
Color QUAD System

User's Manual

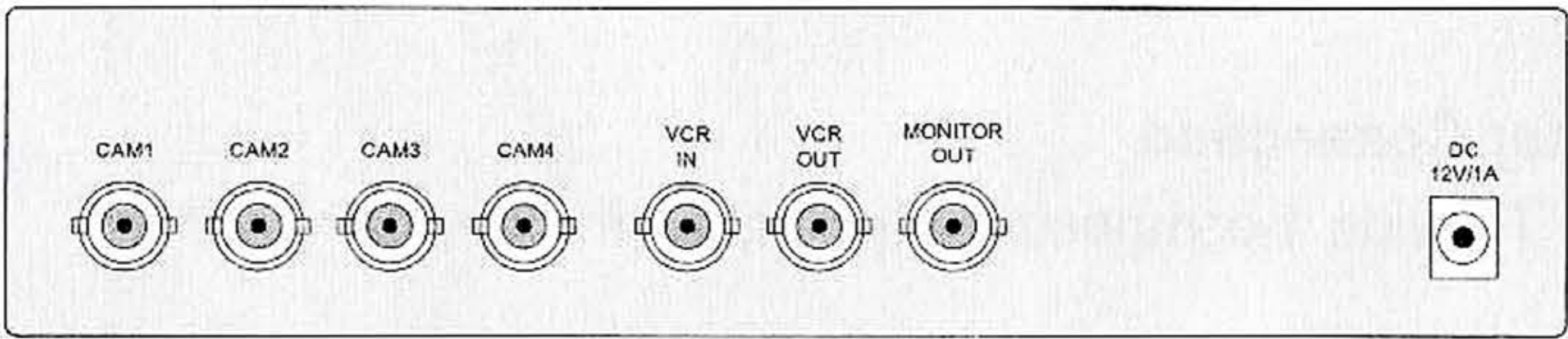


System Features

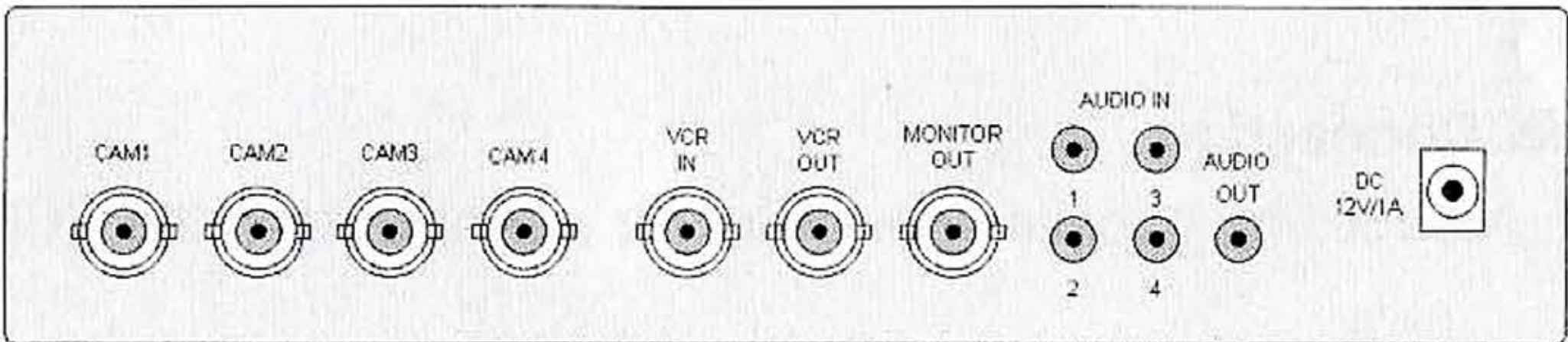
- Connects up to 4/8 Video Camera
Adjustable Brightness, Contrast, Saturation, Hue and Sharpness
- High Resolution
720X480 60Hz for NTSC
720X576 50Hz for PAL
- Various Display Modes
QUAD Split Mode
Full Screen Mode
PIP Screen Mode
Non-realtime 8 Split Mode
Dual Split Mode
Auto Sequence Mode
- High Performance Freeze Function
Flicker Free Image Capture
- High Performance Zoom Function
Selectable Zoom Area
- Various Overlay Information
Camera Title
Real Time and Date
Alarm/Loss/Motion Message
- Playback in QUAD or Full Screen Image
- Provide Various Event Input and Detection

