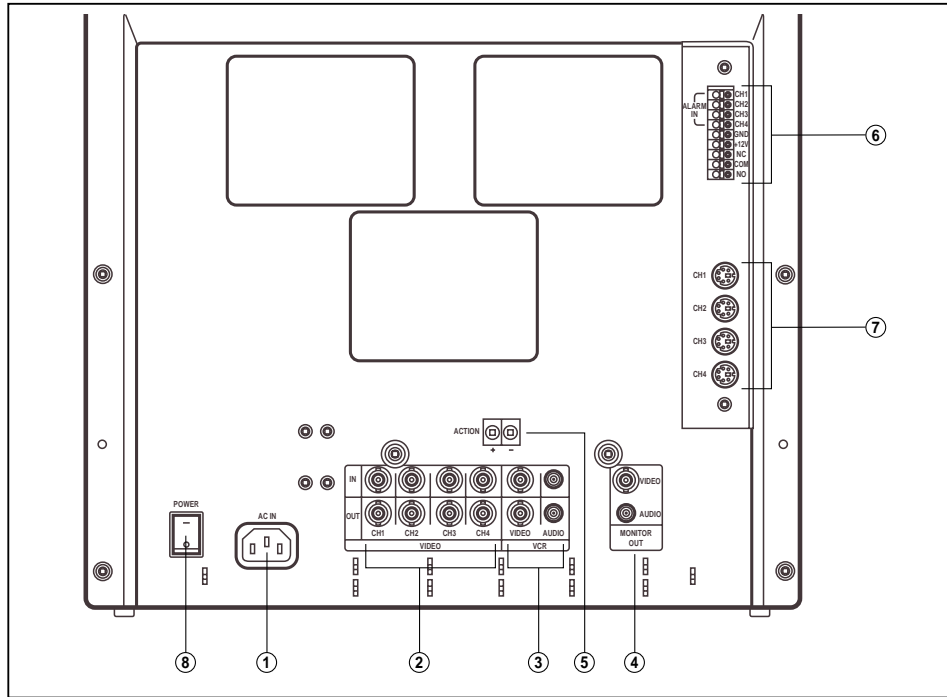
12. P. Menu button(Picture Menu)

P.Menu allows you to optimise the camera image by means of contrast, brightness, colour, tint & sharpness mode in the sub menu.

- Contrast : Use to adjust the contrast of the screen.
- Brightness : Use to adjust the brightness of the screen.
- Color : Use to adjust the density of colour.
- Tint : Use to adjust the Tint of colour.
- Sharpness : Use to adjust the sharpness of colour.

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Rear View



1. AC input

This is an input terminal that connects to AC 90~240V power.

2. Video input/output connectors

- BNC camera inputs 1~4 : These inputs are used for standard cameras with BNC type connectors.
- Looping outputs 1~4 : These are looping outputs for cameras on through. It can be used to display or record the pictures on a separate monitor or recorder.

3. VCR Video/Audio input/output connectors

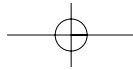
Video/Audio input connectors are for receiving video/audio signal from VCR or another video unit.

Video/Audio output connectors are for transmitting video/audio signal from a camera to another monitor. Also used in recording on VCR.

4. Monitor Video/Audio output connectors

Video/Audio output for slave monitor. Connect via double male to double male RCA leads of required length.

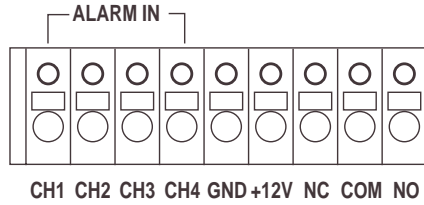
NB : Maximum recommended distance between master and slave monitor is 20m.



5. Action terminal

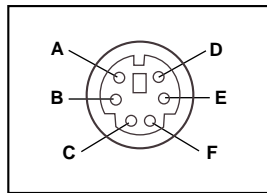
To activate other devices such as a lock release to open a door.

6. Alarm terminal



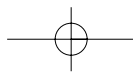
7. Camera input multi(Din) jacks

To connect up to 4 Witness cameras such as Pan/Tilt Dome Cameras, Cam6, Colcam2, Cam4-2K etc.

