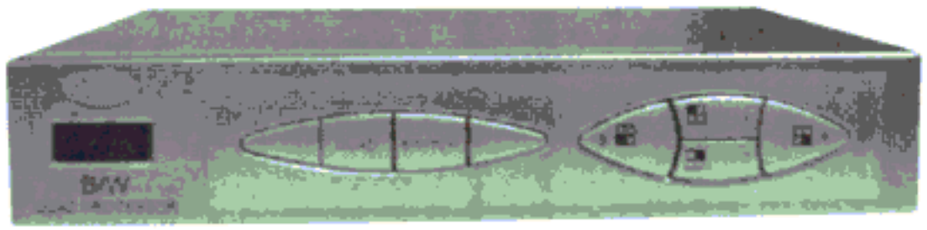
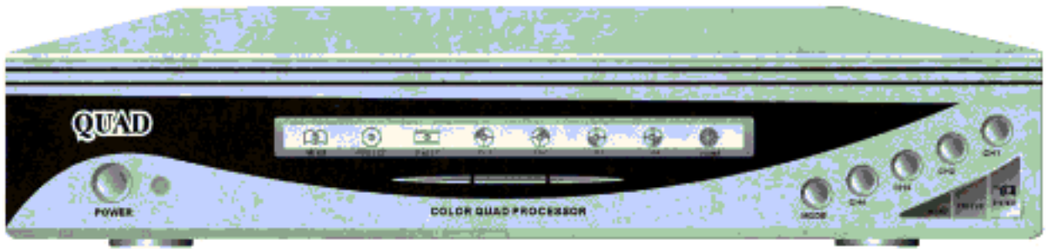
Color Quad Processor





Operation Manual

System Features

- Connects up to 4/8 Video Camera
  - Adjustable Brightness, Contrast, Saturation, Hue and Sharpness

- High Resolution
  - 720X480 60Hz for NTSC
  - 720X576 50Hz for PAL

- Various Display Mode
  - QUAD Split Mode
  - Full Screen Mode
  - PIP Screen Mode
    - 1 PIP Screen Mode
    - 2 PIP Screen Mode
  - Auto Sequence Mode

- High Performance Freeze Function
  - Flicker Free Image Captured

- High Performance Zoom Function
  - Selectable ZoomArea

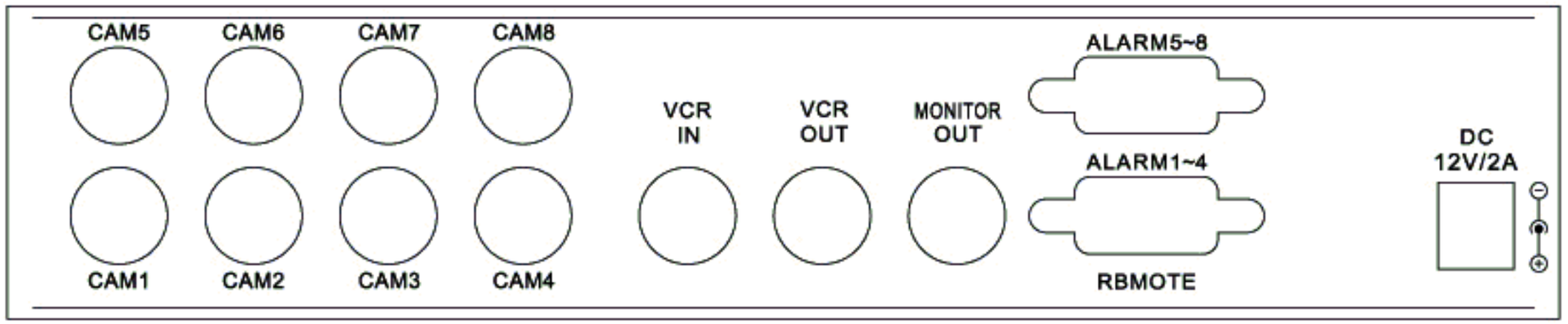
- Various Overlay Information
  - Camera Title
  - Real Time and Date
  - Alarm/Loss/Motion Message

- Playback in QUAD or Full Screen Image

- Provide Various Event Input
  - Alarm Input
  - Video Loss Detection
  - Motion Detection
  - 60 Event Report
  - Built-in Buzzer

- Remote Control by RS232C connection

Rear Panel Installation



Camera Connection

Accept 8 composite video signals from the camera.