Rear Panel Installation

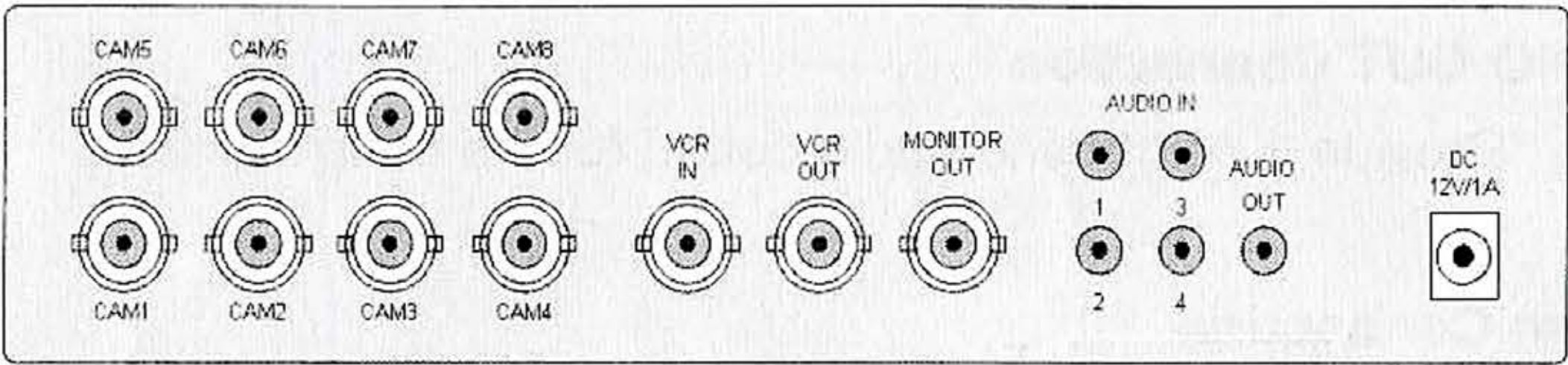
Color Quad system



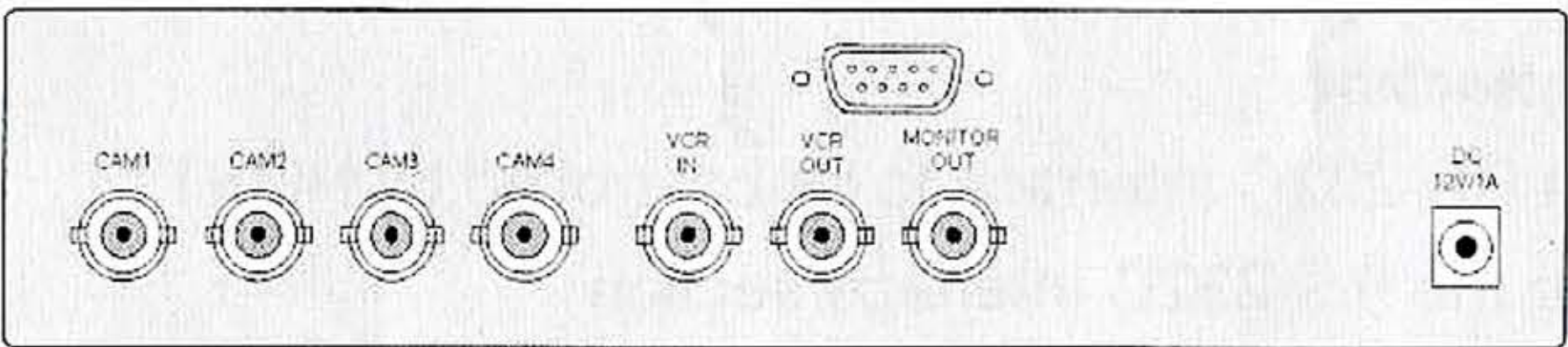
Audio color Quad system



Dual color Quad system



Color Quad system with VGA



Color Quad system with VGA/485/LOOP OUT

Camera Connection

Accept 8 composite video inputs from the camera.

Monitor Connection

Provide 1 composite video output for the main monitor.

VCR OUT Connection

Provide 1 composite video output for recording in the VCR.

VCR IN Connection

Accept 1 composite video input for playback from the VCR.

AUDIO IN Connection

Accept 4 composite audio inputs from the camera.

AUDIO OUT Connection

Provide 1 composite audio output for the main monitor.

Alarm Connection

Accept 8 alarm inputs and provide relay out.

Refer to the Alarm Interface section.

RS-232C Connection

Provide RS-232C interface to be controlled by HOST.

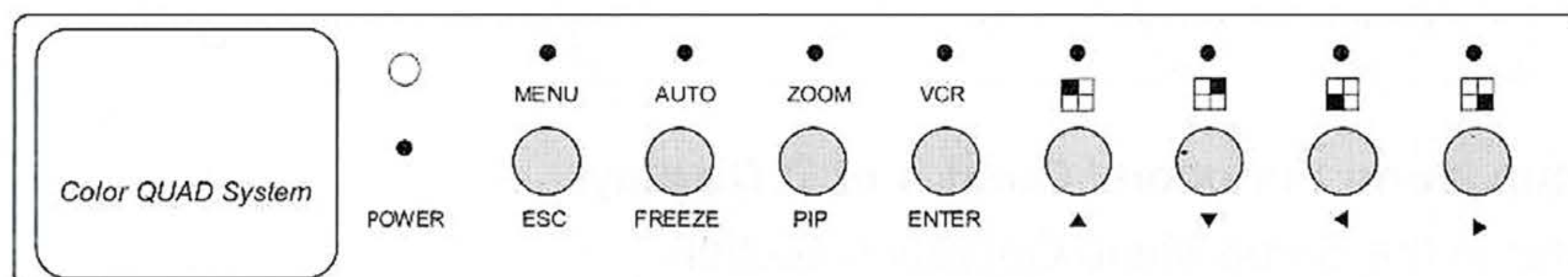
Refer to the RS-232C Interface section.

Power Jack Connection

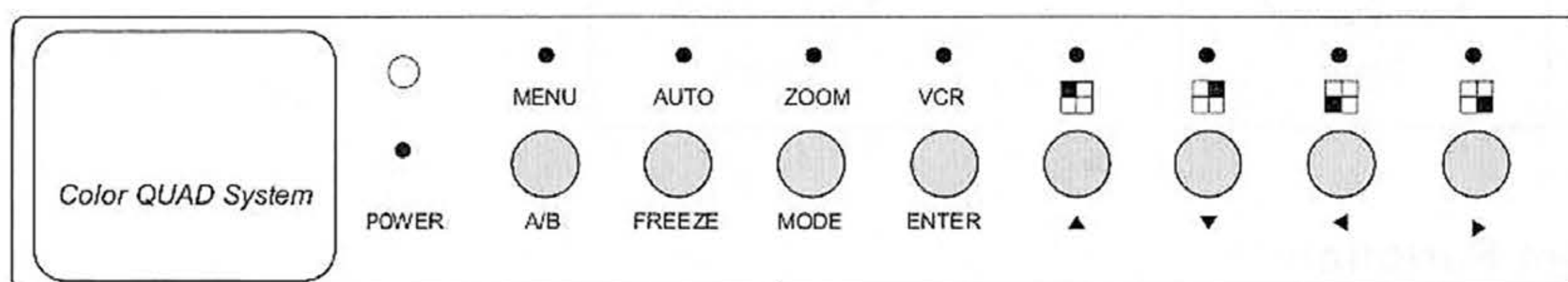
DC 12V/1A, Center is positive.

Front Key Operation

Color Quad system front panel



Dual Color Quad system front panel



MENU / ESC / A/B

Invoke menu setup / exit / change page A or B

AUTO / FREEZE

Invoke auto sequence function / freeze function

ZOOM / PIP / MODE

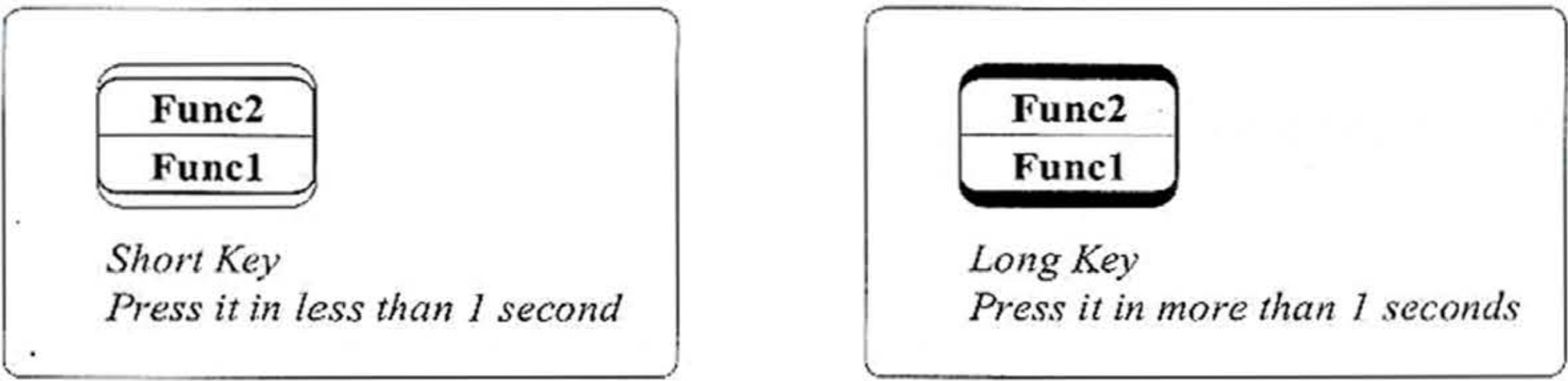
Invoke 2*ZOOM function / picture in picture / change display mode

