

# **REAL TIME COLOR QUAD PROCESSOR**

**INSTALLATION & INSTRUCTION MANUAL**

\* BEFORE OPERATING THE UNIT, PLEASE READ THIS MANUAL CAREFULLY

## CONTENTS

### NOTE

1. This unit must be located in a position away from water, moisture or other liquids. Avoid placing this unit where it will be subject to vibration or excessive temperatures. This unit does not contain user serviceable parts.
2. To ensure sound operation of this unit, it should be located in an environment where the temperature is between  $+5^{\circ}\text{C} \sim +40^{\circ}\text{C}$  ( $+41^{\circ}\text{F}$  to  $+104^{\circ}\text{F}$ ). Humidity should be less than 90%.
3. The ventilation holes must remain free from obstruction. Failure to comply may result in damage to the appliance.



CAUTION — REFER TO ACCOMPANYING DOCUMENTS

**Note:** This equipment has been certified to comply with the limits for a class B digital device, pursuant to subpart J of Part 15 of FCC Rules. Only peripherals certified to comply with the class B limits that may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

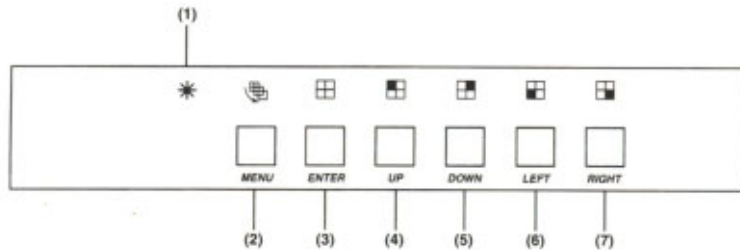
FCC & CE APPROVED

- **Product Features**
- **Drawing of Front and Rear Panel**
- **Description of Front Panel**
- **Description of Rear Panel**
- **How to Operate and Program**
  - A. **Monitoring Functions**
    1. Initial Picture
    2. Full Screen
    3. Quad Screen
    4. Automatic sequential switching mode
  - B. **The Setup Menu**
    1. Camera Title
    2. Time/Date
    3. Picture Adjust
    4. Display Adjust
    5. Auto Adjust
    6. To End the Setup Menu
- **System Connection**
- **Specifications**

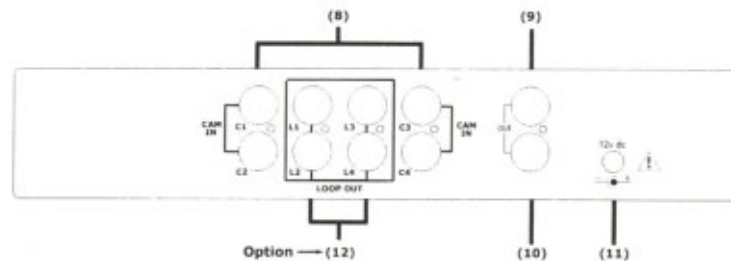
## PRODUCT FEATURES

1. Provides the setup menu available for Camera Title · Time/Date · Contrast · Brightness · Chroma · Tint · Display mode and Dwell Time setting.
2. True real time performance that make the viewing pictures more smooth and clearer.
3. It is designed by the digital circuitry, the viewing picture has no jitter problem during sequencing the cameras.
4. Built-in time/date generator, plus 8 character camera titles.

### FRONT PANEL :



### REAR PANEL :



## Description of Front Panel

### 1. POWER INDICATOR:

LED light on indicates power on.

### 2. MENU/AUTO SEQUENTIAL SWITCHING BUTTON

- ①. Hold this button for one second more that will enter into the menu setting.
- ②. Just touch this button it will go into automatic sequential switching mode.

### 3. QUAD SCREEN/ENTER BUTTON:

- ①. Press this button for a quadrant picture view.
- ②. While in the menu setting, press this button to exit the setup menu.