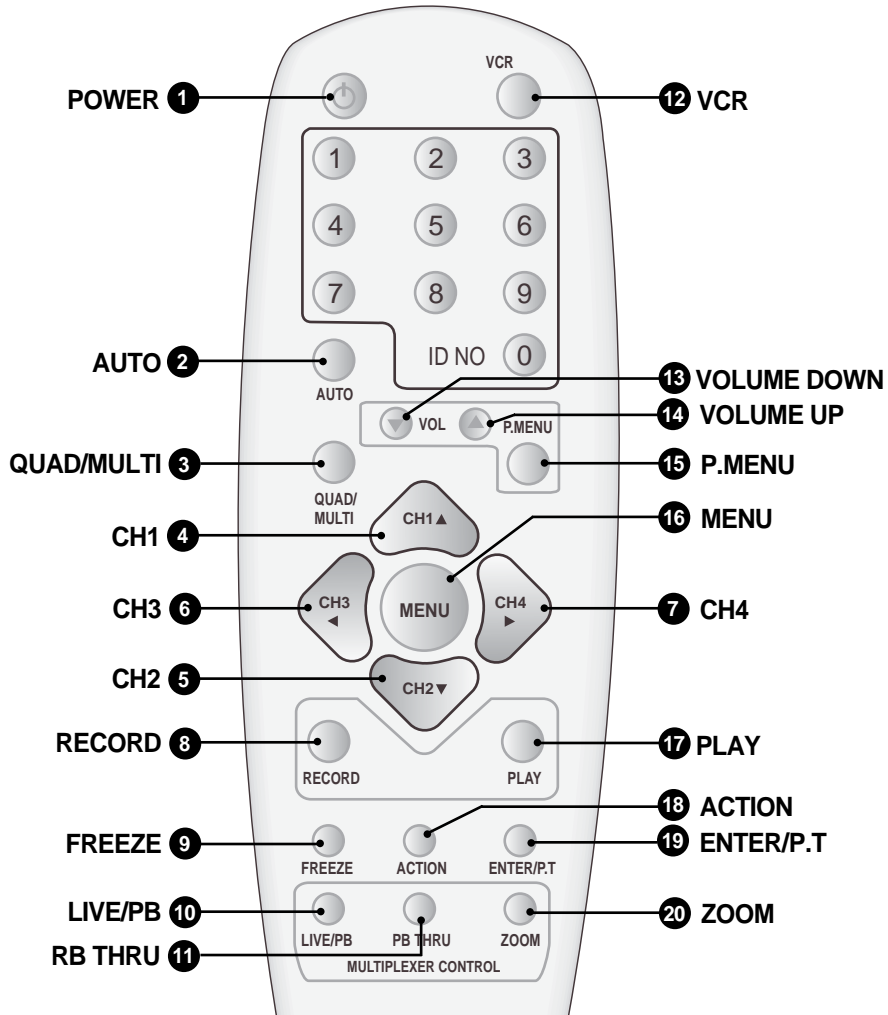


- A) +12V
- B) Audio in
- C) CAPW (Camera auto amp)
- D) Video in
- E) Audio out
- F) V-sync (Gen-lock)

8. Main power switch



REMOTE CONTROL UNIT



※ This remote control is used with various models, therefore some keys do not correspond with WITNESS DCQ.

CAUTION

**Danger of explosion if battery is incorrectly replaced.
 Replace only with the same or equivalent type
 recommended by the manufacturer.
 Dispose of used batteries according
 to the manufacture's instructions.**