VCR / ENTER

VCR playback / enter menu setup

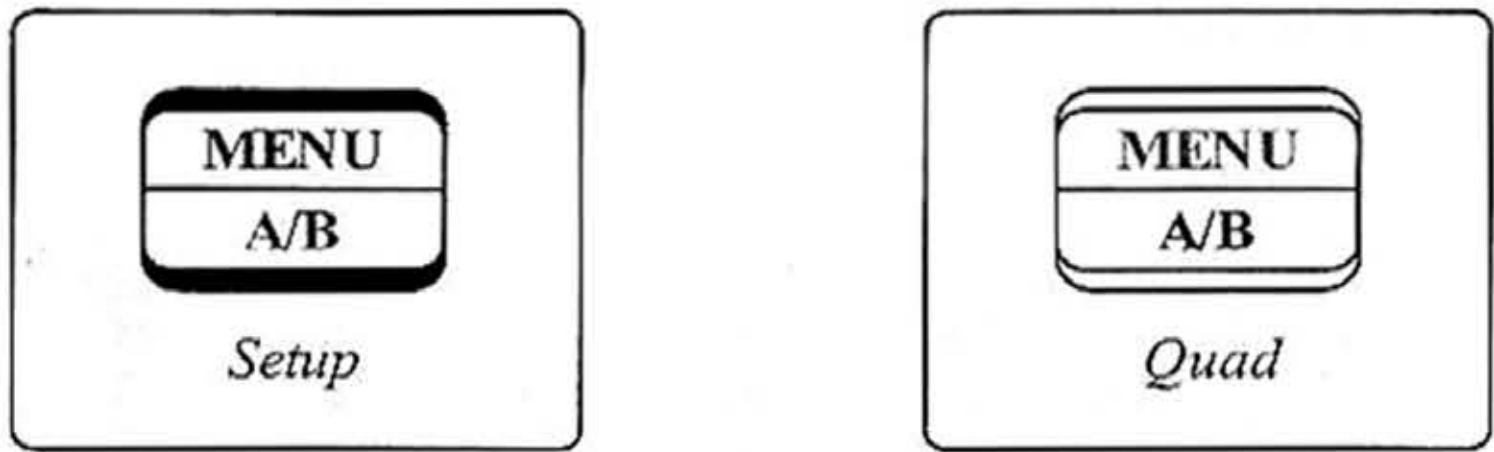
 /  Channel 1 (channel 5) display / up

Key Definition



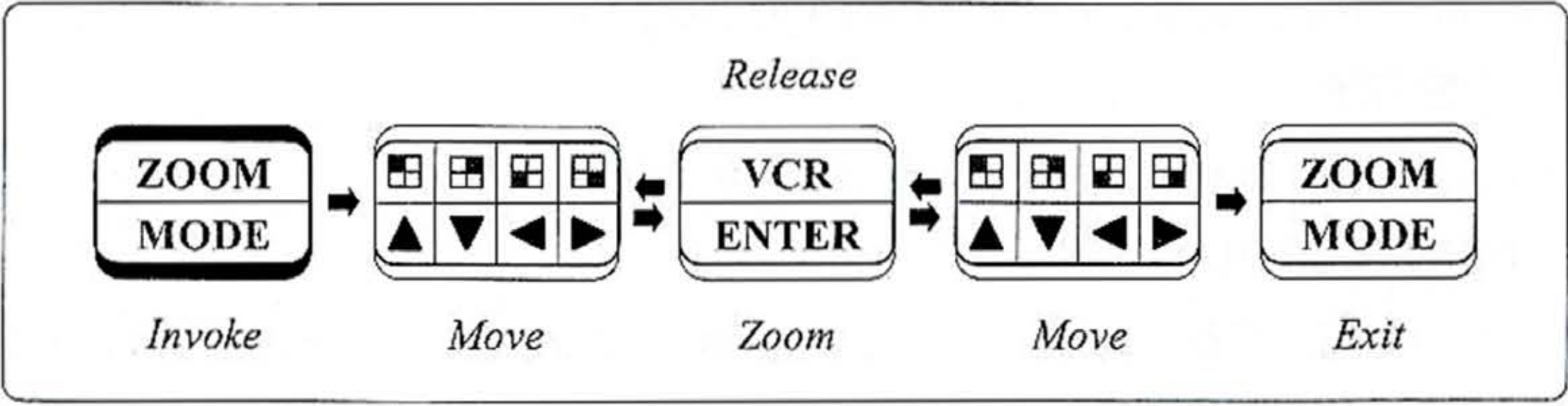
Setup Menu Function / Quad A or B Display

Refer to the Setup Menu Operation section.
Key A/B selects page to be displayed. Page A and B is toggled for each A/B key.



Zoom Function

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

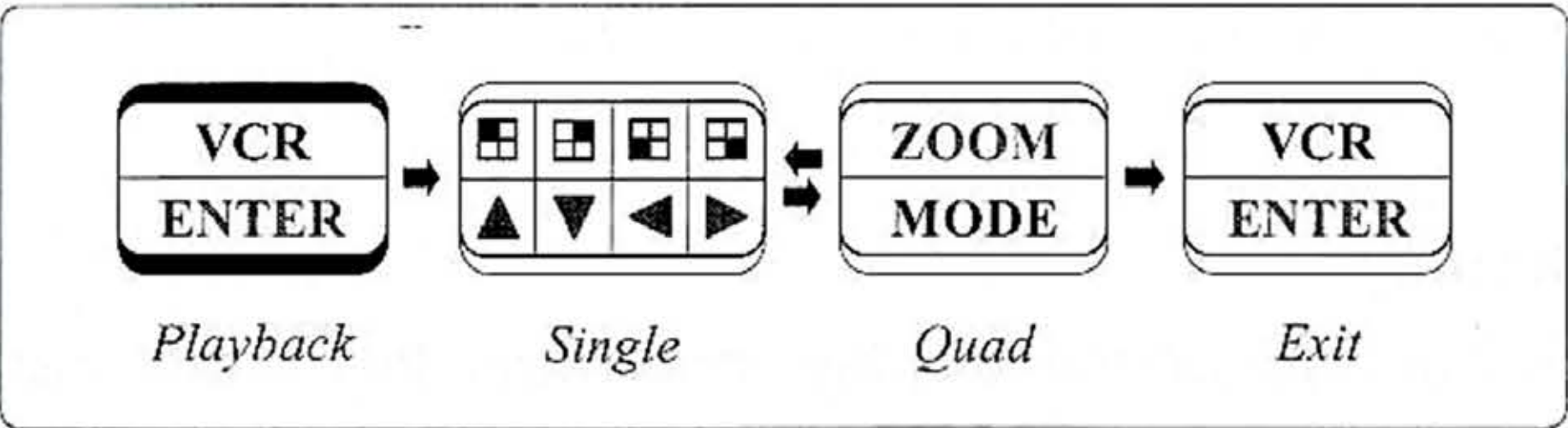


Freeze Function

All displayed channel is frozen when freeze function is invoked. Zoom function can also be invoked while freeze function is invoked.

