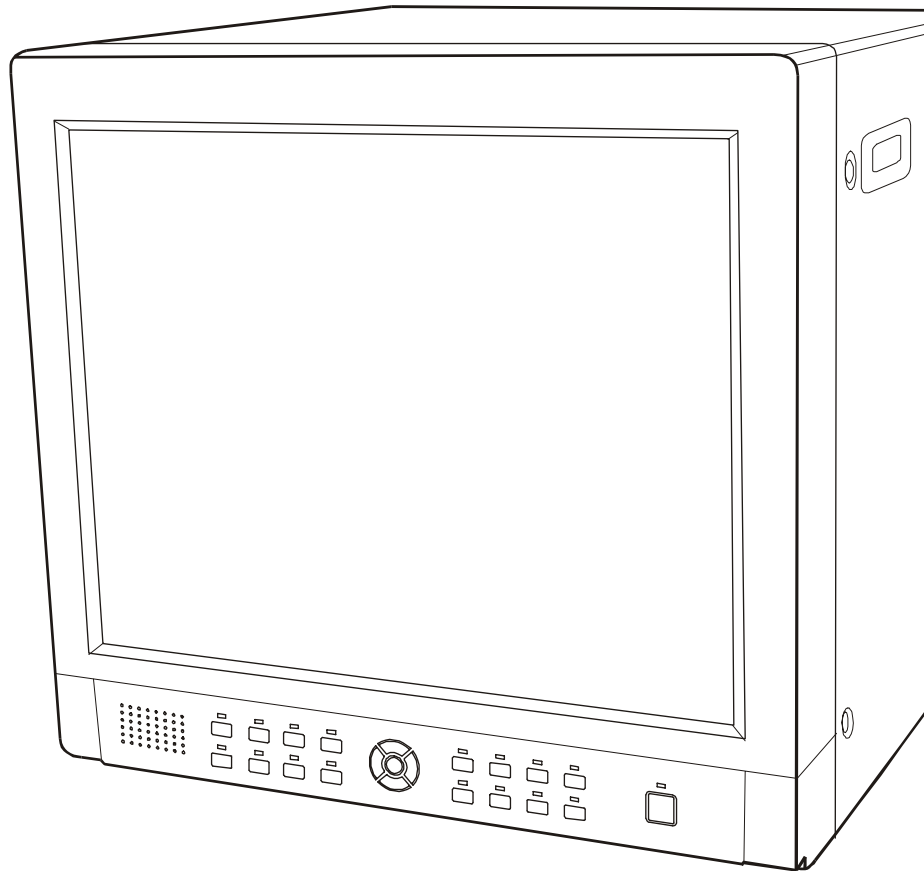


Instruction

15 INCH 2 PAGE COLOR QUAD MONITOR A-O15QC



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

ISSUE 1 - SEP, 2004

THE INFORMATION IN THIS PUBLICATION IS BELIEVED TO BE ACCURATE IN ALL RESPECTS. HOWEVER, WE CANNOT ASSUME RESPONSIBILITY FOR ANY CONSEQUENCES RESULTING FROM THE USE THEREOF. THE INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE WITHOUT NOTICE. REVISIONS OR NEW EDITIONS TO THIS PUBLICATION MAY BE ISSUED TO INCORPORATE SUCH CHANGES.

FCC COMPLIANCE STATEMENT

INFORMATION TO THE USER: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS B DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE IN A RESIDENTIAL INSTALLATION. THIS EQUIPMENT GENERATES, USES AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. HOWEVER, THERE IS NO GUARANTEE THAT INTERFERENCE WILL NOT OCCUR IN A PARTICULAR INSTALLATION. IF THIS EQUIPMENT DOES CAUSE HARMFUL INTERFERENCE TO RADIO OR TELEVISION RECEPTION, WHICH CAN BE DETERMINED BY TURNING THE EQUIPMENT OFF AND ON, THE USER IS ENCOURAGED TO TRY TO CORRECT THE INTERFERENCE BY ONE OR MORE OF THE FOLLOWING MEASURES :

- REORIENT OR RELOCATE THE RECEIVING ANTENNA
- INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND RECEIVER
- CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT TO WHICH THE RECEIVER IS CONNECTED
- CONSULT THE DEALER OR AN EXPERIENCED RADIO/TV TECHNICIAN FOR HELP

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

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

CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB-003 DU CANADA.

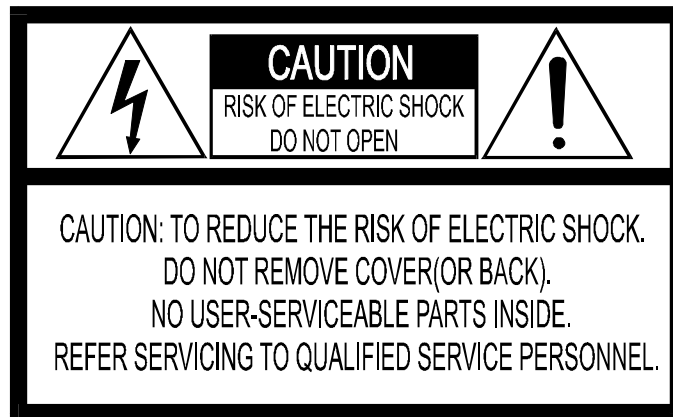
Warnings and Cautions

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

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 uninsulated “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.

PRECAUTIONS

Safety: Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more.
To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.


Installation: Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust or mechanical vibration.

The unit is not designed to waterproof. Exposure to rain or water may damage the unit.

Cleaning: Clean the unit with a slightly damp soft cloth.

Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

IMPORTANT SAFEGUARDS

1. READ INSTRUCTIONS – All the safety and operating instructions should be read before the appliance is operated.
2. RETAIN INSTRUCTIONS – The safety and operating instructions should be retained for future reference.
3. CLEANING – Unplug video monitor or equipment from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. ATTACHMENTS – Do not use attachments not recommended by the video monitor or equipment manufacturer as they may result in the risk of fire, electric shock or injury to persons.
5. WATER AND MOISTURE – Do not use video monitor or equipment near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, or the like.
6. ACCESSORIES – Do not place video monitor or equipment on an unstable cart, stand or table. The video monitor or equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 6A. Video monitor or equipment and cart combinations should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn. 
7. VENTILATION – Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the video monitor or equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video monitor or equipment on a bed, sofa, rug, or other similar surface. Video monitor or equipment should never be placed near or over a radiator or heat

register. Video monitor or equipment receiver should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

8. POWER SOURCES – Video monitor or equipment 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 supplied to your home, consult your video monitor or equipment dealer or local power company. For video monitor or equipment designed to operate from battery power refer to the operating instructions.
9. GROUNDING OR POLARIZATION – This video monitor may be equipment with a polarized alternating – current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your safety purpose of the polarized plug.

Alternate Warnings – This video monitor is equipment with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet.

This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

10. POWER CORDS – Do not allow anything to rest on the power cord. Do not locate video monitor or equipment where the cord will be abused by persons walking on it.
11. HEED WARNINGS – Follow all instructions marked on the video monitor or equipment.
12. LIGHTNING – For added protection for video monitor or equipment 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 antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
13. OVERLOADING --Do not overload 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 monitor or equipment 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 product.
15. SERVICING – Do not attempt to service video monitor or equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. DAMAGE REQUIRING SERVICE – Unplug video monitor or equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions :
 - A. When the power-supply cord or the plug has been damaged.
 - B. If liquid has 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 damaged.
 - F. When the video product exhibits a distinct change in performance – this indicates a need for service.
17. REPLACEMENT PARTS – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
 18. SAFETY CHECK – Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.
 19. FIELD INSTALLATION – This installation should be made by a qualified service person and should conform to all local codes.
-

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CHAPTER 1. FEATURES

DESCRIPTION

The A-O15QC System is a Color 8 - Channel 2 page Quad observation System With a Built- in QUAD processor to allow simultaneous viewing of up to eight Different camera locations.

This color QUAD processor offers a user friendly on-screen programmable menu. The cameras can be viewed sequentially on alarm, Full screen, or in the QUAD mode.

FEATURES

- 15 Inch Color Dual QUAD Monitor
- High clearness Flat Color Monitor
- Full Screen Display - Internal eight camera Sequential Switcher Display
- Quad Display – Each QUAD(A/B) Picture Sequential Switcher Display
- Programmable camera skip in sequential mode
- Quadrants assign function
- On Screen Display
- Screen Freeze Capability (Quad mode)
- Alarming eight Inputs, N.C or N.O
- Video Loss Alarm
- VCR Inputs and Outputs
- PAN Tilt Camera Control
- FULL Screen 20% OVER Scan Control
- Selectable display on alarm – QUAD or Full Screen.
- User Friendly Programmable Menu
- Key Lock / Menu Password enabled
- Alarm / Video Loss Count enabled
- Time-and-Date Stamp

CHAPTER 2. FRONT AND REAR PANEL

THE FRONT PANEL

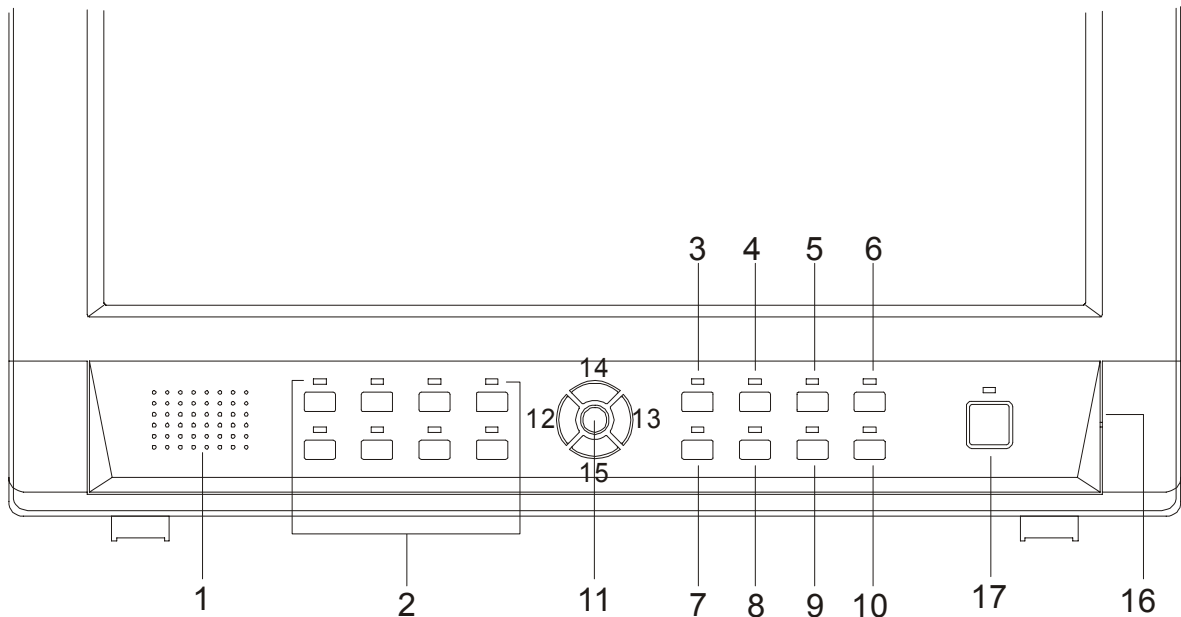


Figure 1. Front

Part	Function	Description
1	Speaker	Sound from the camera location and VCR playback audio can be monitored from the unit's internal speaker
2	CAM1-CAM8	Pressing CAM1-CAM8 Control for display of camera1-camera8 in full - Screen. When an alarm occurs, Press this button to stop the alarm buzzer.
3	SEQ	Pressing SEQ to begin sequencing picture. While in the full Screen mode, press this button to sequencing Full picture (Cam1-Cam8) or user setting program to Sequencing The current displaying camera LED's turn on and "s" character is shown on the lower-right of the screen when the unit is in this mode. While in the Quad Screen (QUADA or QUADB) mode, press SEL button And press this SEQ button to sequencing Quarter Picture