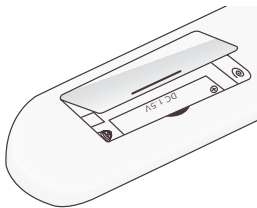
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- 1 POWER**
Press to turn the MONITOR on and off.
- 2 AUTO**
This button makes the quad processor switched the signal sources to be displayed sequentially.
- 3 QUAD/MULTI**
Press this button to display the picture of VCR playback.
- 4 CH1 (▲)**
CH1 button enables the camera 1 to be displayed in a single mode.
- 5 CH2 (▼)**
CH2 button enables the camera 2 to be displayed in a single mode.
- 6 CH3 (◀)**
CH3 button enables the camera 3 to be displayed in a single mode. Also used to highlight selections on the system main menus.
- 7 CH4 (▶)**
CH4 button enables the camera 4 to be displayed in a single mode. Also used to highlight selections on the system main menus.
- 8 RECORD**
Used in the quad display monitor only
- 9 FREEZE**
Press this button to stop the image temporarily.
- 10 LIVE/PB**
Used in the Mux monitor only
- 11 RB THRU**
Used in the Mux monitor only
- 12 VCR**
Press this button to display the picture of VCR playback.
- 13 VOLUME DOWN**
Press to decrease the volume level. Also used to select items on the on-screen picture menu.
- 14 VOLUME UP**
Press to increase the volume level. Also used to select items on the on-screen picture menu.
- 15 P.MENU (PICTURE)**
Press to temporarily cut off the sound.
- 16 MENU(SYSTEM)**
Display the system main menu on the screen. You can set up CHANNEL TITLE, DATE & TIME, DISPLAY MODE, AUTO SWITCHER, ALARM & BUZZER.
- 17 PLAY**
Used in the quad display monitor only
- 18 ACTION**
It switches the internal relay to put on.
- 19 ENTER/P.T**
If this key is pressed, the system goes to the PAN/TILT control mode, and then you can change the camera view position by pressing the up/down, right/left button.
- 20 ZOOM**
Zoom in on the picture in VCR mode.

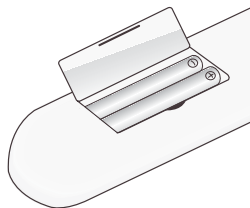
■ INSERTING THE BATTERIES IN THE REMOTE CONTROLLER

You must insert or replace the batteries in the remote controller when you:

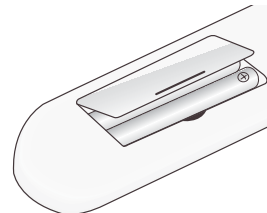
- Purchase the set. (AA size 1.5V x 2)
- Find that the remote controller is no longer operating correctly.



- 1** Remove the cover of the remote controller by pressing the symbol and pulling the cover space in the direction of the arrow.

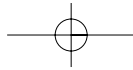


- 2** Insert 2 batteries(AA size), taking care to respect the polarities.



- 3** Replace the cover by pushing it in the direction of the arrow.

! You can use your remote controller within a distance of 7~10m and an angle of 30 degrees from the left and right sides of the remote controller receptor of your monitor.



CONFIGURATING

This chapter describes the configuration required for the safe installation and usage of this system.

You can install the monitor on a flat table or rack. The monitor must be in horizontal balance and should not be placed on a vertical or slide setting. The location of the main board and the configuration of the wire unit component are very important to operate the system properly. If the components are so close that ventilation is not sufficient, the system may not work properly or will be difficult to maintain. To reduce risks leading to system malfunction or shutdown as result of configuration, please make sure to allow enough ventilation in the system operating room and fix the cover of the main unit firmly. High-voltage current occurs in the unit : therefore, please do not try to open the cover.

The monitor requires the following operating conditions to maintain an appropriate temperature and humidity.

- Operating Temperature : 0°C ~ 40°C
- Storing Temperature : -20°C ~ -60°C
- Operation Humidity : 20% ~ 85%RH
- Storing Humidity : 20% ~ 95%RH
- Input Voltage : AC90 ~ 240V
- Power of consumption : Equal to or less than 75Watts
- Frequency : 50/60Hz

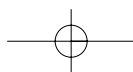
Caution

Please supply input power voltage with a variation of less than 10% of the specific voltage to the system in use. The power plug must be grounded. Please do not connect other appliances or equipment using the system's power outlet. It is recommended to use AVR to supply a stable power source. If you would use this appliance to supply voltage for 240V, you should use the proper adapter for 240V rating.

UNPACKING

Upon purchase of this system, unpack the box and put the unit on a floor stand, or place the unit where you are going to install the system. Please check the contents of the package as listed below.