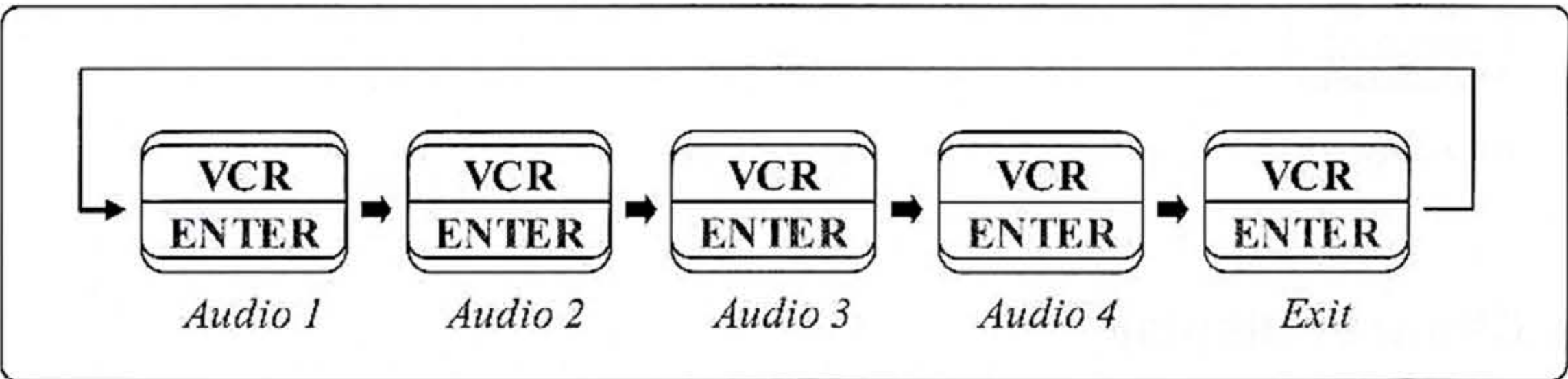
Playback Function

When playback function is running, 4 channel keys select camera to be displayed as single full screen and the MODE key makes quad display mode.



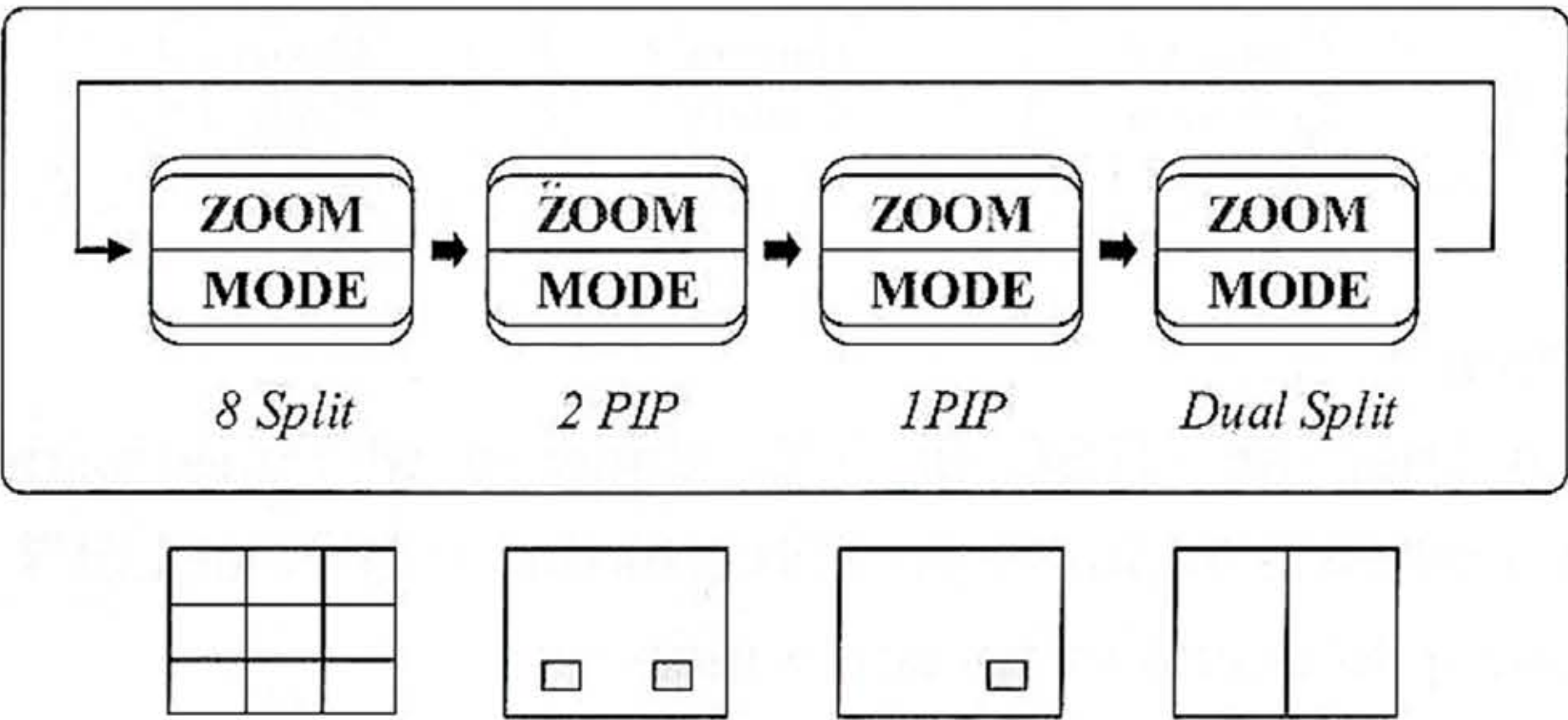
Audio Display (Only with Audio color Quad system)

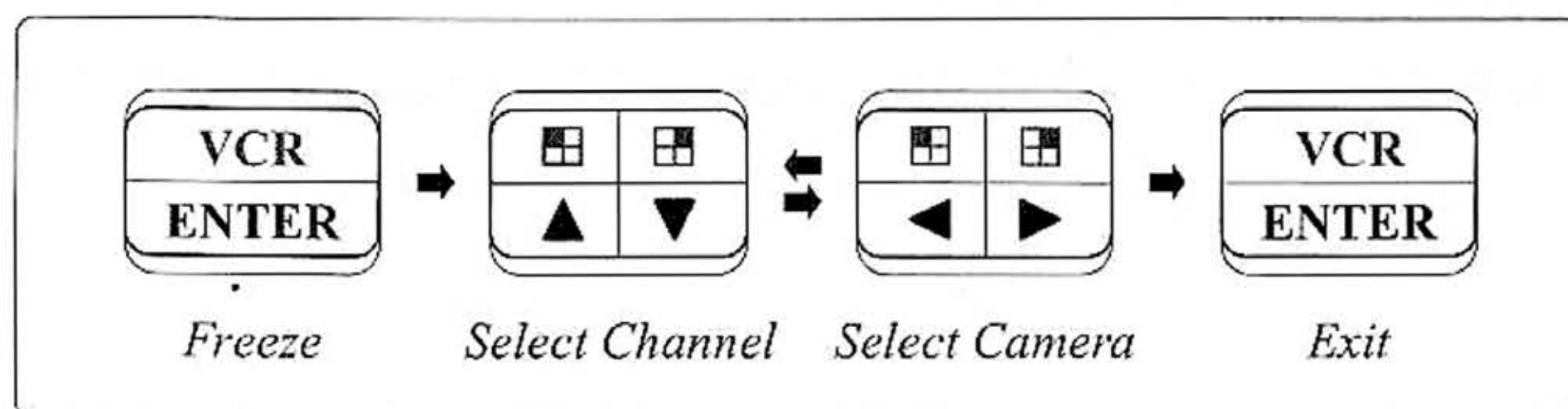
The display modes are circulated as the following sequence.