### 4. CAMERA 1FULL SCREEN/UP BUTTON:

- ①. Press this button for camera 1 full screen view.
- ②. While in the menu setting, press this button to move the cursor up.

### 5. CAMERA 2FULL SCREEN/DOWN BUTTON:

- ①. Press this button for camera 2 full screen view.
- ②. While in the menu setting, press this button to move the cursor down

### 6. CAMERA 3FULL SCREEN/LEFT BUTTON:

- ①. Press this button for camera 3 full screen view.
- ②. While in the menu setting, press this button to alter the content.

### 7. CAMERA 4FULL SCREEN/RIGHT BUTTON:

- ①. Press this button for camera 4 full screen view.
- ②. While in the menu setting, press this button to alter the content.

## Description of Rear Panel

### 8. CAMERA INPUT TERMINALS:

Up to 4 cameras can be connected to these terminals.

### 9. MONITOR OUTPUT TERMINAL:

Connect this jack to the monitor for surveillance.

### 10. VCR OUTPUT TERMINAL:

Connect this jack to video cassette recorder for recording.

### 11. POWER IN JACK:

Use DC 12V, 500 mA adapter input. (AC power adapter included)

### 12. LOOPING CAMERA OUTPUTS:

These connectors are used for extending the camera inputs to other accessories. (OPTION)

## How to Operate and Program

### A. MONITORING FUNCTIONS

1. After plugged in the monitor displays as below.

01/00/00	08 : 00 : 00
CH1	CH2
CH3	CH4

2. Full Screen Button: Press any one of the (4) · (5) · (6) · (7) buttons, that the corresponding camera is selected for a full screen view.
3. Quad Screen Button: Press this button for a quadrant picture view.
4. Automatic Sequential Switching Button: Press this button slightly, it will enter into automatic sequential switching mode.

### B. THE SETUP MENU:

Press the MENU button for more than 1 second, the system setup menu will appear on the screen as illustrated below.

SYSTEM SETUP	
1.	CAMERA TITLE
2.	TIME / DATE
3.	PICTURE ADJUST
4.	DISPLAY MODE
5.	AUTO ADJUST

### 1. CAMERA TITLE :

- ①. Move the cursor to the item 1.
- ②. Press the MENU button to enter into the camera title setting.
- ③. Press the CH1 button to select the camera that desire to set the title.
- ④. Press the CH2 button to select the location of the characters and the location selected will flash. Total 8 characters are available for each camera titling.
- ⑤. Press the CH3 or CH4 button to alter characters.
- ⑥. Press the MENU button again to end the camera title setting.

SYSTEM SETUP	
▶ 1. CAMERA TITLE	□□ CH1 □□
2. TIME / DATE	□□ CH2 □□
3. PICTURE ADJUST	□□ CH3 □□
4. DISPLAY MODE	□□ CH4 □□
5. AUTO ADJUST	
SELECT ↑ ↓ ← →, PUSH SET KEY	

#### 2. TIME / DATE :

- ①. Move the cursor to item 2.
- ②. Press the MENU button to enter into time/date setting.
- ③. Press the CH3 or CH4 button to select the location where desire to change and the location selected will flash.
- ④. Press the CH1 or CH2 button to alter the numbers.
- ⑤. Press the MENU button again to end. time/date setting.

SYSTEM SETUP	
1. CAMERA TITLE	
▶ 2. TIME / DATE	03 / 03 / 03
3. PICTURE ADJUST	08 : 00 : 00
4. DISPLAY MODE	
5. AUTO ADJUST	
SELECT ↑ ↓ ← →, PUSH SET KEY	

#### 3. PICTURE ADJUST :

- ①. Move the cursor to the item 3.
- ②. Press the MENU button to enter into picture adjustment.
- ③. Press the CH1 - CH2 button to select the camera which needs to do an adjustment of contrast · brightness · chroma and tint.
- ④. Press the CH3 - CH4 button to raise or lower the figures.
- ⑤. Press the MENU button again to end the picture adjustment.