THE FRONT PANEL, continued

Part	Function	Description
4	QUAD	While in the QUADA mode, Press once to display QUADB(cam5-cam8) mode . Push the QUAD button again to display QUADA again.
5	TALK	Press and hold to send audio from the monitor's built in microphone to the selected camera intercom(purchased separately) The operator can select the audio channel while in the quad mode. When an alarm occurs press this button to stop the alarm buzzer and screen Will display the current picture. While in the sequence mode, press this button will stop the sequence operation, and the screen will display the current picture
6	P/T	While in the full picture mode (CAM1-CAM8) or QUAD Mode(QUADA &QUADB) Press P/T Used to Control Motorized DOME Camera After Channel (Cam1-Cam8) Select , press P/T Button and press Control Button [▲(up). ▼ (down), ◀ (left), ▶ (right)] to move the Camera Viewing The current displaying Channel LED Flash and a "P" character is blink on the low – left (beside Camera titles) of the screen when the unit is in P/T mode. While QUAD picture selected mode (QUADA or QUADB), Press P/T Button next Press Channel select button (CAM1-CAM8) and press Control Button [▲(up). ▼ (down), ◀ (left), ▶ (right)] to move the Camera Viewing * The select displaying Channel LED Flash and character is "P" Blinking
7	SEL	This SEL button to choose on the menu then push the this button: Press MENU button to appear user menu(TIME, DATE MENU, ALARM MENU... ETC) then operator have to push the SEL button.
8	FREEZE	While in the quad mode, press this button to freeze the picture for display Press again to exit the freeze screen. When an alarm occurs, press this button to stop the alarm buzzer, and the screen will display the current picture

9	VCR	<p>Press this button to display signal from the VCR IN Port to the internal monitor. In this mode, the LED above the VCR button illuminates. The screen displays text overlay during VCR playback.</p> <p>To exit the VCR mode, press the VCR button again.</p> <p>When an alarms occur in VCR playback mod, the unit exits this mode.,</p> <p>When an alarm occurs, pressing this button will stop alarm buzzer operation and the screen will display the current picture</p>
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Continued on next page

THE FRONT PANEL, continued

Part	Function	Description
10	ZOOM	Press this button to Control ZOOM Camera , the Function is capacity ZOOM-IN or ZOOM –OUT * This button to future Function.
11	MENU	Used to display the Main Menu. While in the main Menu screen, press this button to again to exit the SETUP mode and return to the previous mode This allows setup of camera option, alarm option, sequence option, picture Adjust, configuration and operation
12	◀ & MUTE	When a MENU mode, This button is used to move to the cursor to the left The MUTE button will set the volume of he speaker to zero. A second press returns the volume back to the original setting. This MUTE function can be set for every camera and VCR mode separately
13	▶ & VOLUME	When a MENU Mode, This button is used to move to the cursor to the right The VOLUME button will select which camera’s audio is audible. This button also selects which camera will receive the audio from the built in microphone when the TALK button is pressed
14	▲	This button is used to move to the cursor to the up or increase menu value The VOLUME UP button will adjust the volume control for the appropriate audio level
15	▼	This button is used to move to the cursor to the up or decrease menu value The VOLUME DOWN button will adjust the volume control for the appropriate audio level
16	MICRO-PHONE	The Microphone allows for two-way communication from the monitor to camera locations equipped with two-way audio. Press the TALK button to talk into the microphone.
17	POWER SWITCH	Press the switch to turn the monitor ON. The POWER LED illuminates and remains ON while the switch is in the ON position. Press the switch again to turn the monitor OFF. The main power switch is located on the back of the monitor.

THE REAR PANEL

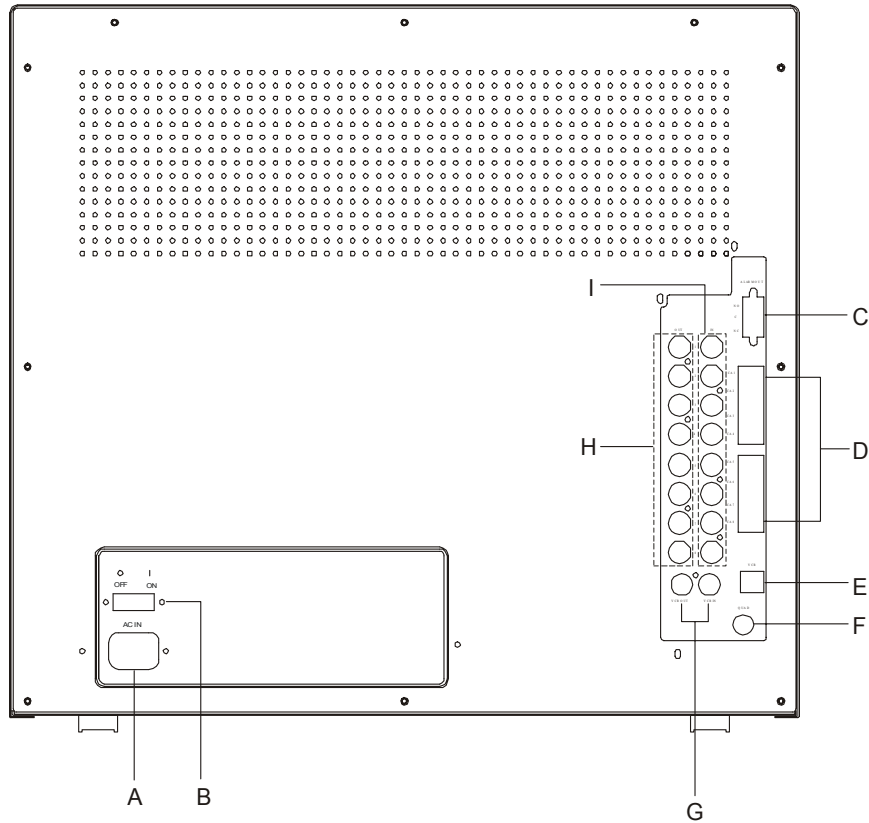


Figure 2. Back

Part	Label	Function
A	AC IN Socket	The AC IN socket connects the monitor to a suitable wall outlet with the supplied power cord.
B	MAIN POWER	The MAIN power switch controls power to the entire unit. Flip the switch to turn the main power supply ON or OFF. This control allows the user to keep main power ON at the monitor (for recording purposes) while turning the front power switch OFF (monitor is blank). This extends the life of the CRT and gives the impression that the unit is OFF when actually the camera connected to the monitor can still be recorded.
C	ALARM OUT	This is a dry relay contact output that changes state whenever an alarm is received on the monitor. The contacts are rated for a maximum of 24V dc at 1 Amp
D, I	CA1-8 CAMERANPUT	Eight cameras can be connected to the monitor using the modular RJ11 connections labeled CA1, CA2, CA3, CA4, CA5, CA6, CA7 and CA8. "I" Mark Position can be connected to the monitor using the BNC connections
H	CA1-8 CAMERA OUT	For camera video signal loop-out of cameras to standard monitor or to multi-channel DVR.

E, G	VCR IN/OUT	The modular VCR connector is used to connect a VCR to the monitor for recording purposes. The output video is identical to what is displayed on the monitor (e.g. If camera 1 is displayed full screen, only camera one is recorded. If the monitor is set to Quad mode, all 4 cameras are recorded in quad mode.) "G" Mark Position can be connected to the monitor using the BNC connections
F	QUAD OUT	The QUAD connector is a BNC jack that outputs a quad picture to a secondary monitor or transmission device.

CHAPTER 3 INSTALLATION

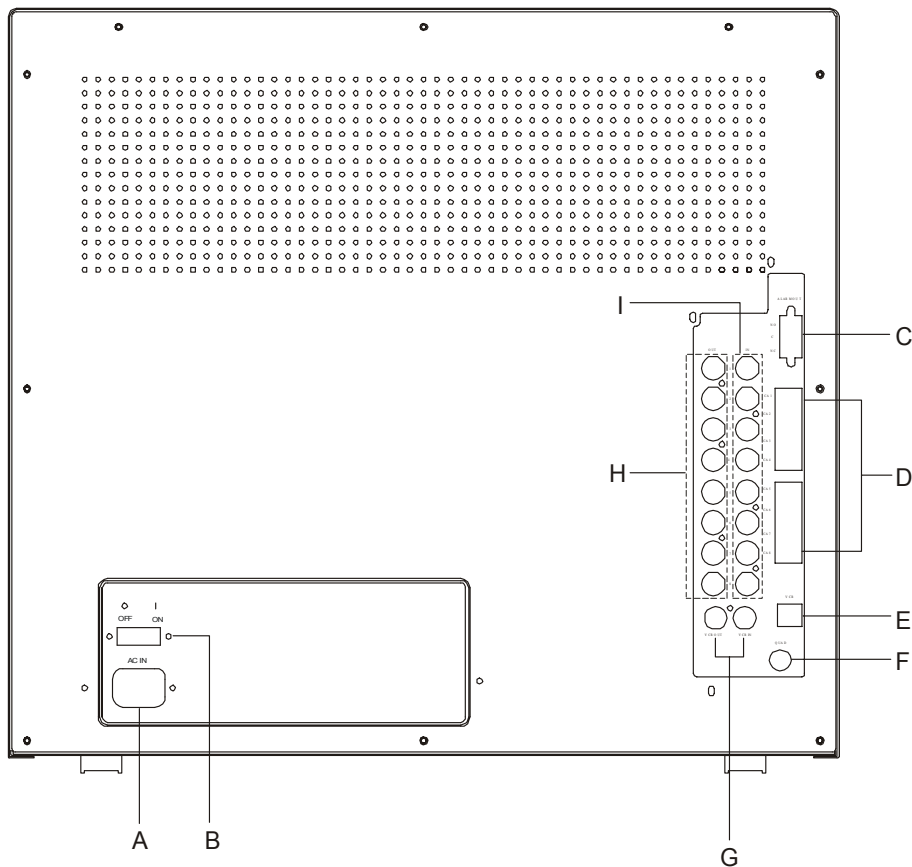
REAR SIDE OF MONITOR

1 GENERAL

The Observation Monitor has easy to use connectors making installations as user-friendly as possible.