Multi Channel Display

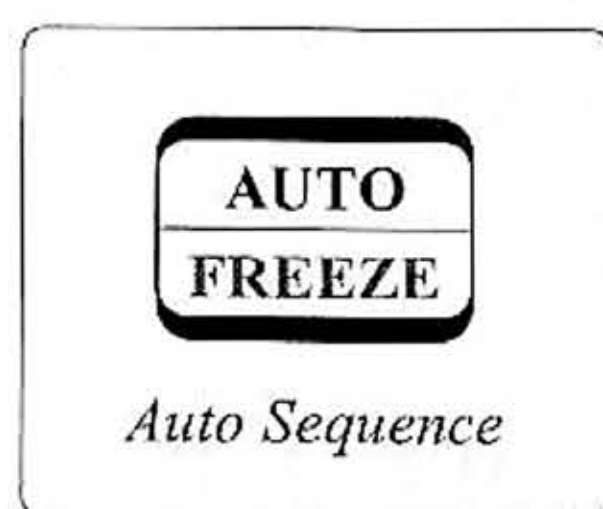
The display modes are circulated as the following sequence, Non-realtime 8 Split, 2 Picture-in-Picture, 1 Picture-in-Picture and Dual Split for each MODE key.





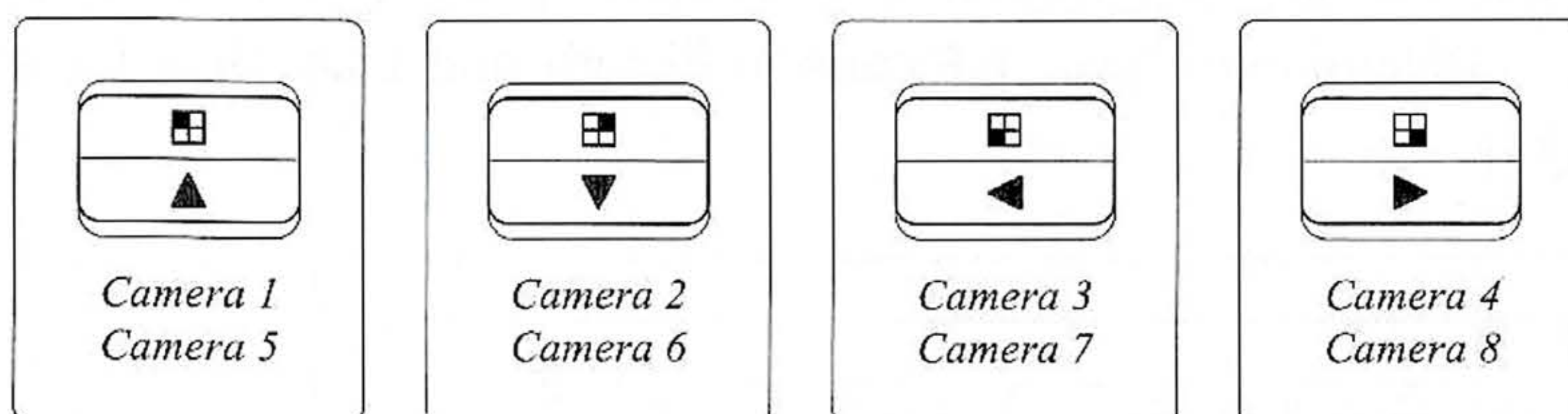
Auto Sequence Display

AUTO key invokes auto sequence display mode and this mode can be maintained until any other display mode is selected.



Single Channel Display

Each channel button selects camera to be display as full screen. When pushing same button, camera is toggled to the other page.