Monitor Connection

Provide 1 composite video signal for the main monitor.

VCR OUT Connection

Provide 1 composite video signal for the VCR recording.

VCR IN Connection

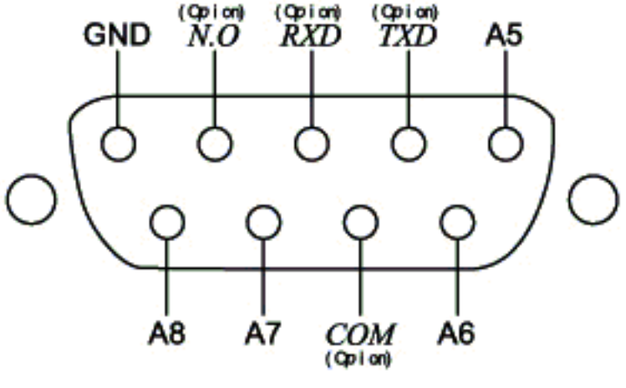
Accept 1 composite video signal for playback from the VCR.

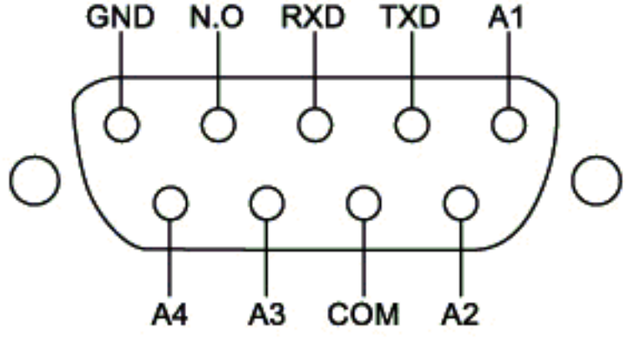
Power Jack Connection

DC 12V/1A, 2.1mm Jack, Center is positive.

Connection for Alarm and Remote Control

Accepts 8 alarm input and provides 1 alarm output with COMMON and also provides RS232C interface for remote control.





Alarm Event Operation

A1~A8 : 8 Alarm inputs for each camera. GND : Ground from the sensors.
N.O : Normally Open alarm output. COM : COMMON alarm output

When alarm occurs from only one channel, the corresponding channel will be displayed in full screen. For more than one alarm at the same time, screen mode will be changed to QUAD mode. The screen by alarm will be maintained during alarm hold time which is defined in setup menu. Regardless of alarm hold time, press any key to clear alarm mode. For multiple alarm input at the same time, the final alarm keeps alarm hold time.

Remote Control Protocol

A Computer can control system remotely by RS-232C interface which works up to the 9600bps.