2 THE OBSERVATION MONITOR CONNECTIONS

The following connectors are located on the observation monitor.



< OBSERVATION MONITOR CONNECTION LOCATIONS >

- A. AC IN SOCKET – Connect the AC Power cord (supplied) to this socket and to a wall outlet.
- B. MAIN POWER – Set the switch to turn main power on or off.
- C. ALARM OUT– This is a dry relay contact output that changes state whenever an alarm is received on the monitor. The contacts are rated for a maximum of 24 VDC at 1 Amp.
- D. CA 1-8 – These connectors are for observation modular cameras.
- E. VCR – This modular connection is for use with the VCR
- F. QUAD OUT – BNC jack connector for QUAD output
- G. VCR IN / OUTPUT– BNC jack connector for video output, video input to/from VCR or DVR MAIN – BNC jack connector for main output.
- H,I . CAMERA INPUT /OUTPUT BNC CONNECTORS– For camera inputs and video signal loop-out of cameras to standard monitor or to multi-channel DVR.

Caution: Connectors (CA1-CA8, VCR) are not for connection to telephone line.

VCR

CA1~CA8



Pin 1 ----- Ground	Pin 1 ----- Alarm/In
Pin 2 ----- Audio Out	Pin 2 ----- +15VDC Out
Pin 3 ----- Video Out	Pin 3 ----- Intercom Audio Out
Pin 4 ----- Audio In	Pin 4 ----- Video In
Pin 5 ----- Video In	Pin 5 ----- Intercom Audio In
Pin 6 ----- Ground	Pin 6 ----- Ground

< Modular jacks >

MONITOR INSTALLATION WITH CAMERAS

The observation monitor must be installed by qualified service and installation personnel. The installation must be in accordance with all local and federal electrical and building codes.

Perform the following steps to install the observation monitor. **See Figure 1.**

- A. Unpack the observation monitor.
- B. Place the observation monitor in a convenient location.
Do not plug the power cord into a power outlet until step J.

Caution:



The MAIN POWER on the rear of the monitor must be turned off before camera cables are plugged into the camera ports, which are also on the rear of the monitor. Plugging a camera cable into the monitor with the power on could damage the monitor and/or camera.

- C. Select an appropriate location for the cameras.
- D. Install cameras to be connected to the monitor.
- E. Route the assembled cable from the monitor to the camera.

Caution:



Be careful when routing the cable from the camera to the monitor. Try not to put unnecessary strain on the cable or connectors. The cable can be damaged if pulled by the connectors. Do not place the cable next to fluorescent lights; interference may result. Do not use staples to support the cable, as you may damage the cable. If the provided camera cable is not long enough, do not substitute a telephone cable. Using a telephone cable could damage the camera and/or the monitor.

- F. For modular type, plug the cable into the connector port labeled “MONITOR” on the rear of the camera.
- G. For BNC type, plug the cable into the connector port labeled “VIDEO OUT” on the rear of the camera.
- H. Plug the other end of the cable into the corresponding camera connector port on the rear of the monitor. The ports are labeled “CA1” for camera one, “CA2” for camera two, etc.

I. Repeat steps D through G for additional observation cameras.

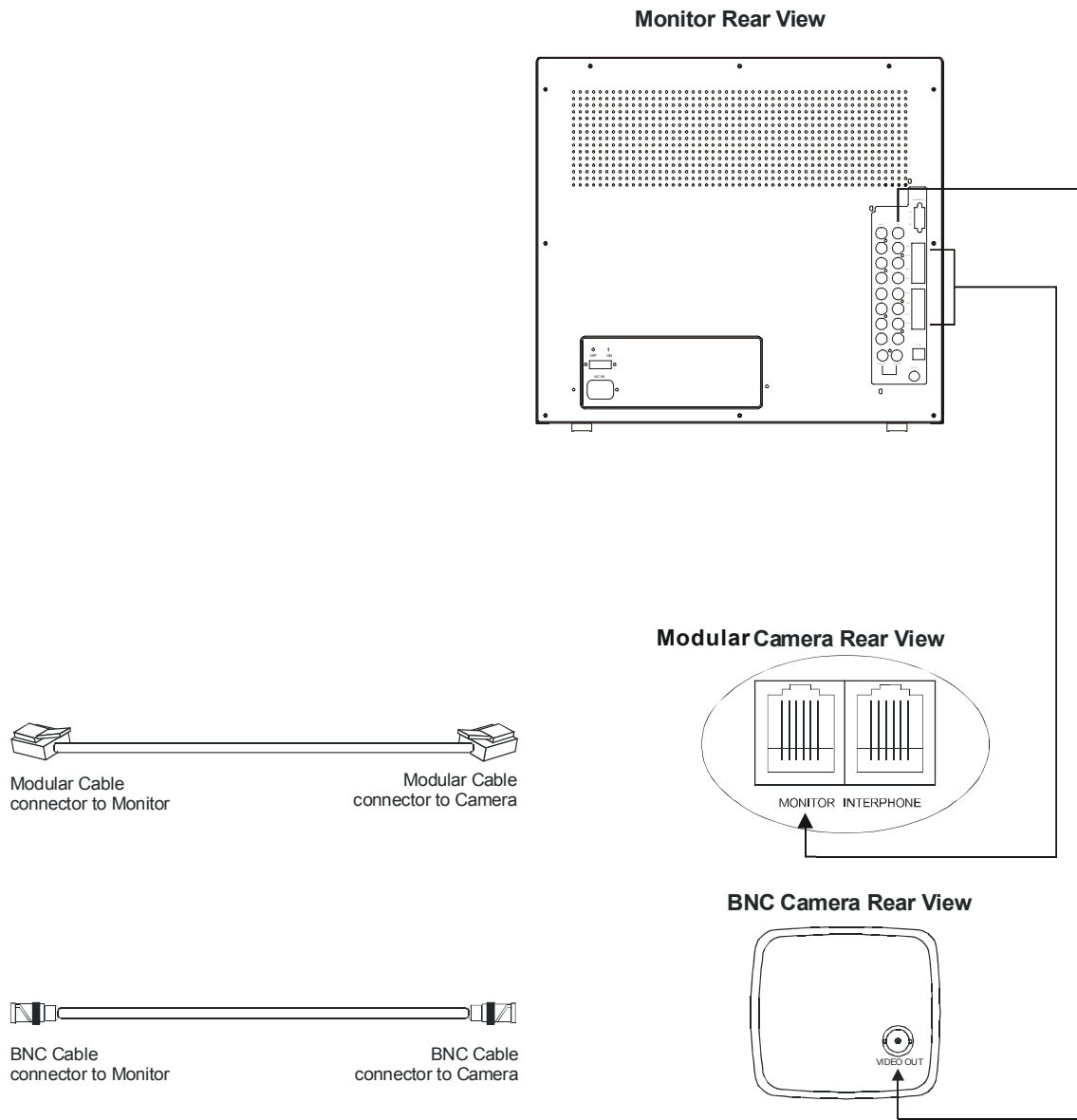
Caution:

Do not plug an observation camera and a standard security camera into the same camera port on the rear of the observation monitor; i.e., an observation camera into the RJ-11-E for CA1 and a BNC cabled standard security camera on the BNC input for CA1.

NOTE:

Connecting a cable to the output BNC connector disconnects the termination for that camera input signal, therefore an unused cable should be removed from the BNC connector.

- J. Plug the power cord for the monitor into a power outlet.
- K. Turn on the MAIN POWER switch on the rear of the monitor and the POWER switch on the front of the monitor.
- L. The monitor should display a picture in the QUAD display mode.



<FIGURE 1> MONITOR WITH CAMERAS

INSTALLATION WITH A VCR OR SECURITY TIME-LAPSE RECORDER

The observation monitor may be installed with a standard VCR, a security event/time-lapse recorder or a digital video recorder.

Perform the following steps after installing the monitor. **See Figures 2-1 and 2-2**

- A. Obtain the following equipment:
 - a. Recorder
 - b. VCR interconnection cable
 - c. Videotape (if using VCR)
- B. Place the recorder in a convenient location.
(usually within reach of the observation monitor)
- C. Turn OFF the MAIN POWER switch on the observation monitor.
- D. Plug the Modular connector of the VCR interconnection cable into the "VCR" port on the rear of the monitor.
- E. For modular type, connect the "Audio In" connector to the "Audio In" port on the VCR or DVR.
- F. For modular type, connect the "Audio Out" connector to the "Audio Out" port on the VCR or DVR.
- G. For modular type, connect the "Video In" connector to the "Video In" port on the VCR or DVR.
Use a RCA to BNC adapter if necessary.
- H. For modular type, connect the "Video Out" connector to the "Video Out" port on the VCR or DVR.
Use a RCA to BNC adapter if necessary.
- I. For BNC type, connect the "VCR Output" port on the monitor to the "Video In" port on the VCR or DVR using the BNC cable and the "VCR Input" port on the monitor to the "Video Output" port on the VCR or DVR using the BNC cable.

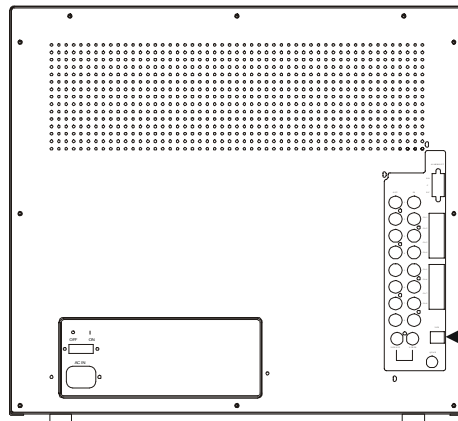
- J. Plug the power cord for the recorder into a power outlet.
- K. Turn on the MAIN POWER switch for the observation monitor, and the POWER switch on the front of the monitor.
- L. Press the VCR button on the front of the monitor.
A QUAD screen picture should be displayed on the monitor.
- M. Program the recorder using the manufacturer's instructions.
- N. Press the VCR button on the front of the monitor to return to a normal operation mode.
- O. Start recording using the manufacturer's instructions.