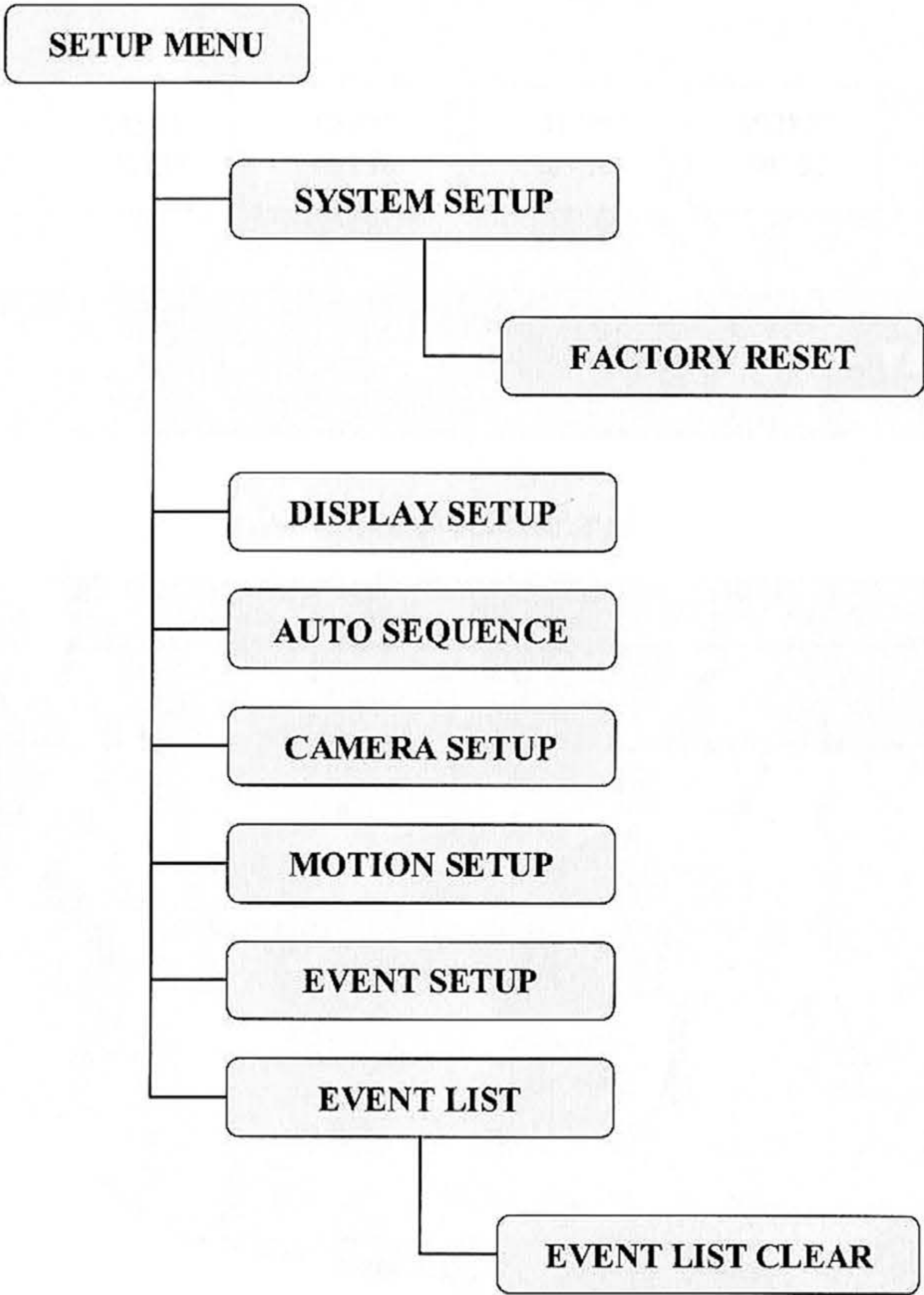


PAL/NTSC System

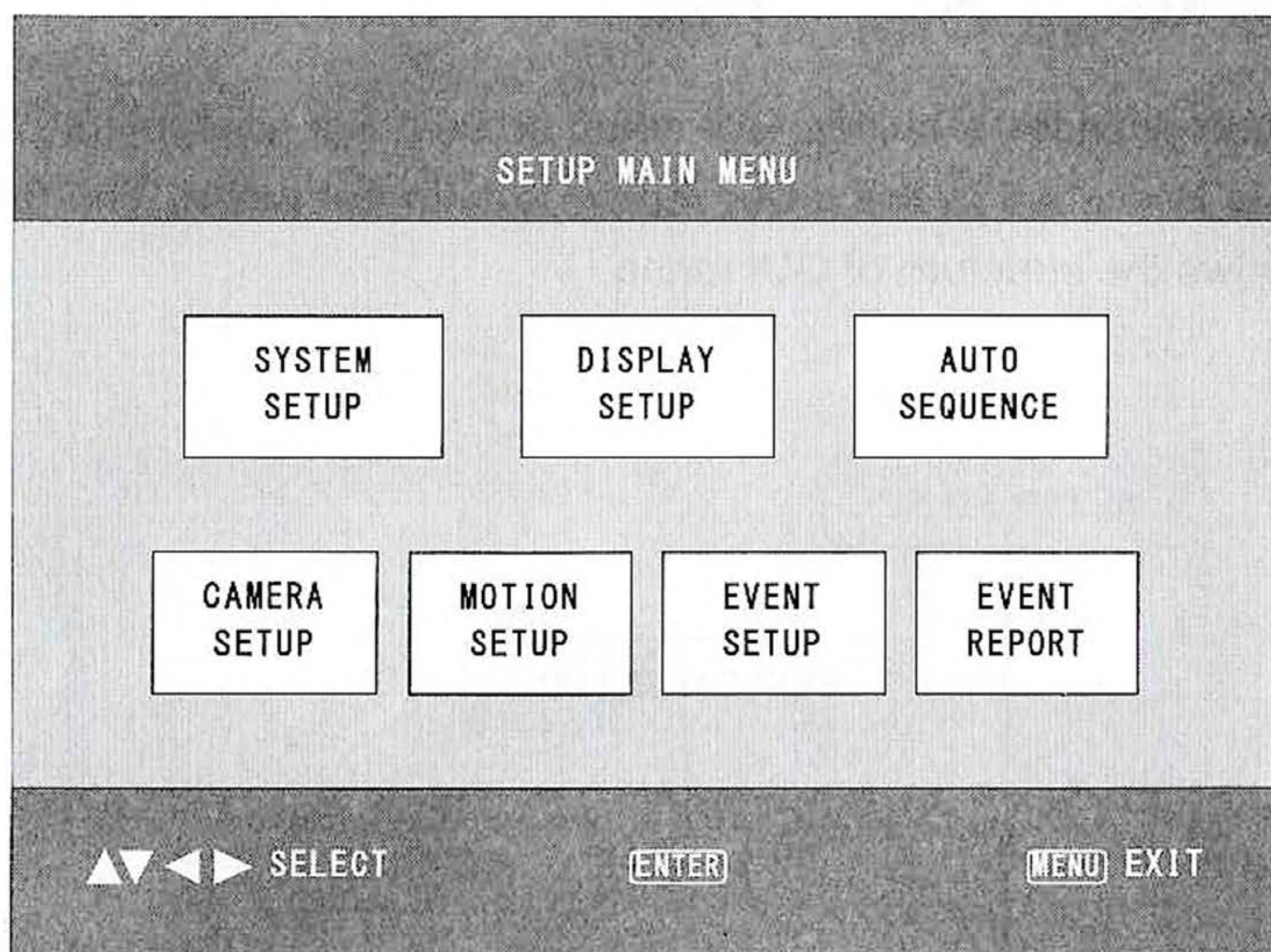
System can be defined as NTSC or PAL standard with the following method. The first method is to power on with pressing RIGHT or LEFT key and the second one is to define in the setup menu.