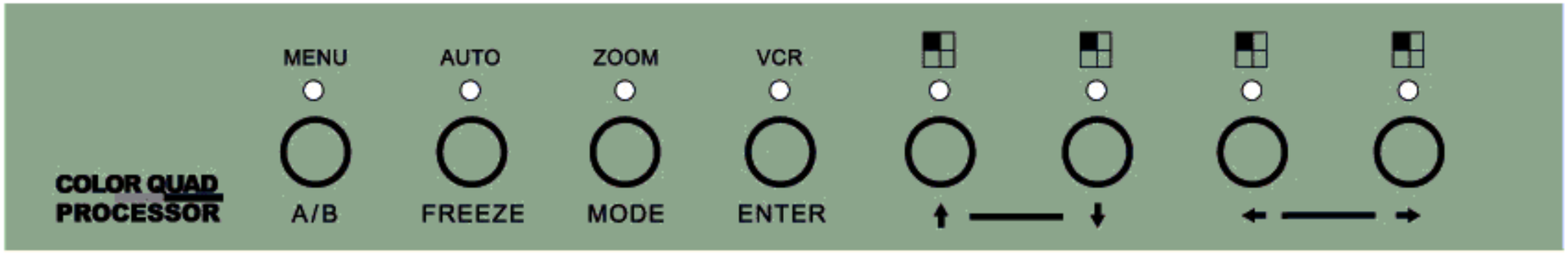
For Receive mode, system accepts commands which have 2 ASCII code as following table.

Code	Function	Code	Function
R1	Camera 1	RP	PIP1
R2	Camera 2	RS	PIP2
R3	Camera 3	RF	Freeze
R4	Camera 4	RZ	Zoom
R5	Camera 5	RV	VCR playback
R6	Camera 6	RM	Menu
R7	Camera 7	RE	Enter
R8	Camera 8	RU	▲
RA	Page A	RD	▼
RB	Page B	RL	◀
RO	AUTO	RR	▶
RQ	QUAD	RZ	Factory reset

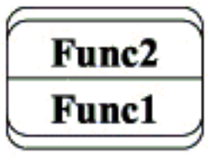
For Transmit mode, system sends event messages which have 5 ASCII code as following table.

1st Code	2nd Code	3rd Code	4th Code	5th Code
M	Channel Number (1~8)	Event (A,L,M)	Carriage Return	Line Feed

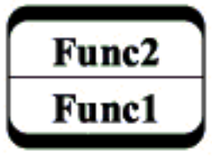
Front Panel Operation



Key Definition



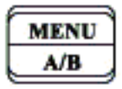
Short Key
Press for less than 1 second



Long Key
Press for more than 1 seconds

Change Page A or B

Key A/B selects page to be displayed and page A and B is toggled by this key.



Invoke SETUP Menu

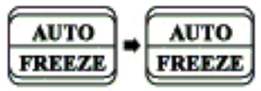
Reference Setup Menu Operation.

Setup menu

Invoke FREEZE Function

All channel images enter freeze status when freeze function is invoked.

Zoom function can be invoked while freeze function is running.



Invoke Exit

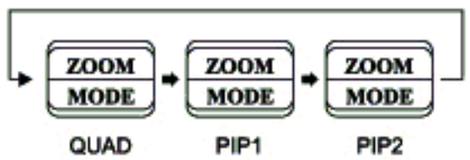
Invoke AUTO SEQUENCE Function

AUTO key invokes auto sequence display mode.

Auto sequence

Change DISPLAY Mode

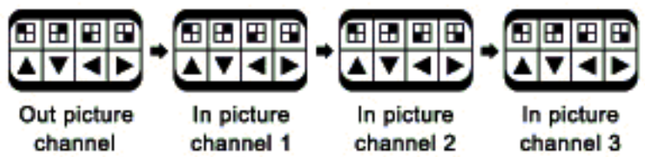
The display modes are circulated as QUAD, PIP1 and PIP2 with pressing each MODE key.



QUAD PIP1 PIP2

Select full screen for PIP1 and PIP2 display mode

The first long channel key for PIP1 and PIP2 mode defines out picture channel and the second, third and forth long key define in picture channel.

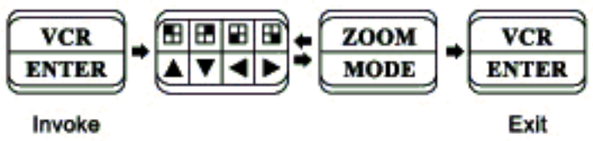


Invoke 2X ZOOM Function

A zoomed area can be moved by pressing 4 arrow keys anytime when zoom function is invoked. Freeze function can be executed while zoom function is running.