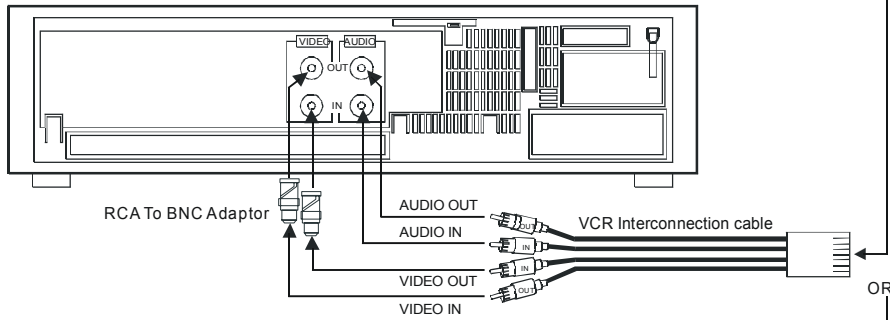
Caution:

User must use only one of the modular and BNC cables for the VCR input.

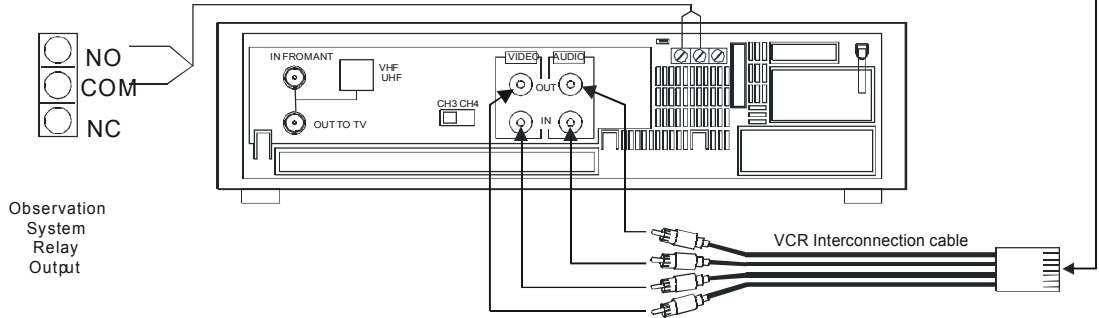
Monitor Rear View



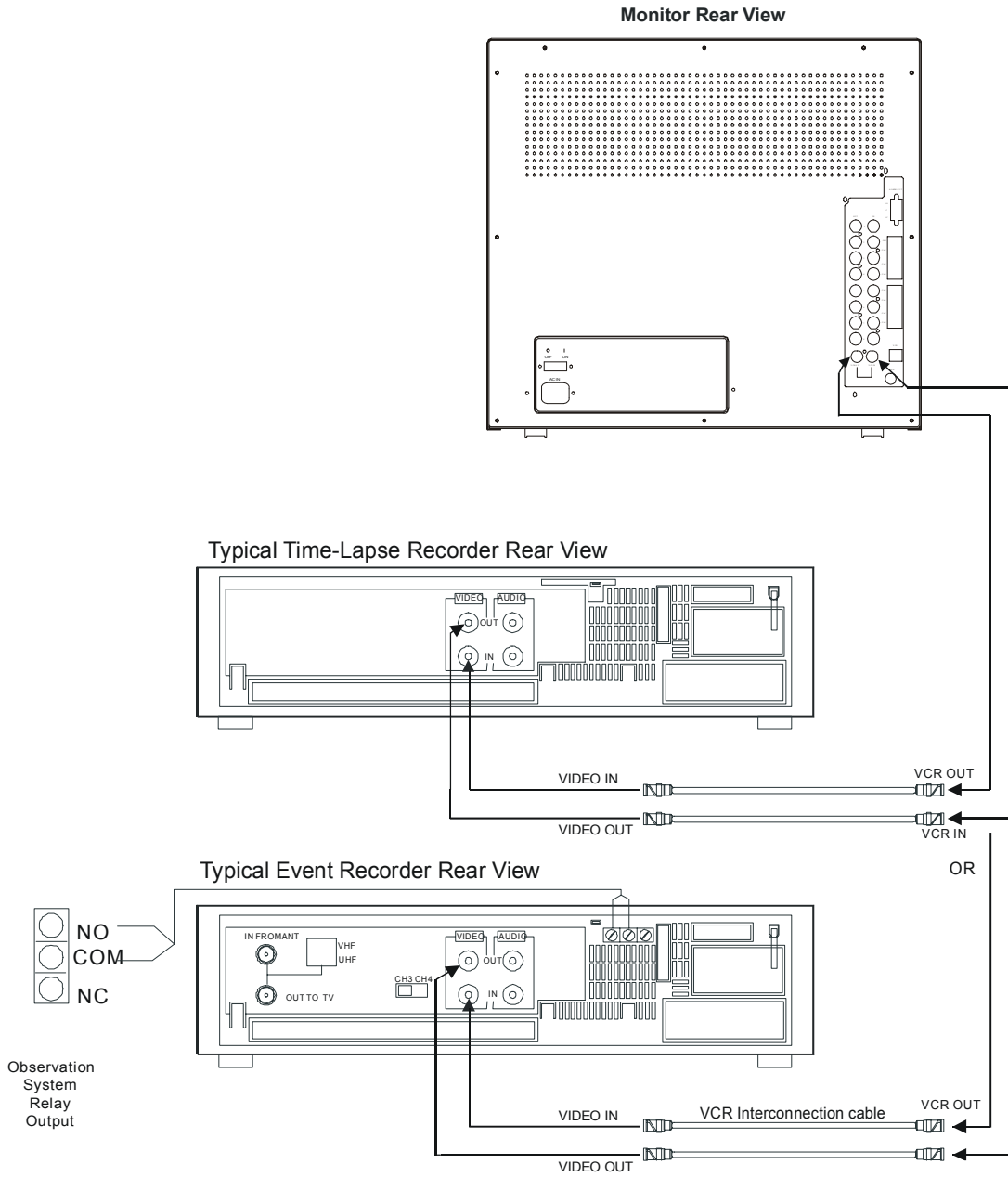
Typical Time-Lapse Recorder Rear View



Typical Event Recorder Rear View



<FIGURE 2-1> OBSERVATION MONITOR WITH A RECORDER (Modular Type)



<FIGURE 2-2> OBSERVATION MONITOR WITH A RECORDER (BNC Type)

Installation with Alarm Devices

The monitor can annunciate alarms and activate a recorder or other external alarm device when an alarm is received at the observation monitor.

Perform the following steps after the installation of the monitor. **See Figure 3**

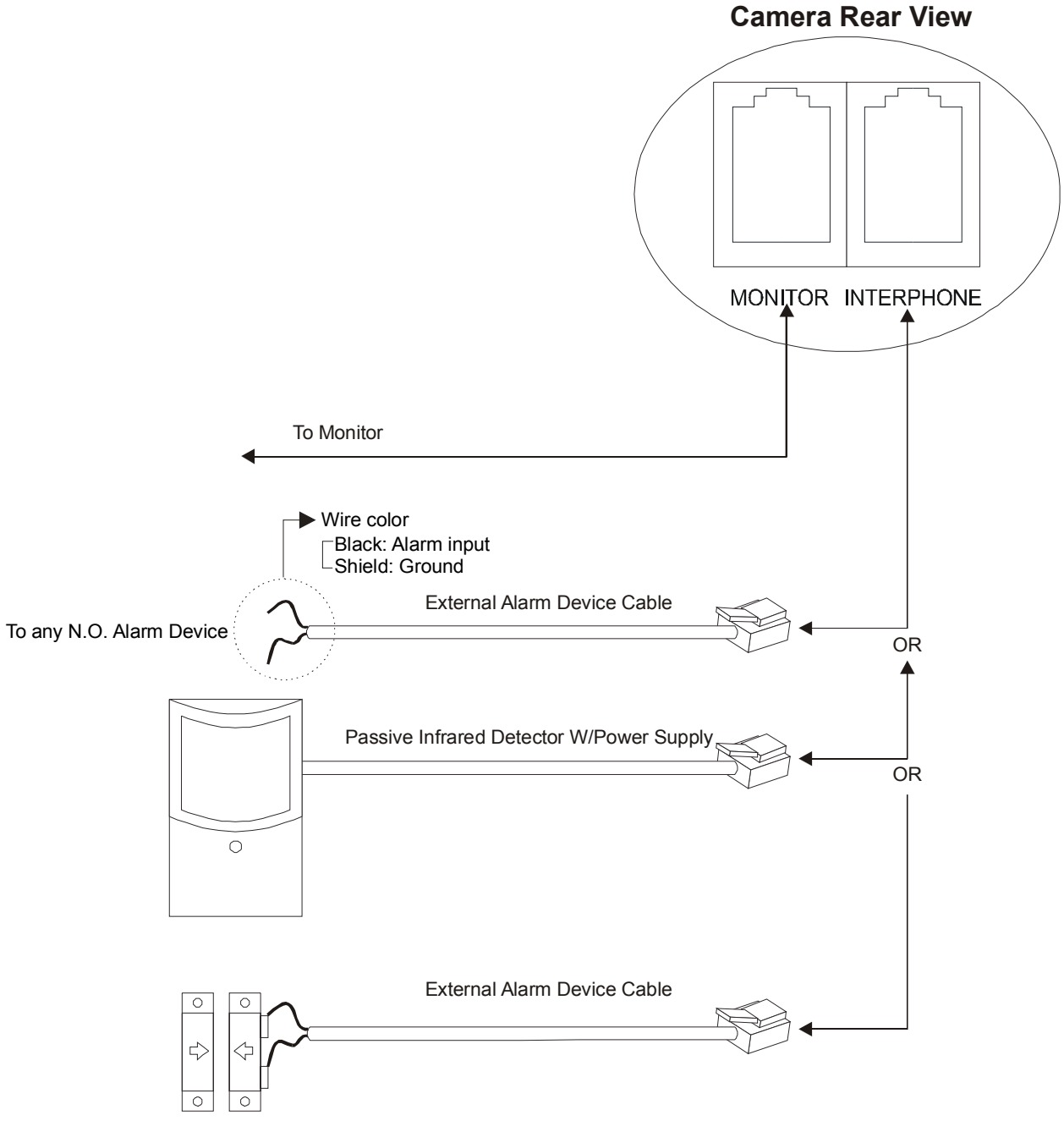
- A. Obtain one of the alarm device units
- B. Locate a suitable location for the alarm device.
- C. Mount the alarm device using the manufacturer's instructions.
- D. Route the alarm device cable from the alarm device to the observation camera.
- E. Connect the ends of the cable to the alarm device following the manufacturer's instructions.
- F. Turn OFF the MAIN POWER switch on the observation monitor.
- G. Plug the RJ-11-E connector of the alarm device cable into the interphone port, on the rear of the camera or plug a dual alarm interface adapter into the interphone port and plug the alarm device cable(s) into the dual alarm interface adapter.