Setup Menu Operation

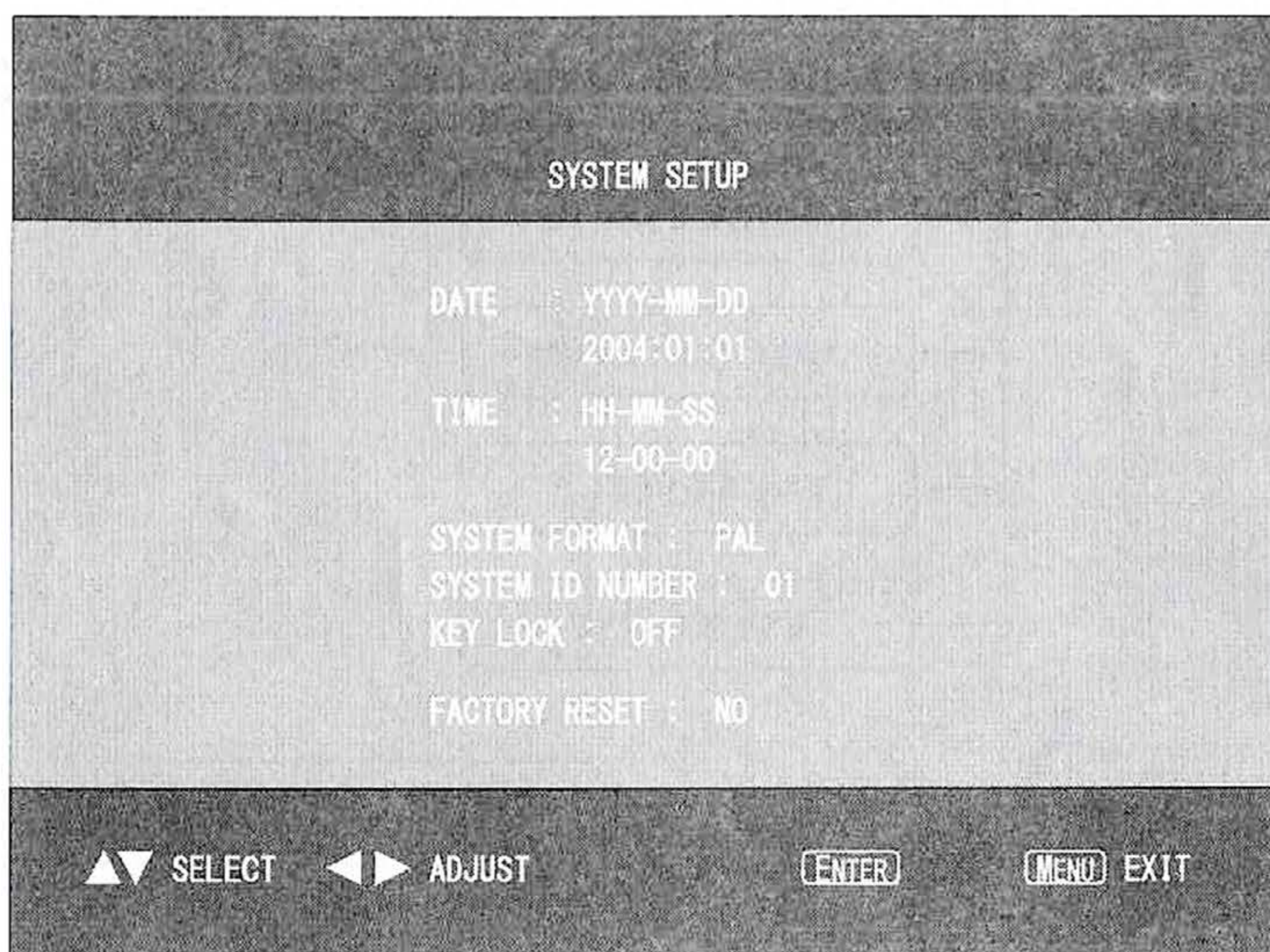
The system provides a built-in GUI setup screen. For each menu, the key function is described in the lower region to help operation. The following figure shows the structure of GUI menu.