Invoke PLAYBACK FUNCTION

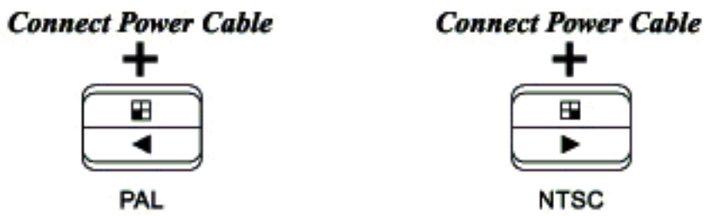
When playback function is running, 4 channel keys select each channel and mode key makes single screen.



Select SINGLE SCREEN CAMERA

4 channel keys select camera to be display as full screen.

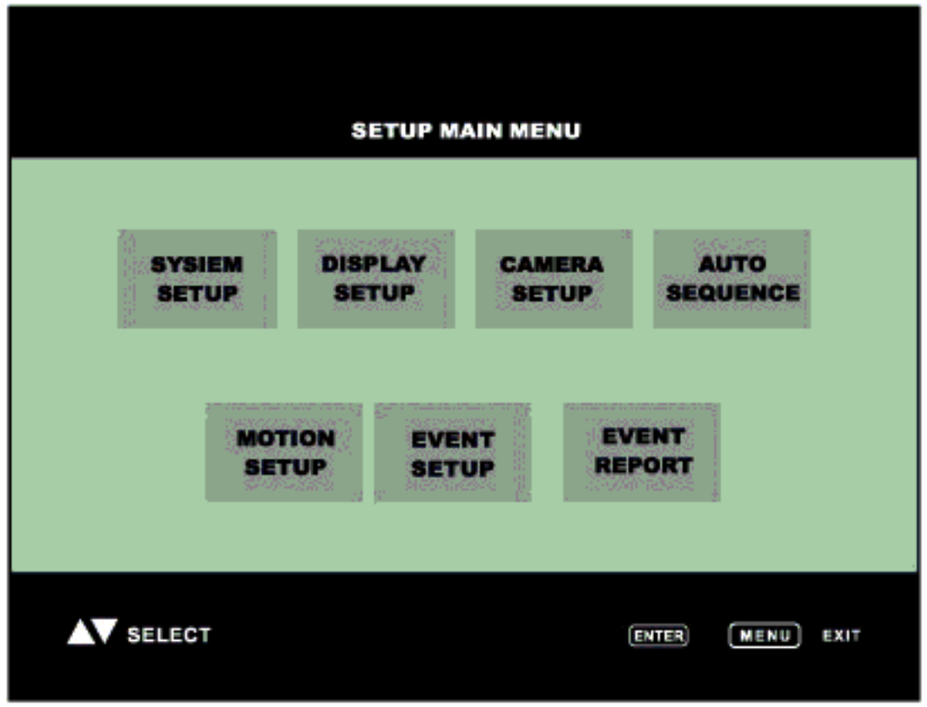
System can be defined by pressing each channel key when the power switch is turn on.