Caution:

Be careful when routing the cable from the camera to the alarm device. Try not to put unnecessary strain on the cable or connectors. The cable can be damaged if pulled by the connectors. Do not place the cable next to fluorescent lights; interference may result. Do not use staples to support the cable, as you may damage the cable. If the provided camera cable is not long enough, do not substitute a telephone cable. Using a telephone cable could damage the camera and/or alarm device. Alarm cable may be added to the alarm device cable if it is not long enough. All connections should be properly connected and insulated to prevent electrical shock and fire hazards.

- H. Turn on the MAIN POWER switch for the observation monitor and the POWER switch on the front of the monitor.

Place the monitor in the desired operating mode.



<figure 2> alarm device installation (modular type)

*** MODULAR PIN SPEC OF CAMERA (CAMERA REAR VIEW)**

Pin No	MONITOR	Pin No	INTERPHONE	REMARK
1	ALARM OUT	1	ALARM IN	Left
2	DC IN (15V)	2	DC OUT(12V)	
3	AUDIO IN	3	AUDIO OUT	
4	VIDEO OUT	4	AUDIO IN	
5	AUDIO OUT	5	NC	
6	GND	6	GND	Right

INSTALLATION WITH A TWO-WAY INTERCOM

The monitor has the ability to have a two-way intercom between the monitor and the camera location.

Perform the following steps after installing the monitor. **See Figure 4.**

- A. Obtain an intercom station.
- B. Select a suitable location for the intercom station. The typical mounting height should be between 30" and 42" above the floor for easy access.
- C. Route the intercom cable from the observation camera to the intercom station.
- D. Plug one end of the cable into the jack on the rear of the intercom station.
- E. Turn OFF the MAIN POWER switch on the observation monitor.
- F. Plug the RJ-11-E connector of the intercom cable into the interphone port, on the rear of the camera.

Caution:

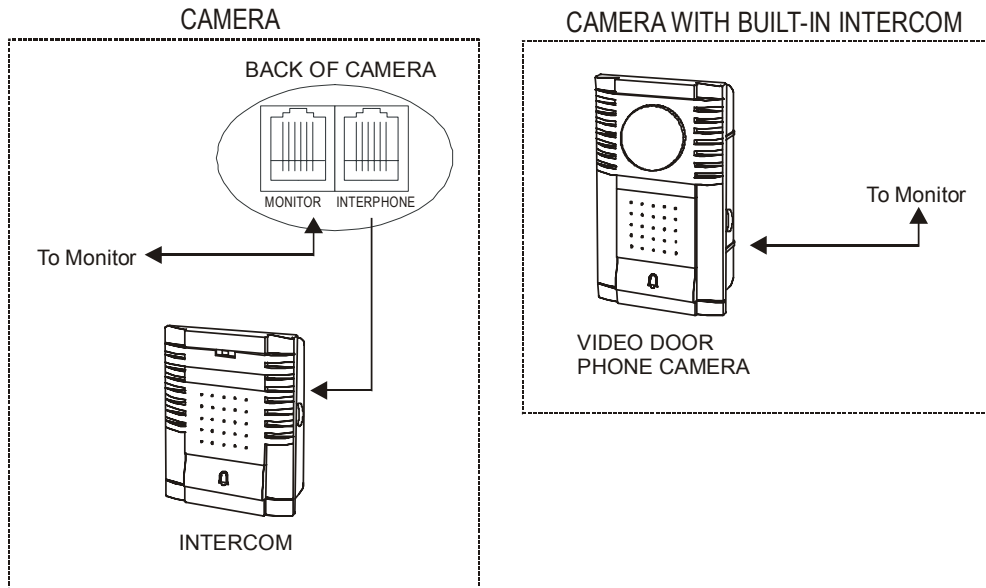
Be careful when routing the cable from the camera to the intercom station.

Try not to put any unnecessary strain on the cable or connectors.

The cable can be damaged if pulled by the connectors.

Do not place the cable next to fluorescent lights; interference may result. Do not use staples to support the cable, as you may damage the cable. If the provided camera cable is not long enough, do not substitute a telephone cable. Using a telephone cable could damage the camera and/or alarm device.

- G. Turn on the MAIN POWER switch for the observation monitor, and the POWER switch on the front of the monitor.
- H. Place the monitor in the desired operating mode.



<FIGURE 4> TWO-WAY INTERCOM INSTALLATION

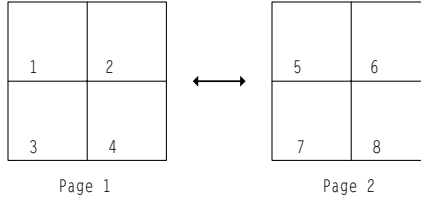
CHAPTER 4. QUAD PROCESSOR FUNCTIONS

DISPLAY FORMATS

QUAD DISPLAY Pressing QUAD button displays a QUAD screen with four camera pictures. Black background displays for not installed or disabled cameras. The LEDs of the installed and enabled cameras and QUAD LED are lit. Use the following table as a guide for the actions possible in the QUAD mode.

Button(s)	Action
QUAD	Press QUAD again to change QUAD page (QUADA & QUADB) The default page setups are as follows: <ul style="list-style-type: none"> ● QUADA = (CA1, CA2, CA3, CA4) QUADB = (CA5, CA6, CA7, CA8)
SEQ	Quadrant sequence mode : Press QUAD then QUAD is Lit, Press SEQ to start the sequence of the lower-right quadrant camera and the LED of the current quadrant camera and SEQ LED turn on. Press SEQ again to stop the sequence and the SEQ LED turns off. In this mode, cameras not already displayed can be sequenced.

SEL +SEQ	<p>Page sequence mode:</p> <p>Press SEL then SEL LED is lit , Press SEQ to sequence a page (QUADA & QUADB). Then SEQ LED is lit. Press SEQ again to stop the sequence and the SEQ LED is lit</p>
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**FULL
SCREEN
DISPLAY**

Press any camera number button to change the display to the Full screen display mode of the camera. In this mode, the current displaying camera LED is lit.

Button(s)	Action
CA 1 - 8	<p>Press camera number button to change the display to the Full screen display mode of the camera.</p> <p>Note: The blue screen is displayed for the camera with no video signal.</p>
SEQ	<p>Press SEQ to start the sequence of the camera and the camera LED and SEQ LED turns on. Press SEQ again to stop the sequence and the SEQ LED turns off.</p>

**SEQ
DISPLAY**

Pressing SEQ sequences the cameras in order set in the Menu Setup. The displayed camera LED and SEQ LED are lit and “s” character is displayed on the screen. If the dwell time in the Menu Setup is set to more than one second for any uninstalled camera or any disabled camera, the camera sequences with a black background in QUAD mode or with a blue background in Full-screen mode. If the dwell time is set to OFF for any camera, the camera will be skipped in the sequence even if installed to the system and enabled. The dwell time for each camera can be set individually and sequence order can be set in the Menu Setup. Pressing SEQ again stops the sequential switching mode.

FREEZE DISPLAY Pressing FREEZE freezes the screen of the QUAD mode. When the unit is freeze mode, FREEZE LED is lit and the frozen camera LED's flash. And the blinking "FREEZE" character is displayed and the image is frozen on the screen until the FREEZE button is pressed again or the corresponding camera button is pressed.

Note: In the Full screen mode, FREEZE function is disable.

MODE	Button(s)	Action
QUAD FROZEN	FREEZE	Press FREEZE to exit the FREEZE mode. V-LOSS event Channel to Frozen

VCR OPERATION

The VCR mode allows you to view the video playing back the VCR.

VCR PLAYBACK After you pressed the PLAY button of the VCR, Pressing the VCR button displays the VCR playback. In this mode, the VCR LED and QUAD LED are lit.
The VCR Input is Modular To RCA Cable

VCR OUTPUT The VCR signal goes to VCR RCA Output
The VCR output is same as the Viewing Monitor

ALARM MODE

OVERVIEW The monitor has several alarm functions, including a single alarm, multiple alarm and Video loss alarm. Each of these alarms will be explained in this section.

SINGLE ALARM AND MULTIPLE ALARMS When alarms occur, the following actions are carried out.

- The LED indicators of the alarmed cameras blink twice per second.
- The alarm buzzer sounds if enabled.
- The alarm relays are energized if enabled.
- The blinking character "ALARM" is displayed.
- All above actions are continued until the alarm is reset.
- Pressing any button stops the buzzer sound only before the alarm has released, and by pressing the followed second button the unit goes to the corresponding button display mode.
- When multiple alarms occur, if the option is set FULL in Alarm Display Setup Menu, the outputs are switched between the alarmed cameras in numerical order automatically every two seconds.

The ALARM HOLD TIME can be set in the alarm time setup menu.

It is started to count after the alarm has released.

The dwell time of the buzzer and the relay starts when an alarm is occurred and stops when the Alarm Hold Time is expired.

Note: When an alarm occurs, the FREEZE mode is canceled.

VCR MODE ALARM When an alarm occurs in the VCR playback mode, it exits the VCR playback mode and performs the alarm operation. When the Alarm Hold Time has elapsed, it goes to the previous VCR mode.

When an alarm occurs in VCR mode, the following actions occur:

1. The LED indicator of the alarmed camera blinks.
2. The alarm buzzer sounds, if enabled.
3. The alarm relay is energized, if enabled

VIDEO LOSS This Monitor can detect the loss of video signal for all connected camera inputs.

ALARM If the Video Loss Alarm has been set to OFF in the ALARM SETUP menu, then the loss of video signal is ignored. If the option is set to ON, the following actions occur:

- The Display mode is changed to the QUAD mode.
- The LEDs of the cameras with loss of video signal blink.
- The relays are energized if option is enabled.
- The alarm buzzer sounds if enabled.
- The “V-LOSS” messages blink to Loss Picture.
- The last picture of the camera with video loss is frozen in the QUAD mode.