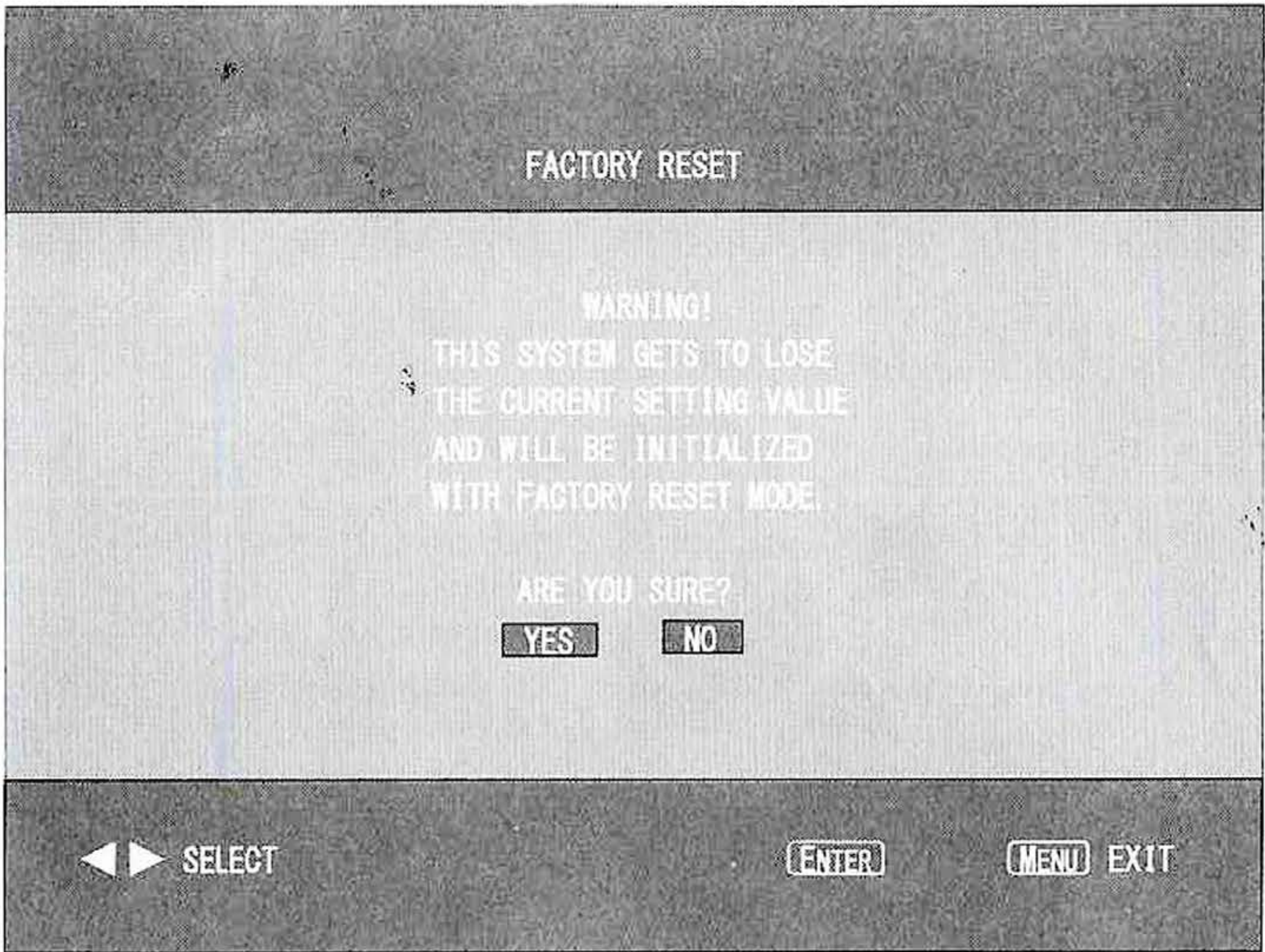
Setup Main menu



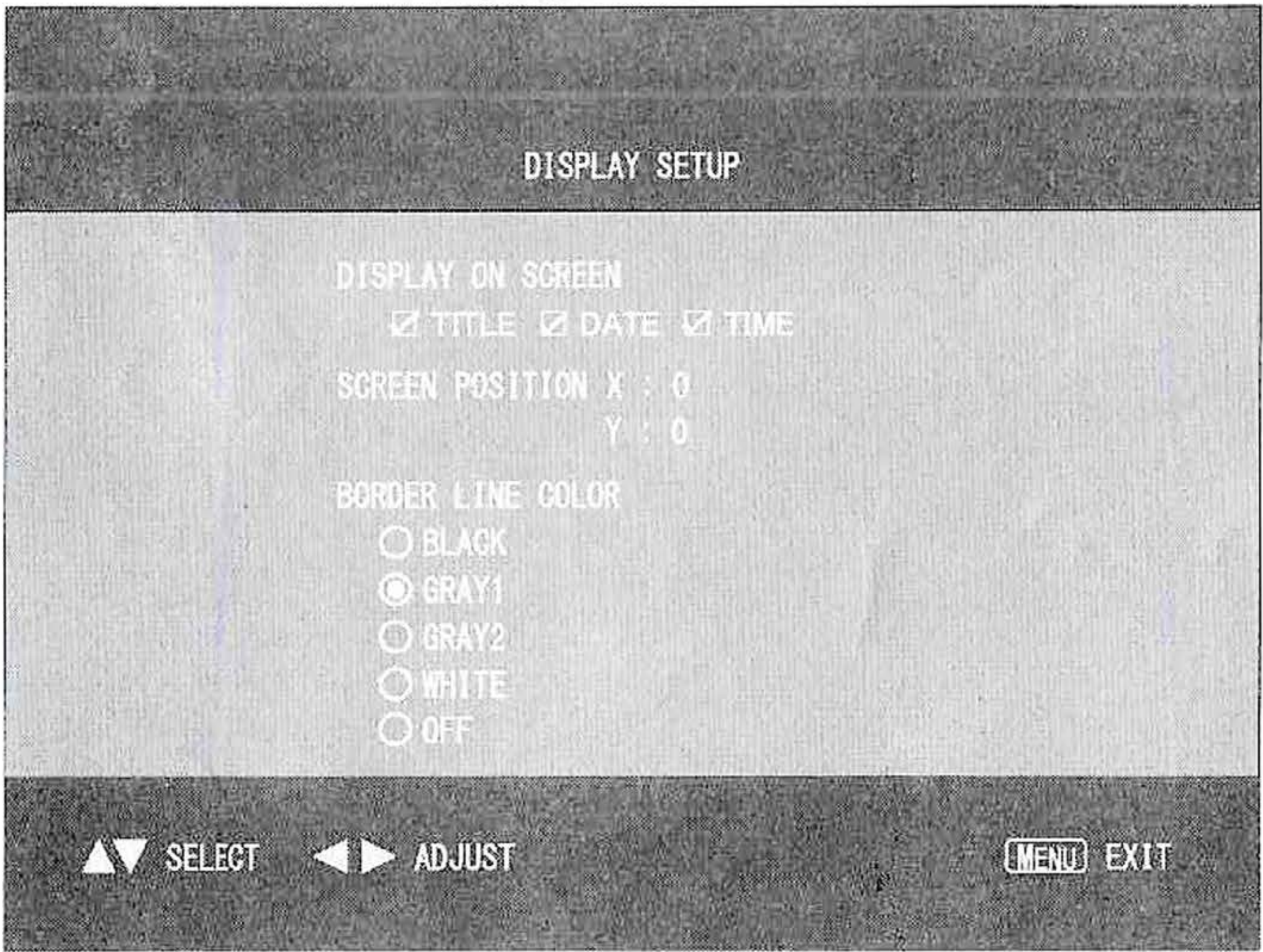
System Setup Menu



Factory Reset Menu



Display Setup Menu



Camera Setup Menu

CAMERA SETUP

CAMERA : 1



TITLE : CAMERA1

BRIGHTNESS : 0

CONTRAST : 0

SATURATION : 0

HUE : 0

SHARPNESS : 0

MIRRORING : OFF

▲▼ SELECT ◀▶ ADJUST

[MENU] EXIT

Auto Sequence Setup Menu

AUTO SEQUENCE DWELL TIME

PAGE A QUAD : 1 SEC

CAMERA1 : 1 SEC

CAMERA2 : 1 SEC

CAMERA3 : 1 SEC

CAMERA4 : 1 SEC

PAGE B QUAD : 1 SEC

CAMERA5 : 1 SEC

CAMERA6 : 1 SEC

CAMERA7 : 1 SEC

CAMERA8 : 1 SEC

▲▼ SELECT ◀▶ ADJUST

[MENU] EXIT

Motion Setup Menu

MOTION SETUP

CAMERA : 1



DETECTION TIME

ALWAYS OFF

ON : 11:00:00

OFF : 12:00:00

SENSITIVITY : 0

VELOCITY : 0

MASKING AREA

[X, Y] = (0, 0)

▲▼ SELECT ◀▶ ADJUST

[MENU] EXIT

Event Setup Menu

EVENT SETUP

BUZZER/REPORT ☒ CONTROL

CHANNEL	1	2	3	4	5	6	7	8
ALARM	✓	✓	✓	✓	✓	✓	✓	✓
LOSS	✓	✓	✓	✓	✓	✓	✓	✓
MOTION								

BUZZER HOLD TIME : 05 SEC

REPORT HOLD TIME : 30 SEC

▲▼◀▶ SELECT

[ENTER] ENABLE

[MENU] EXIT

Event Report

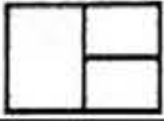
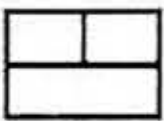
EVENT REPORT				
1 OF 6 PAGE				
NO	YY-MM-DD	HH:MM:SS	CH	EVENT
1	04-07-30	16:56:03	1	LOSS
2	04-07-30	16:56:03	2	ALARM
3	04-07-30	16:56:03	3	MOTION
4	04-07-30	16:56:03	4	LOSS
5	04-07-30	16:56:03	5	ALARM
6	04-07-30	16:56:03	6	MOTION
7	04-07-30	16:56:03	7	LOSS
8	04-07-30	16:56:03	8	MOTION
9	04-07-30	16:56:03	1	LOSS
10	04-07-30	16:56:03	2	ALARM
LIST CLEAR : NO				
▲▼ SELECT ◀▶ SELECT PAGE [MENU] EXIT				

Event List Clear Menu

LIST CLEAR		
WARNING! THIS SYSTEM GETS TO LOSE THE CURRENT EVENT LIST AND WILL BE INITIALIZED WITH BLINK.		
ARE YOU SURE?		
☐ YES ☐ NO		
◀▶ SELECT	[ENTER]	[MENU] EXIT

RS-485 Interface

The RS485 is used for remote control of the machine, baud rate is 9600bps .Meanwhile, the system ID works to provide the range of values which can be modified: 0x01~0XFF. Through the system ID we can operate the machine. How-to, first sent the ID, and then the following stated commands are sent. e.g. Freeze the image on the machine with ID number 0x01, send 485 command :0x01 0x8d.

Code(Hex)	Description	Code(Hex)	Description
0×80	Null	0×8d	Freeze
0×81	Channel 1/5	0×8e	Zoom
0×82	Channel 2/6	0×8f	Menu
0×83	Channel 3/7	0×90	▲
0×84	Channel 4/8	0×91	▼
0×85	Quad A Page	0×92	◀
0×86	Quad B Page	0×93	▶
0×87	Auto Sequence	0×94	Enter
0×88	Non-real time 8 Split	0x95	3Picture-in-picture
0×89	2Picture-in-picture	0x96	Vertical dual split
0×8a	1Picture-in-picture	0x97	
0×8b	Horizontal dual Split	0x98	
0×8c	Playback		