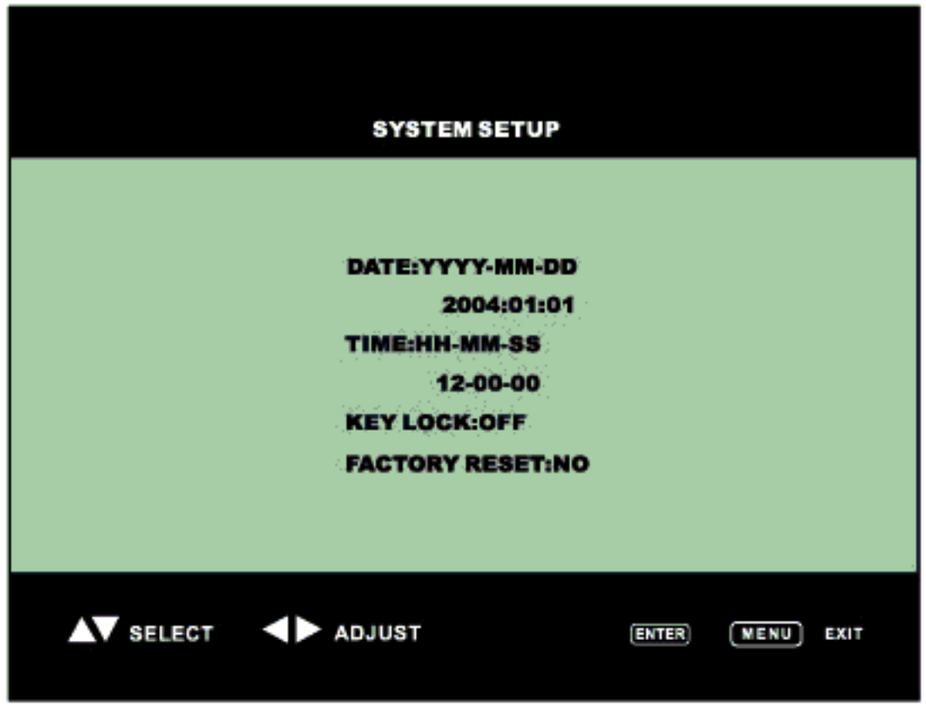
Setup Menu Operation

The system provides GUI setup screen. Each menu screen is separated into three parts. Screen title is displayed in upper region and menu items are located in middle of screen. The key function is described in lower region.