The dwell time of video loss alarm is the same as the V-LOSS HOLD time in the alarm time setup menu.

The V-LOSS HOLD time starts to count as soon as the unit detects no video signal.

The buzzer and the relay of Video loss start when the unit detects Video loss, and stop when the V-LOSS HOLD Time is expires. The video loss output goes out the logic level low during a video loss alarm. Pressing any button on video loss alarm stops the buzzer sound, turns off the relay and the LED of the camera with video loss.

Then the unit goes to the corresponding button display mode by any followed button.

But the blinking “V-LOSS” message stops blinking and appears until the unit detects the new valid video signal on the camera with video loss.

Note: The video loss alarm is ignored in the camera with “DISABLE” option.

Note: When a video loss alarm of the camera not displayed on current screen occurs, the unit goes to QUAD display mode.

VCR MODE When a video loss alarm occurs in the VCR mode, the unit keeps the VCR playback mode.

VIDEO LOSS When an alarm occurs in VCR mode, the following actions occur:

- ALARM**
- 1.The LED indicator of the alarmed camera blinks.
 - 2.The alarm buzzer sounds, if enabled.
 - 3.The alarm relay is energized, if enabled.

ALARM RESET When one of the following occurs, the alarm action finishes.

When the Alarm Hold Time has elapsed, that camera's alarm actions are terminated and the unit goes to previous mode.

When the V-LOSS HOLD time has elapsed, that camera's video loss alarm action is terminated.

Press any button to cancel an alarm action manually and the unit goes to the corresponding button display mode by pressing another button.

CONNECTORS Alarm Input:

The unit has eight alarm inputs, one alarm input is assigned to each camera input. These inputs can be connected to any security device equipped with either a contact closure or TTL/CMOS standard alarm output. Alarm polarity can be selected for each input via the Alarm Input Setup menu.

Alarm input connections requires two wires. One wire connects to the desired alarm input pin. The second wire connects to ground pin. If the alarm input for a camera has been turned OFF in the Alarm Input Setup menu, then the input is ignored.

Alarm output:

The unit has two alarm outputs that a Form "C" dry contact output. Normally open (N.O) and Normally closed (N.C) contacts with shared common.

CHAPTER 5. SETUP MODE

OVERVIEW

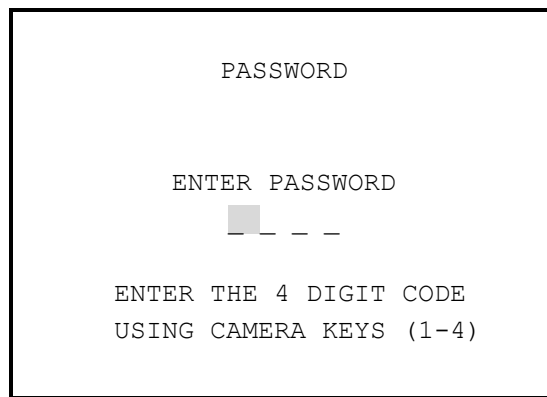
Pressing the MENU button places the unit into a programming mode.

Setup mode allows you to customize the unit operation to suit a specific application. In the setup mode, the arrow buttons are used as DOWN, UP, LEFT and RIGHT buttons. When the unit comes out from Setup menu, it comes to the previous display mode. In the menu mode, if any button is not pressed for two minutes, it will exit to operate in the previous mode.

Note: In this mode, alarms and video-loss alarm detection is disable.

PROGRAMMING SCREENS

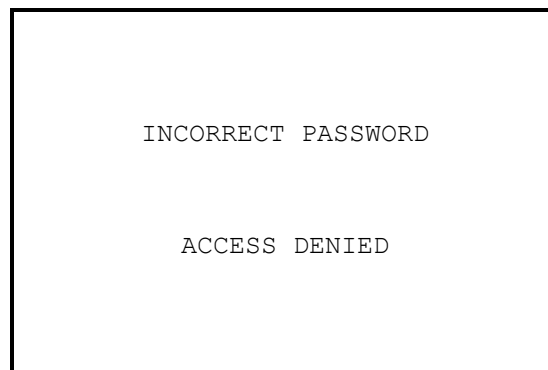
PASSWORD PROTECTION



If the PASSWORD option is turned ON, pressing MENU displays the password confirmation screen. If the PASSWORD option is turned OFF, the password confirmation screen is bypassed and the MAIN MENU screen display. The four-digit password must be entered using the buttons for camera 1 through 4.

If the incorrect password is entered, the screen displays an access denied message two seconds and returns to the previous mode.

INCORRECT PASSWORD MESSAGE SCREEN



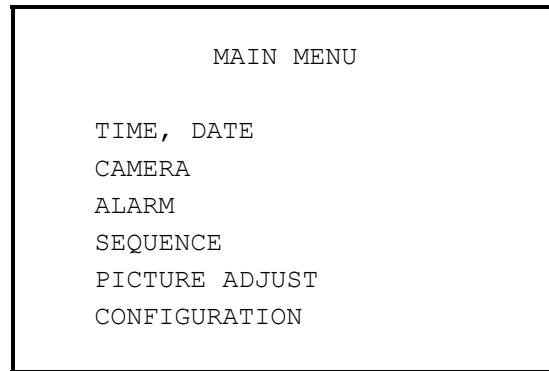
If your password is "1 2 3 4", press the keys as CA1, CA2, CA3, CA4.

- Factory Default 1 1 1 1.

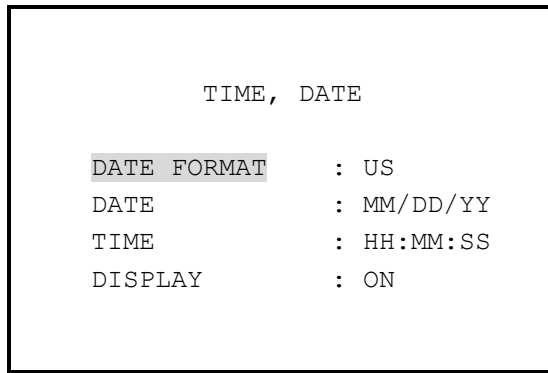
MAIN MENU SETUP

OVERVIEW The main menu provides access to all programming facilities. The table below describes the functions of the programming and camera select controls.

Control	Description
MENU	From the main menu screen, exits the menu mode and return to the previous mode. Pressing this button while in a sub-menu returns to the upper menu screen.
SEL	Selects the setup option or enters the sub menu
▲	Moves the cursor up or scrolls through the available options
▼	Moves the cursor down or scrolls through the available options
▶	Moves the cursor right
◀	Moves the cursor left
CA1 - 4	Enters a number from 1 to 4.



TIME AND DATE SETUP



**DATE
FORMAT**

The second option on the time and date setup screen is date format. This is used to select between the following three date formats:

FORMAT	DISPLAY	EXAMPLE
US (default)	MM/DD/YY	11/09/02
EURO	DD/MM/YY	09/11/02
ASIA	YY/MM/DD	02/11/09

Use the following steps to set the date format option.

DATE

This field is used to set the current date. The format displayed on the screen is dependent on the data format option set in the preceding steps. Use the following steps to set the current date.

Step	Action
1	Press ▲ or ▼ until DATE FORMAT is selected.
2	Press ► to select the option.
3	Select the desired option using the ▲ or ▼ buttons.
4	Press ◀ button. The selected option is saved and the cursor is moved to DATE FORMAT.

TIME

This field is used to set the time in a 24-hour format.
Use the same steps above for setting the time.

Step	Action
1	Press ▲ or ▼ until TIME FORMAT is selected.
2	Press ► to select the option.(HH:MM:SS)
3	Select the desired option using the ▲ or ▼ buttons.

4	Press ◀ button. The selected option is saved and the cursor is moved to TIME FORMAT.
---	---

**DISPLAY
OPTION**

The display option on the time and date setup screen allows you to select whether to display the time and date on the screen. The default option is ON. Change the display option using the steps in the following steps.

Step	Action
1	Press ▲ or ▼ until DISPLAY is selected, then press ▶ to select.
2	Select the desired option (ON or OFF) using the ▲ or ▼ buttons.
3	Press the ◀ button. The selected option is saved and the cursor is moved to the DISPLAY option.

CAMERA TITLES SETUP

OVERVIEW

The camera titles setup screen allows you to select whether or not to display titles for each camera when that camera is displayed, change the text displayed for each camera and move the position of the titles.

CAMERA TITLES	
CAMERA1	:CA1
CAMERA2	:CA2
CAMERA3	:CA3
CAMERA4	:CA4
CAMERA5	:CA5
CAMERA6	:CA6
CAMERA7	:CA7
CAMERA8	:CA8
DISPLAY	:ON

**CAMERA
TITLES**

Numbers 1-8 on the camera titles setup screen are used to set each camera title. An 8-character title can be designated for each camera, and this title appears on the screen when the display option is ON and the camera is selected. The default camera title is “CA” with the corresponding number. Following are the available characters for camera titles regardless of the language setting:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
 - . / 0 1 2 3 4 5 6 7 8 9 : = , () . BLANK

The steps below provide an example for setting camera titles. In this example, set CA1 to “1:LOBBY.”

Step	Action
1	Press ▲ or ▼ until Camera 1 is selected.
2	Press ► to select the title.
3	Press ▲ or ▼ until the “L” character is displayed. Pressing ▲ scrolls one character at a time in ascending order. Pressing ▼ scrolls one character at a time in descending order. Holding down the ▲ or ▼ button for two seconds will scroll the characters automatically. Stop pressing ▲ or ▼ to stop scrolling.
4	Press ► to move the cursor to the right one position in the title. Press ▲ or ▼ until the “O” character is displayed.
5	Press ► to move the cursor to the right one position in the title. Press ▲ or ▼ until the “B” character is displayed.
6	Press ► to move the cursor to the right one position in the title. Press ▲ or ▼ until the “B” character is displayed.
7	Press ► to move the cursor to the right one position in the title. Press ▲ or ▼ until the “Y” character is displayed.
8	Press the ◀ button to save the title.

**DISPLAY
OPTION**

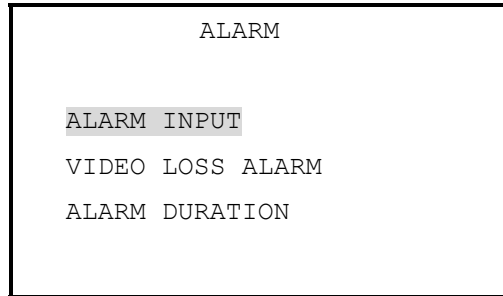
The display option on the camera titles setup screen allows you to select whether or not to display camera titles on the screen. The default option is ON. Change the display option using the steps in the following steps.