PICTURE ADJUST			
CONTRAST	24	CONTRAST	24
BRIGHT	32	BRIGHT	32
CHROMA	31	CHROMA	31
TINT	32	TINT	32
CONTRAST	24	CONTRAST	24
BRIGHT	32	BRIGHT	32
CHROMA	31	CHROMA	31
TINT	32	TINT	32
SELECT ↑ ↓ ← →, PUSH SET KEY			

#### 4. DISPLAY ADJUST :

- ①. Move the cursor to the item 4.
  - ②. Press the MENU button to enter into the display mode setting.
  - ③. Press the CH1 - CH2 button to move the cursor to select the item which desire to change.
  - ④. Press the CH3 - CH4 button to alter the contents.
  - ⑤. Press the MENU button again to end the display mode setting.
- BOUNDARY: the cross line On/Off switch.  
INPUT SYSTEM is used for an option of NTSC or PAL system.

DISPLAY ADJUST	
DATE / TIME	: ON
CHANNEL NAME	: ON
BOUNDARY	: OFF
INPUT SYSTEM	: NTSC
SELECT ↑ ↓ ← →, PUSH SET KEY	

#### 5. AUTO ADJUST :

- ①. Move the cursor to the item 5.
- ②. Press the MENU button to enter into the dwell time setting.
- ③. Press the CH1 - CH2 button to move the cursor to select the item which needs a change.
- ④. Press the CH3 - CH4 button to alter the contents.
- ⑤. Press the MENU button again to end the dwell time setting.

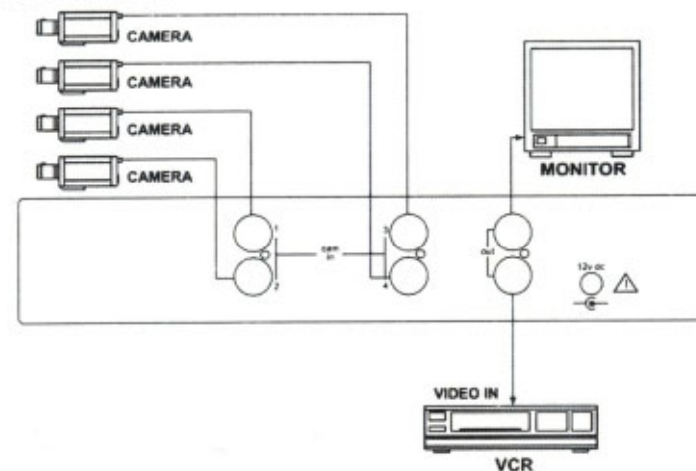
AUTO ADJUST	
AUTO DWELL TIME : 03 SEC	
CH1	: ON
CH2	: ON
CH3	: ON
CH4	: ON
QUAD	: ON
SELECT ↑ ↓ ← →, PUSH SET KEY	

#### 6. TO END THE SETUP MENU :

Press the ENTER button to exit.

### SYSTEM CONNECTION

#### Basic Connection:



### SPECIFICATIONS

Camera Inputs	BNC × 4 composite video 1.0 V p-p 75 ohms
Monitor Output	BNC × 1 composite video 1.0 V p-p 75 ohms
VCR Output	BNC × 1 composite video 1.0 V p-p 75 ohms
Resolution	NTSC: 720 x 480 pixels, PAL: 720 x 576 pixels
Refresh rate	60 fps ( NTSC ) / 50 fps ( PAL )
Power Source	DC 12V · 500 mA
Power Consumption	Max. 5 Watts
Weight	1 lb 9 oz ( 0.7 kg. ) net
Dimensions	220mm ( W ) x 140mm ( D ) x 50mm ( H ) 8 3/5" ( W ) x 5 1/2" ( D ) x 2" ( H )