- Monitor main unit
- Observation Camera (or Pan/Tilt Dome Camera)
- 20m(60ft) 6-pin Multi(Din) Cable
- Instruction Manual
- Power Cable
- Remote Controller (Optional)



CAUTIONS OF INSTALLATION

-MONITOR

User must keep in mind the following caution points when installing this system.

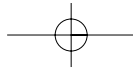
- User must turn the power off before installing.
- Be careful that the product is not exposed to strong impact or shock.
- Please keep the product away from magnetic fields, radios or TVs.
- During or even after the installing is complete, make sure that the main board is always kept clean.
- Install on an open, flat space and always keep in an appropriate temperature. Also, the backside and the wall behind it should always have a 15cm or more gap in between.
- Be careful not to drop any electrically transmissive objects in the ventilating holes.
- In changing the fuse for electrical circuit protection, user must turn the power off and unplug the power cord.
- Keep the system in a cold location where it can not be exposed to sunlight. Also, keep the product in an unreachable storing area.
- If you continue to use nevertheless smoke or a burning smell is detected, there can be a danger of fire or electrocution. In such case immediately shut down the power and refer to the supplier.
- The most dangerous conditions are a wet surface, ungrounded expansion cables, old and tattered cords, no safety grounding, etc. These conditions may well occur hazards.

-CAMERA

- Be sure that no power is connected to pan/tilt dome camera or observation camera and monitor during installation.
- The camera must have been installed in accordance with the instructions given in the instruction manual and only compatible equipment may be connected to it.
- The camera must have been used only for its intended purpose, and not been subjected to damage by misuse, wilful or accidental damage, damage caused by excessive voltage or lightning.
- The camera must not have been tampered with or repaired by anyone other than its authorized service agents.

NOTE

In cleaning the product you must use a dry cloth. If it is so dirty, you may use a detergent and a cloth, then wipe again with a dry cloth. Such flammable substances as alcohol, benzene, or thinner may critically damage the exterior.



Built-in Quad & P/T Control 14" Color Observation System

This chapter shows you how to execute various modes using the system setup menu.

STARTING THE SETUP MODE

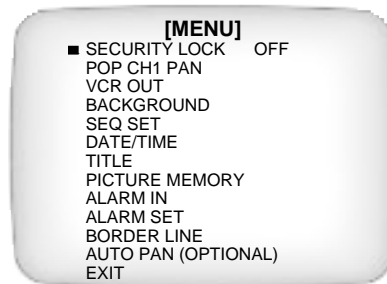
1. Check the power cables of the equipment connected to Monitor and turn the power switch
2. Press the S. Menu button on the front panel.

Note

Only while in Live Mode, you can enter the setup mode.

Main menu

Press the "S. MENU" button on the front of the system, the main menu of the system setup appears as follows.

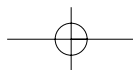


• **Modifying settings**

Select a menu item by using the ▲▼ & "Enter" buttons. Use the ◀▶ buttons to decrease, increase or change the value of a selected menu item.

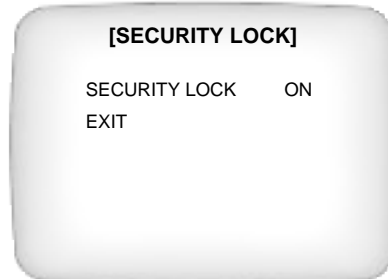
• **Saving the Setting / Returning to the Main Menu**

When the modification of each sub menu item is complete, press the Enter button to save the settings. Use this button to enter a Sub menu of the Main menu. To return to the Main menu from the Sub Menu, please select exit.



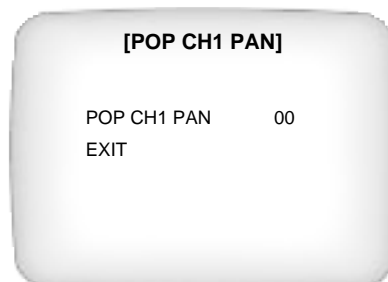
MENU SETTING

1. SECURITY LOCK

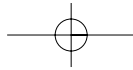


1. Place the cursor on "Security Lock" of the Main Menu and press enter to select ON or OFF, using ▲▼button.
2. Once you have exited the menu & selected the security lock to "ON" no buttons on the monitor or Remocon will work. The only working function is the "S.Menu" button which allows you to go back into the main menu.