Step	Action
1	Press ▲ or ▼ until DISPLAY is selected, then press ► to select the option.
2	Select the desired option (ON or OFF) using the ▲ or ▼ buttons.
3	Press the ◀ button. The selected option is saved and the cursor moves back to DISPLAY.

ALARM SETUP

OVERVIEW

The alarm setup screen allows you to select the alarm input, the video loss alarm on/off, the display on alarm and alarm time.

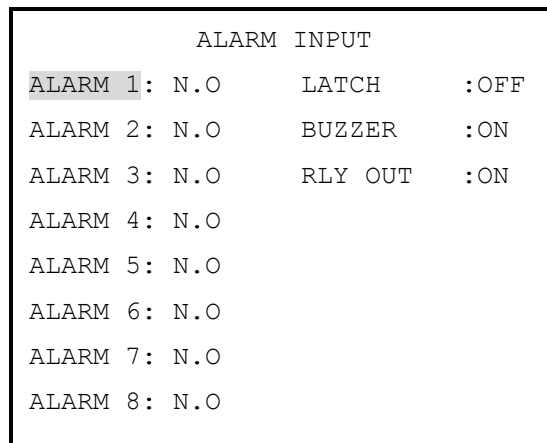


ALARM INPUT SETUP

Alarm inputs define the way connectors respond to external input, in terms of whether they are normally open (NO), normally closed (NC), or if they ignore the input.

The default is normally open (NO). The alarm input setup screen allows you to set these options.

Note: Any alarm that occurs while in the setup mode is ignored.



INPUT OPTIONS

The alarm numbers displayed on the screen allow you to change the alarm input options. Use the following steps to change the option for each camera.

Step	Action
1	Press ▲ or ▼ to move the cursor to the desired number.
2	Press ► to select the option.
3	Select the new option using the ▲ or ▼ buttons. Valid settings are: •OFF: The alarm input is ignored. •NO: The unit looks for a short for alarm condition. •NC: The unit looks for an open for alarm condition.
4	Press ◀ to save the change.

LATCH

This option is used to determine how long the alarm message will display in the main monitor.

Step	Action
1	Press ▲ or ▼ to move the cursor to the Alarm LATCH option.
2	Press ► to select the option.
3	Press ▲ or ▼ to change the value. Select from the following: <ul style="list-style-type: none">• ON : All alarm messages remain on screen and the LED indicators of alarmed cameras will blink until manually cleared by entering the setup menu.• OFF : Each alarm message remains on screen until the alarm hold time expires or manually cleared by pressing any button. This is the default setting.
4	Press ◀ to save the new option and return the cursor to LATCH.

BUZZER

The alarm buzzer option allows you to select whether the alarm buzzer is turned on or off. Use the following steps to change this option.

Step	Action
1	Press ▲ or ▼ to move the cursor to the Alarm BUZZER option.
2	Press ► to select the option.
3	Press ▲ or ▼ to change the value. Select from the following: <ul style="list-style-type: none">• ON: Sounds the alarm buzzer until the ALARM time expires or manually cleared by pressing any button This is the default setting.• OFF: Does not sound the alarm buzzer
4	Press ◀ to save the new option and return the cursor to BUZZER.

RLY OUT (RELAY)

The alarm relay option allows you to select whether the alarm relay is turned on or off. Use the following steps to change this option.

Step	Action
1	Press ▲ or ▼ to move the cursor to the RELAY OUT option.
2	Press ► to select the option.
3	Press ▲ or ▼ to change the value. Select from the following: <ul style="list-style-type: none">• ON: RELAY OUT ACTION until the ALARM time expires or manually cleared by pressing any button This is the default setting.• OFF: Does not RELAY ACTION
4	Press ◀ to save the new option and return the cursor to RLY OUT

VIDEO LOSS ALARM

The video loss alarm allows you to turn the video loss alarm on or off for each camera when video input is lost. Use the following steps to change this option.

Step	Action
1	Press ▲ or ▼ to move the cursor to the desired number.
2	Press ► to select the option.
3	Select the new option using the ▲ or ▼ buttons. Valid settings are: <ul style="list-style-type: none"> • OFF: The V-LOSS is ignored. • ON: While the camera V-LOSS for alarm active
4	Press ◀ to save the change.

VIDEO LOSS ALARM		
CA1: ON	LATCH	:OFF
CA2: ON	BUZZER	:ON
CA3: ON	RLY OUT	:ON
CA4: ON		
CA5: ON		
CA6: ON		
CA7: ON		
CA8: ON		

LATCH

This option is used to determine how long the video loss alarm message will display in the monitor.

Step	Action
1	Press ▲ or ▼ to move the cursor to the V-LOSS LATCH option.
2	Press ► to select the option.
3	Press ▲ or ▼ to change the value. Select from the following: <ul style="list-style-type: none"> • ON: All V-LOSS messages remain on screen and the LED indicators of alarmed cameras will blink until manually cleared by entering the setup menu. • OFF: Each V-LOSS message remains on screen until the alarm hold time expires or manually cleared by pressing any button. This is the default setting.
4	Press ◀ to save the new option and return the cursor to LATCH.

BUZZER

The video loss buzzer allows you to enable or disable the buzzer when the video loss alarm is set to ON. The buzzer sounds until the V-LOSS time expires, if enabled. Use the following steps to change this option.

Step	Action
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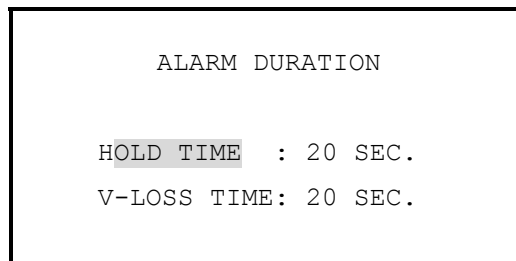
1	Press ▲ or ▼ to move the cursor to the V-LOSS BUZZER option.
2	Press ► to select the option.
3	Press ▲ or ▼ to change the value. Select from the following: <ul style="list-style-type: none"> • ON: Sounds the V-LOSS buzzer until the ALARM time expires or manually cleared by pressing any button This is the default setting. • OFF: Does not sound the V-LOSS buzzer
4	Press ◀ to save the new option and return the cursor to BUZZER.

RLY OUT
(Relay OUT)

The Video Loss relay option allows you to select whether the relay is turned on or off. Use the following steps to change this option.

Step	Action
1	Press ▲ or ▼ to move the cursor to the RELAY OUT option.
2	Press ► to select the option.
3	Press ▲ or ▼ to change the value. Select from the following: <ul style="list-style-type: none"> • ON: RELAY OUT ACTION until the V-LOSS time expires or manually cleared by pressing any button This is the default setting. • OFF: Does not RELAY ACTION
4	Press ◀ to save the new option and return the cursor to RLY OUT

ALARM DURATION



HOLD TIME
OPTION

This option is used to set the amount of time that the alarm relay and alarm display continues after the alarm has released. Change this option using the following steps.

V-LOSS TIME
OPTION

This option is used to set the amount of time that the video loss alarm relay, buzzer and display continues after the unit detects the new video signal of the camera with video loss. Change this option using the following steps.

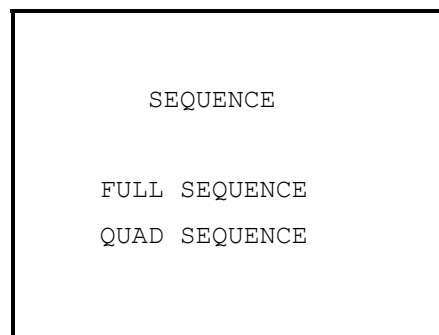
Step	Action
------	--------

1	Press ▲ or ▼ to move the cursor to the ALARM DURATION option in Alarm setup menu, then press ►.
2	Press ▲ or ▼ to move the cursor to the HOLD TIME option, then press ►.
3	Press ▲ or ▼ to change the number of seconds. Valid settings are from 0 to 99 seconds. The default setting is 20 seconds.
4	Press ◀ to save the new option and return the cursor to HOLD TIME.
5	Press ▲ or ▼ to move the cursor to the V-LOSS TIME option, then press ►.
6	Press ▲ or ▼ to change the number of seconds. Valid settings are from 0 to 99 seconds. The default setting is 20 seconds.
7	Press ◀ to save the new option and return the cursor to the V-LOSS TIME option.

SEQUENCE SETUP

OVERVIEW

The sequence setup menu allows you to select whether or not to display cameras in the sequential switching modes, and if so, specify the number of seconds each camera displays. The order and dwell time in the full sequence option and QUAD sequence option.



Sequence has a couple way mode, the first full Screen(CA1- CA8 & QUAD) sequence
The seconds QUAD sequence (QUADA-QUADB and Quadrant)

Full SEQUENCE			
ORDER	TIME	ORDER	TIME
1:CA1	03S	6:CA5	03S
2:CA2	03S	7:CA6	03S
3:CA3	03S	8:CA7	03S
4:CA4	03S	9:CA8	03S
5:QUADA	OFF	10:QUAD8	OFF

**ORDER
OPTION**

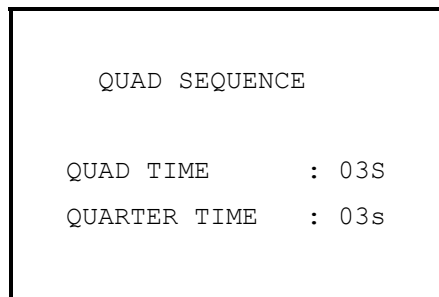
The ORDER option allows the user to select the switching order in the sequential switching mode. A camera can be set to sequence more than once in the sequence order (e.g.: CA1, CA2, CA3, CA4, QUADA....). To change this option, use the following steps:

Step	Action
1	Press ► to select the SEQUENCE setup menu in the main menu.
2	Press ▲ or ▼ to move the cursor to the desired number.
3	Press ► to select the current option.
4	Select the new option using the ▲ and ▼ buttons.
5	Press ◀ to save the change.
6	Repeat steps 1 through 5 for all other desired numbers.

**DWELL TIME
OPTION**

The dwell time option is used for the sequential switching mode for each camera. Valid dwell times are from 00 to 99 seconds. If 00 second is selected, the word OFF is displayed on the screen. Three seconds is the default dwell time. Use the following steps to set the dwell time for each camera.

Step	Action
1	Press ▲ or ▼ to move the cursor to the desired number.
2	Press > two times to move the cursor to the DWELL time.
3	Press ▲ or ▼ to set the DWELL time.
4	Press ◀ to save the new DWELL time.