SETUP MAIN MENU

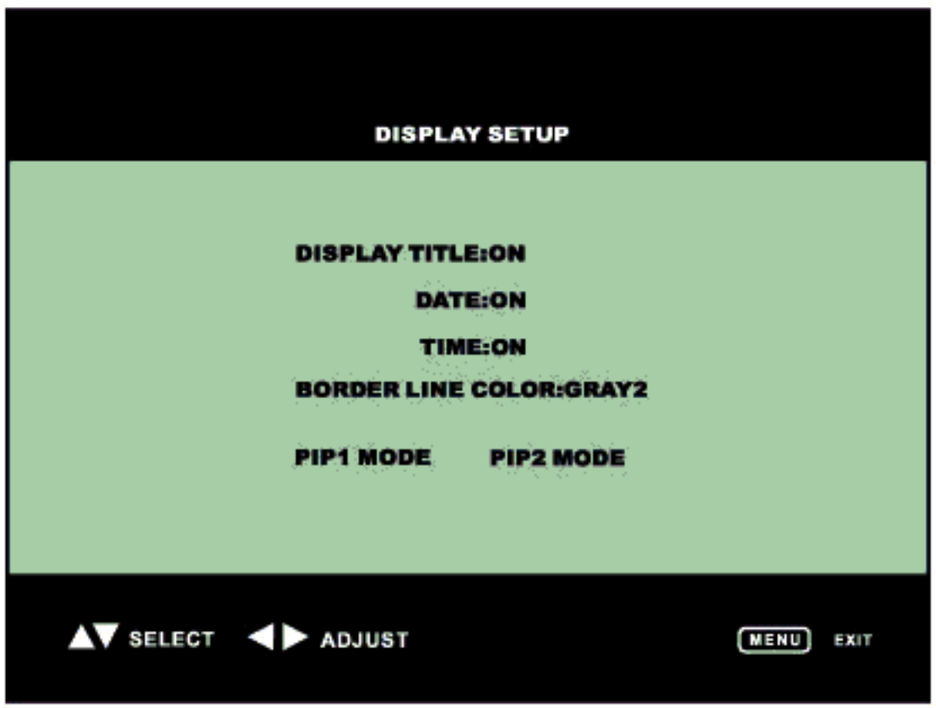


SYSTEM SETUP MENU



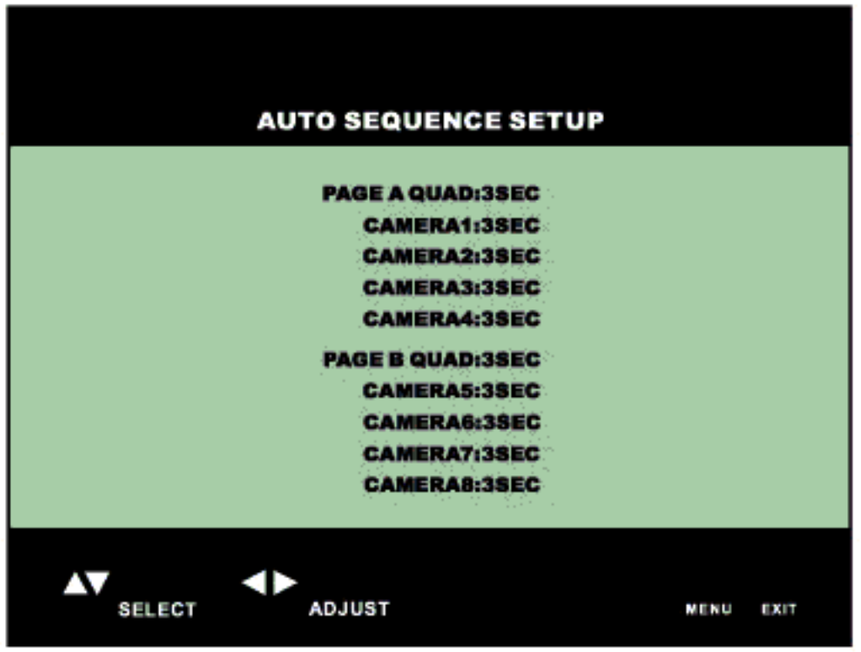
FACTORY RESET MENU

DISPLAY SETUP MENU



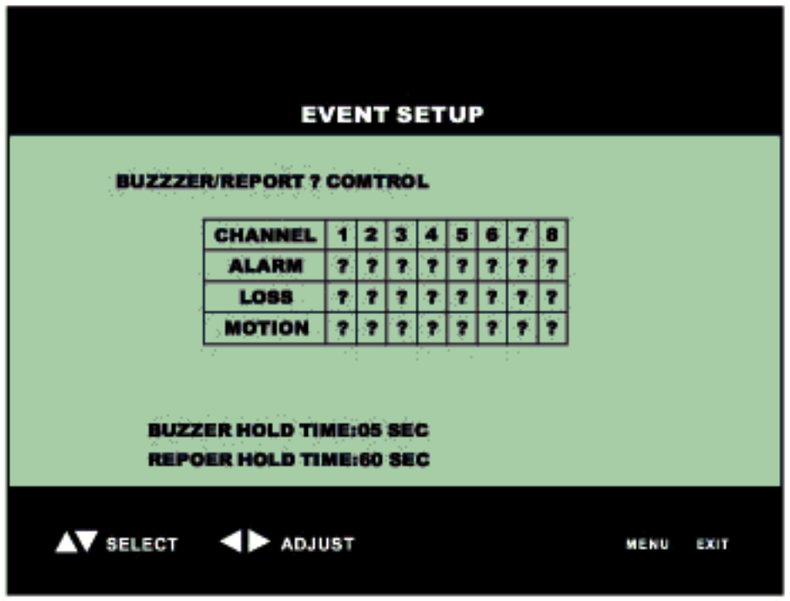
CAMERA SETUP MENU

AUTO SEQUENCE SETUP MENU



MOTION SETUP MENU

EVENT SETUP MENU



EVENT REPORT