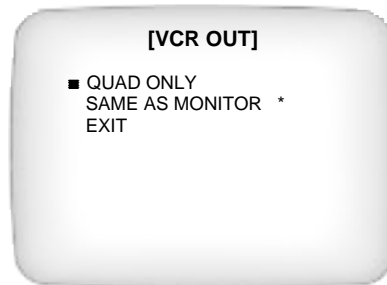
2. POP CH1 PAN



Select POP CH1 Pan on the main menu whilst in Multi (POP) mode. Set the location of image of CH1, using ◀▶ buttons.

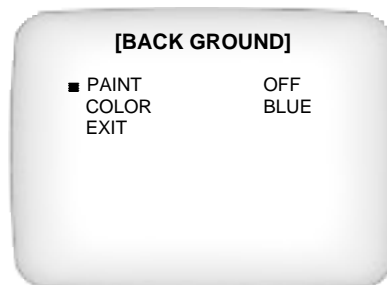


3. VCR OUT



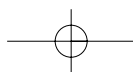
1. Place the cursor on "VCR OUT" of the main menu and press enter to set the way of VCR recording, of QUAD ONLY or SAME AS MONITOR, using ▲▼ button. Then press the Enter button to set the desired way. Please note if "VCR OUT" is set to "QUAD ONLY" mode then the digital functions such as REC, PLAY & FREEZE will only work in Multi mode i.e, QUAD, POP, PIP. On the other hand if VCR OUT is SAME AS MONITOR then all digital functions work in all modes.

4. BACKGROUND



PAINT : OFF/FULL/HALF
COLOR : BLUE/GREY/BLACK

1. Place the cursor on "BACKGROUND" of the Main Menu and press enter to set the Paint Tone and Color, using ▲▼button.



5. SEQ SET (Channel Duration time Setting)

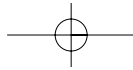
[SEQ SET]	
CH	INTERVAL (SEC)
■ 1	02
2	02
3	02
4	02
QUAD	02
EXIT	02

1. Place the cursor on "SEQ SET" of the Main Menu and press enter to set the duration time of each channel.
2. Place the cursor on the desired CH and press enter to set the duration, using ▲▼ button.
3. Interval Sec : 01, 02, 03, ~ 60, skip

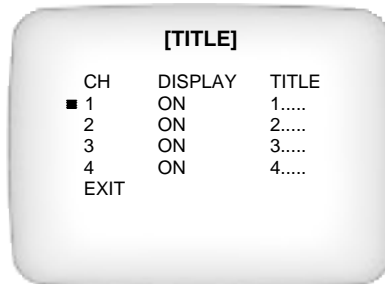
6. DATE / TIME

[DATE / TIME]	
	MM - DD - YYYY
■ DATE	01 - 26 - 01
TIME	11 : 30 : 22
DISPLAY	MM - DD - YYYY
EXIT	

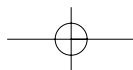
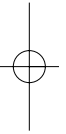
1. Place the cursor on "DATE / TIME" of the Main Menu and press enter to set the date and time.
2. Place the cursor on the desired Sub Menu and press enter to set the date and time, using ▲▼button.
3. User also can select the desired way of Date display, American Style, European Style and Asian Style, using ▲▼button.



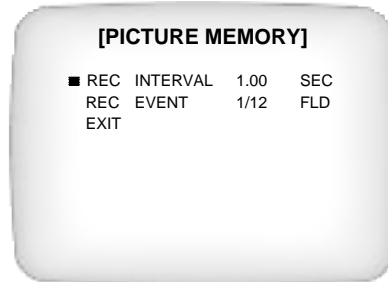
7. TITLE (Channel Name Setting)



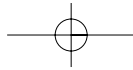
1. Place the cursor on "TITLE" of the Main Menu and press enter to set the name of each channel.
2. Move the cursor to right and left using ◀▶button, and press enter to input the desired characters using ▲▼button.
3. Up to 8 characters are available for each channel name.
4. User also can select ON/OFF screen display of each channel name.