QUAD SEQUENCE OPTION

The QUAD SEQUENCE option is used for the page sequence mode in the QUAD display mode. Valid dwell times are from 00 to 99 seconds. If 00 second is selected, the word OFF is displayed on the screen. The 00 second means the QUAD display will not sequence. Three seconds is the default dwell time but the QUAD is OFF. Use the following steps to set the dwell time for the QUAD Time option.

The QUARTER Time option is used for the QUAD SCREEN in the QUARTER SCREEN(Low-right 1/4 screen) Valid dwell times are from 00 to 99 seconds.

Step	Action
1	Press ▲ or ▼ to move the cursor to the desired number.
2	Press > two times to move the cursor to the DWELL time.
3	Press ▲ or ▼ to set the DWELL time.
4	Press ◀ to save the new DWELL time. Then MENU button

PICTURE ADJUST

OVER VIEW The Picture Adjust menu allows you to modify the picture quality of the selected camera.

FULL PICTURE ADJUST	
VOLUME	: 00
CONTRAST	: 32
BRIGHTNESS	: 10
SHARPNESS	: 20
COLOR	: 24
TINT	: 00
H POSITION	: 62
V POSITION	: -02
NEXT PAGE	

ORDER OPTION

The picture adjust screen is used to modify the picture quality of each channel It is accessible in both the full screen mode and the quad screen mode

Step	Action
1	Press ▲ or ▼ to move the cursor to the desired item then press ► to select.

2	Press ▲ or ▼ to change the value then press ◀ to save the option.
3	Repeat steps 1 through 2 for all other desired items.
4	Press the MENU button to go to the PICTURE ADJUST menu.

QUAD1	
CONTRAST	: 07
BRIGHTNESS	: 07
COLOR	: 08
TINT	: 00

OSD when Adjust quadrant 1

CONTRAST	: 07
BRIGHTNESS	: 07
COLOR	: 08
TINT	: 00
QUAD7	

OSD when Adjust Camera 7

QUAD PICTURE ADJUST This menu allows you to adjust the level for brightness, contrast, color and tint of the select QUARTER picture. These levels are controlled by 16 steps from MIN to MAX.

Step	Action
1	Press ▲ or ▼ to move the cursor to the desired item then press ▶ to select.
2	Press ▲ or ▼ to change the value then press ◀ to save the option.
3	Repeat steps 1 through 2 for all other desired items.
4	Press the MENU button to go to the QUAD PICTURE ADJUST menu.

CONFIGURATION

OVERVIEW The configuration setup screen allows you to make changes to the security options. On this screen, you can setup password confirmation, security codes, factory defaults, protection against unauthorized operation, VCR input, remote control.

CONFIGURATION	
PASSWORD	: OFF
ENTER NEW CODE	: _ _ _ _
RE-ENTER NEW CODE	: _ _ _ _
FACTORY DEFAULT	: NO
KEY LOCK	: OFF
ALARM COUNT	
AUDIO MARK	: ON
VIDEO SETUP	
VIS TRIGGER PULSE	: ON

PASSWORD The password option is used to protect programming setup from unauthorized access. If this option is ON, pressing MENU to enter the main menu setup mode will display the password confirmation screen.

Step	Action
1	On the CONFIGURATION screen, press ▲ or ▼ until PASSWORD is selected, then press ►.
2	Select the desired option (ON or OFF) using the ▲ or ▼ buttons. Press ◀ to save the setting.

CHANGING THE PASSWORD The Enter New Code and Re-enter New Code fields are used to change the password for the unit. Use the following steps to change the password.

Step	Action
1	On the CONFIGURATION screen, press ▲ or ▼ until ENTER NEW CODE is selected.
2	Press ► to select the first digit of the password.
3	Enter four digits for the new password using the quadrant number buttons CA1 through CA4.
4	The first digit (-) of the Re-enter new password field is automatically selected.
5	Re-enter the same four digits as above.

6	If the changing password code was successful, the screen displays a “CHANGE PASSWORD SUCCESS” message for two seconds. If not, a “CHANGE PASSWORD FAIL” message screen is displayed at two seconds and the cursor place the ENTER NEW CODE menu-item automatically. In this case, repeat the same steps.
---	--

CHANGE PASSWORD

SUCCESS

CHANGE PASSWORD

FAIL

**FACTORY
DEFAULTS**

This option allows you to return to the unit to all factory-defined defaults.

The default setting is NO. Use the following steps to reset the unit to factory defaults.

Warning: This action erases all user settings and cannot be undone.

Step	Action
1	Press ▲ or ▼ until FACTORY DEFAULTS is selected, then press ►. A warning message is displayed in the message portion of the screen.

ARNING

THIS WILL CHANGE
ALL USER SETTINGS TO
THE FACTORY DEFAULT.

FACTORY DEFAULT
IS DONE.

2	<p>Select the desired option (YES or NO) using the ► or ◀ buttons, then press the MENU button.</p> <p>If the option is “YES”, the message “FACTORY DEFAULT IS DONE” is displayed on the screen and the unit returns to the factory default settings. If the option is NO, the screen returns to the CONFIGURATION menu.</p>
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KEY LOCK

This option is used to protect the control buttons against unauthorized operation. Use the following steps to set the key lock option.

Step	Action
1	Press ▲ or ▼ until KEY LOCK is selected, then press ►.
2	Press ▲ or ▼ to select the new option. Valid settings are : <ul style="list-style-type: none"> • ON: The front panel is inoperable. Pressing MENU will place the unit into the main menu setup mode. • OFF: The front panel is operable and KEY LOCK is off. This setting is the default.
3	Press ◀ to save the setting and move the cursor to the KEY LOCK option.

ALARM			COUNT		
COUNT SINCE					
HH:MM:SS			MM/DD/YY		
CAM	ALM	V-L	CAM	ALM	V-L
CA1	00	00	CA5	00	00
CA2	00	00	CA6	00	00
CA3	00	00	CA7	00	00
CA4	00	00	CA8	00	00
PRESS QUAD KEY TO CLEAR					

ALARM COUNT

The alarm COUNT option is used to display the COUNT for up to 255 alarm events.

The COUNT data including alarm source, camera number, time and date is display event :

“ALM” means the alarm was triggered by the external alarm sensor.

“V-L” means the alarm was triggered by the loss of the video signal from the camera input.

Use the following steps to display the alarm COUNT for each alarm and restart the alarm COUNT for all cameras.

Step	Action
1	Press ▲ or ▼ on the Configuration screen until ALARM COUNT is selected.
2	Press ► to display the current alarm counts for all cameras as of the last reset date.
3	Press the MENU button to exit this menu and return to the CONFIGURATION menu. Or press the FULL button to clear all count values. The time and date of the alarm count reset to the current time and date and all count values change to 00.

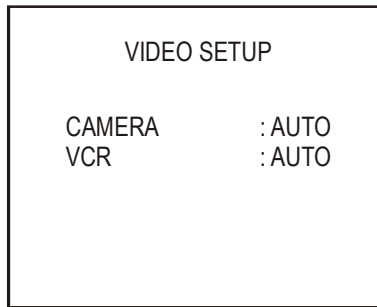
AUDIO MARK

The AUDIO MARK option allows you to select whether or not to display the audio channel selection indicator (O).

Step	Action
1	Press ▲ or ▼ on the Configuration screen until AUDIO MARK is selected.
2	Press ► to select the option
3	Press ▲ or ▼ to select the new option. Valid settings are : <ul style="list-style-type: none"> • ON: The audio channel selection indicator is enabled. This is the default setting. • OFF: The audio channel selection indicator is disabled.
4	Press ◀ to save the change.
5	Press the MENU button to exit this menu and return to the CONFIGURATION menu.

VIDEO SETUP

The VIDEO SETUP option allows the user to adjust the color picture to offset a poor color video signal. Use the following steps to change this configuration setting.



Step	Action
1	Press ▲ or ▼ on the Configuration screen until VIDEO SETUP is selected.
2	Press ► to move the VIDEO SETUP mode.
3	Press ▲ or ▼ to select CAMERA or VCR setup then press ► to select the option.
4	Press ▲ or ▼ to change the value. <ul style="list-style-type: none"> • AUTO: This option allows the unit to detect the black and white video signal or the color video signal automatically. This is default setting. • COLOR: Select this option when the screen has no color in the color video signal.
5	Press ◀ to save the change.
6	Press the MENU button to exit this menu and return to the CONFIGURATION menu.

TRIGGER PULSE

The VIS TRIGGER PULSE (Vertical Interval Switching) option allows the user to select the rolling-free sequencing picture or the VCR output picture. Use the following steps to set the VIS TRIGGER PULSE.

Step	Action
1	Press ▲ or ▼ on Configuration screen until VIS TRIGGER PULSE is selected.
2	Press ► to select the option.
3	Press ▲ or ▼ to select the new option. <ul style="list-style-type: none"> • ON: This option selects the rolling-free sequencing picture in the sequence mode. If you are using the VCR output, you may observe a “white picture” on the screen of the secondary monitor. • OFF: This option selects the stable picture of the secondary monitor through the VCR output. When you select this option, you may observe a rolling picture in the full sequence mode.
4	Press ◀ to save the setting and move the cursor to the VIS TRIGGER PULSE option.
5	Press the MENU button to go to main menu

CHAPTER 7.

TECHNICAL SPECIFICATIONS

Picture Tube	15" diagonal FLAT , 90° deflection angle
Resolution	500 TV lines at center
Display Rate	Real-time refresh rate (60 fields per second)
Video Format	NTSC
Camera Audio / Video Input	(8) RJ-11E,/(8)BNC line level, 1.0Vp-p 75 Ohms terminated
Video OUT	(8) BNC , line level, 1.0Vp-p 75 Ohms terminated
QUAD Video Output	(1) BNC, 1.0Vp-p, 75 Ohms
VCR Audio/Video Input/Output	(1) RJ-11E/ BNC, line level, 1.0Vp-p 75 Ohms terminated
Front Controls	CA 1-8, SEQ, QUAD, FREEZE, VCR, TALK, P/T, ZOOM, SEL, MENU, UP/DOWN/LEFT/RIGHT, POWER (monitor)
Back Controls	POWER (system)
Power Requirements	100-240Vac, 60Hz, 1.5A
Power Consumption	110W max (with 8 cameras)
Ambient Temperature	32° - 86°F (0° - 30°C)
Ambient Humidity	10% - 90% (non-condensing)
Dimension (WxHxD)	362.2 mm x 342.5mm x 381mm
Weight	15.61 kg



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