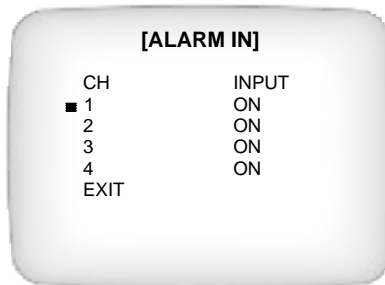
8. PICTURE MEMORY (Picture Memory and Display Time Setting)



1. Place the cursor on "PICTURE MEMORY" of the Main Menu and press enter to set the Picture Memory Interval and to allocate the number of recording field to each event.
2. User can select the Recording Interval between an image and an image from 0.25sec to 9sec as it is desired.
(0.25, 0.50, 1.00, 2.00, 3.00, 4.00, 5.00, 6.00, 7.00, 8.00, 9.00 sec)
3. User also can allocate the number of recording field to each event, from 1/12 to 12/1 field. (The maximum number of recording field in an event is 12 fields)
(1/12, 2/6, 3/4, 4/3, 6/2, 12/1 sec)
4. For example, if You set Rec Interval to 0.25SEC, and Rec Event to 1/12FLD, 12fields (pictures) would be recorded during 3seconds in an event (or one pressing REC button) And if user selected Rec Interval to 0.25SEC, and Rec Event to 2/6FLD, 6fields(pictures) would be recorded during 1.5seconds in an event (or one pressing REC button), and the rest of the field, 6fields will be left for other event.
5. During the recording, "REC" will be displayed on to the bottom of left in screen display, and "PLAY" button is not working.

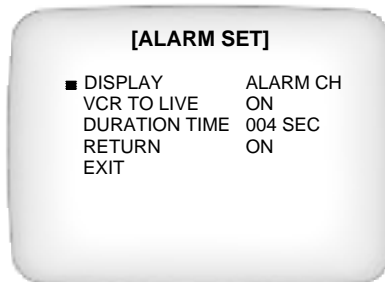


9. ALARM IN (Alarm Input ON/OFF Setting)

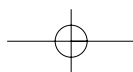


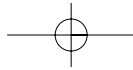
1. Place the cursor on "ALARM IN" of the Main Menu and press enter to set the Alarm Input ON/OFF for each channel.
2. Place the cursor on the desired CH and press enter to set Alarm Input ON/OFF, using ▲▼button.

10. ALARM SET



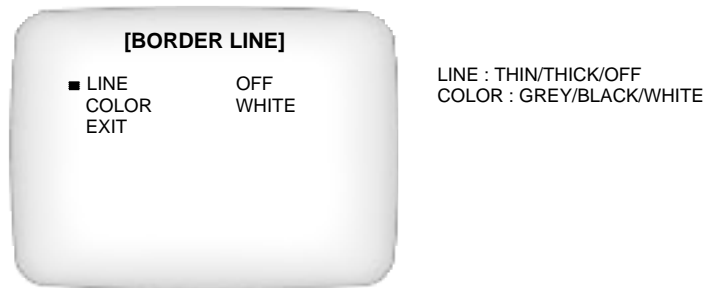
1. Place the cursor on "ALARM SET" of the Main Menu and press enter to set the Display mode during being alarmed
 - ALARM CH : On monitoring the recorded image in VCR mode or a certain channel in Live mode and being alarmed, the screen will be automatically turned to the alarmed channel.
 - QUAD : On monitoring the recorded image in VCR mode or a certain channel in Live mode and being alarmed, the screen will be automatically turned to quad picture.
 - STAY : On monitoring the recorded image in VCR mode or a certain channel in Live mode and being alarmed, the screen will stay in VCR mode or at the channel in Live mode. In this case, the alarm sign will be displayed on the screen.
 - AUTO(default) : On monitoring the recorded image in VCR mode or a certain channel in live mode and being simultaneously alarmed from more than one channels, the screen will be automatically turned to quad or alarmed channel picture.
(One channel alarm = Alarmed channel picture
More than two channel alarm = Quad picture)



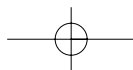


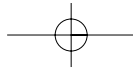
2. VCR TO LIVE : On monitoring the recorded image in VCR mode and being alarmed, the screen can be automatically turned to Alarm channel Live mode by setting this menu ON.
3. Duration Time : 1 ~ 120 SEC
4. Return : Return to the prior picture ON/OFF

11. BORDER LINE



1. Place the cursor on "BORDER LINE" of the Main Menu and press enter to set the Line ON/OFF.
2. User also can select the thickness of border line and the color, as it is desired.





USER'S GUIDE

1. NORMAL RECORDING TO VCR

In normal recording, the video signal input into the camera connected to Monitor are transmitted every 1/30 seconds and recorded 1 frame at a time on the VCR. On using a time lapse VCR, it should be connected to the VCR AUDIO/VIDEO OUT terminal in the rear of Monitor.

(In advance, set the "VCR OUT" in System Main Menu)

In VCR mode, no matter which recording way is selected in system menu, VCR OUT is always in "Same As Monitor", to utilize several digital functions, such as Freeze, Digital Zoom, Digital Event Record and so on.

2. PLAY BACK RECORDED TAPES

To play a recorded tape, first check if the VIDEO OUT terminal of the VCR and the VCR IN terminal of Monitor is connected. Put the tape in the VCR and press the VCR button on Monitor. The recorded tape can be viewed in menu modes.

(In advance, select the "ALARM SET" in System Main Menu)

3. VIEWING FULL SCREEN

When the desired channel among the 4 buttons of "CH1, CH2, CH3, CH4" on the front side of Monitor is pressed, the selected channel appears in Full screen.

4. VIEWING QUAD OR MULTI SCREEN

If user presses the "Multi" button on the front side of Monitor, the Quad, PIP and POP image appears.

5. VIEWING AUTO SEQUENCE TRANSITION SCREEN

The Auto Sequence Transition Screen mode enables user to switch between channels on one, quad, multi screen. This can be activated by pressing the "AUTO" button in Live mode

- If all channels do not have video signals the Auto Sequence button should not work.

6. DIGITAL EVENT/ALARM RECORDING(Up to 12 fields)

Digital Event/Alarm Recording is useful for recording the spot that event or alarm sign is occurred, on monitoring the place and wanting playing the image back promptly.

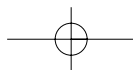
Pressing the "REC" button on the front side of Monitor when event or alarm is occurred, the digital recording will be started.

(In advance, set the "PICTURE MEMORY" in System Main Menu)

7. PLAY BACK THE DIGITAL RECORDING

After the end of recording, by each pressing the "PLAY" button on the front side of Monitor, the recorded picture will be played back as still image from the most recently recorded image.

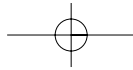
-During the recording, "REC" will be displayed on to the bottom of left in screen display, and "PLAY" button is not working.



SPECIFICATION

MONITOR

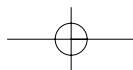
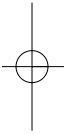
Sub carrier frequency	4.4336MHz \pm 500Hz
Horizontal frequency	15.625MHz \pm 500Hz
Vertical frequency	50 Hz
Picture tube	14" CRT 0.66mm Stripe Pitch, 90° Deflection
Horizontal resolution	420 TV lines
Video In/Out	4 Composite In/Out (Through) BNC VCR In/Out BNC Monitor Out BNC 4 Camera Multi DIN jack input
Audio In/Out	1/2/3/4 (DIN input) VCR In/Out (RCA) Monitor Out (RCA)
High voltage	24KV \pm 1.0KV
Audio Out	1W max
Power input	AC 90V ~ 240V (60 Hz / 50 Hz)
Power consumption	70W max
Dimension	365 x 339 x 391 (W x H x D)mm
Weight	13 Kg
Option	Wireless ID remocon



Built-in Quad & P/T Control 14" Color Observation System

CAMERA (Dome Pan/Tilt Colour)

Power source	12V (From monitor)
Image sensor	1/3" Interline transfer CCD
Active pixels	512(H) x 582(V)
Image sensor area	4.8(H) x 3.7(V)mm
Signal to noise	46dB
Electronic IRIS	1/100,000 sec
Synchronization	External
Signal format	625lines, 2:1 interface
Video output	1.0V p-p (75 ohm)
Audio output	600 Ohms line level
Ambient temperature	-10°C ~ +50°C (14°F ~ 122°F)
Ambient humidity	0 ~ 96% Non-condensing
Image sensor	1/3" Color
Resolution	> 330 TV lines
Min. illumination	1 Lux
Lens	4.3 or 3.6mm Fixed.
Power consumption	Max 3.6W
Panning angle	355°
Pan/Tilt speed	15°/sec
Tilting angle	80°
Housing type	Indoor
Weight	1Kg



CAMERA (CAMCOL 2)

Pick-up device	1/3" color CCD
No. of picture elements	512(H) x 582(V)
Horizontal resolution	>330 TVL
Light sensitivity	3.5 ~ 3000 Lux
Spectral sensitivity range	400 ~ 1,000 nm
Signal to noise ratio	> 48dB
White balance	Auto TTL, 2,500 ~ 6,500°K
Built-in microphone	Electric
Lens type	4mm C/CS mount
Lens viewing angle	59°H ~ 46°V
Lens focal length	F 1.2
Power supply	DC 12V (via system monitor)
Synchronization	Gen lock
Alarm output	4 Pin terminals
Power consumption	4W (excl. Auto-IRIS lens)
Temperature (operating/storage)	-10°C ~ +50°C / -25°C ~ +70°C
Cabinet	Plastic
Dimension	61(W) x 95(D) x 62(H) mm
Weight	200g

CAMERA (CAM 6)

Pick-up device	1/3" color CCD
No. of picture elements	512(H) x 582(V)
Horizontal resolution	>470 TVL
Light sensitivity	3.5 ~ 30,000 Lux
Spectral sensitivity range	400 ~ 1,000 nm
Signal to noise ratio	> 48dB
White balance	Auto TTL, 2,500 ~ 6,500°K
Built-in microphone	Electric
System connection	6 Pin Mini Din jack or Bnc jack
Speaker	0.3W
Lens type	C/CS mount
Lens viewing angle	59°H ~ 46°V
Lens focal length	F 1.2
Lens min. illumination	1Lux
Power supply	DC 12V (via system monitor)
Synchronization	Gen lock
Alarm output	4 Pin terminals
Power consumption	4W
Temperature (operating/storage)	-10°C ~ +50°C / -25°C ~ +70°C
Cabinet	Metal
Weight	255g

TROUBLE SHOOTING GUIDE

While using the system, certain unexpected situations may cause problem with the system. In many cases, system trouble can be solved through a simple trouble shooting check.

If you encounter any problems using this system, please check the following points.

1. When the Power will not turn on Check whether the power cord is properly plugged in.
2. When the Power is on but the screen does not appear. Check whether the camera, monitor and output terminals are properly connected.
3. If the recording function does not work. Check whether the video in terminal of the VCR and the VCR out terminal of Monitor is properly connected. Check whether the tape is recordable.
4. When the recorded tape does not play. Check whether the video out terminal of the VCR and the VCR in terminal of Monitor are properly connected.

Note

When problems relating with recording/playing occur, you must check the conditions of the connected VCR

If you checked all of the above conditions and you still find problems, refer to your supplier and contact a technician.

Note

If you are not comfortably accustomed with the use of such systems, it is highly recommended for you to contact your supplier and directly ask for help.

IMPORTANT

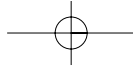
PLEASE RETAIN ALL ORIGINAL PACKAGING IN THE EVENT THAT YOU NEED TO RETURN AN ITEM FOR SERVICE. THIS REDUCES THE RISK OF DAMAGE IN TRANSIT.

Tip) If a user wants to change its characteristic of television system, NTSC to PAL, or PAL to NTSC, he only has to set the jumper of Quad Board as follows.

<NTSC>



JP1, JP2 = NTSC
JP3, JP4 = PAL



Built-in Quad & P/T Control 14" Color Observation System

TECHNICAL HELP

PLEASE PHONE OUR HELPLINE

0121 786 1881

OR SEND A FAX

0121 789 8055

OR AN E-MAIL

ESP1CCTV@ aol.com

“ Please note. Users of CCTV systems where recording is taking place should be aware of their responsibilities under the Data Protection Act 1998. Further information can be found on the website www.dataprotection.gov.uk ”

