# **USER MANUAL**

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## RMS8424 LCD Monitor

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## **Product Overview**

The 3U rack mounted RMS8424-HSC represents new trend in LCD monitor for broadcast and professional video applications. It has 800X600 high resolution, anti-glare TFT screens with full digital signal processing. HD-SDI, SD-SDI and analog composite video standards are accepted of this model. All video formats are scaled to fit on screen in the highest quality using full digital processing, precision scaling and Gamma correction to produce the best images available.



## **Operational Setup**

1. Unpack the RMS8424 and accompanying power supply. Physically inspect for any damage that may have occurred during shipping. Should there be any damage, immediately contact OSEE DIGITAL TECHNOLOGY LTD at +86-010-62968823

2. After inspection, install in your desired location of a standard EIA 19-inch equipment rack. Adequate ventilation is required when installed to prevent possible damage to the RMS8424 internal components.

3. Connect required cables for signal input and output. Please note that power must be applied to the RMS8424 for all outputs to be activated. All BNC connectors should be rated for  $75\Omega$ .

4. Plug the power supply into the A.C. source

5. Attach power connection from power supply to the back of the unit.

6. Fasten the power protect accessory.

7. Turn on each screen of the RMS8424 by depressing the power switch located on the front of the unit.

## **Front Panel**



#### 1. Power On/Off Switch

When indicator above the power switch in green, it indicates that power is on.

#### 2. ASPECT button/lamp

Change the aspect ratio of the picture between 4:3 and 16:9.

#### 3. SCAN

#### 4/5/6 "F1", "F2", "F3"

The function of "F1", "F2" and "F3" serve as quick-buttons; the function can be assigned in the MENU.

#### 7. MENU

Displays the main menu. "Menu Operations" on page 5

#### 8/9 Two functions

- > Press "MENU" to choose the function you need.
- When the "MENU" is not in use, the button of 8/9 can achieve the following functions:
  - 8. Blue Only
  - 9. Audio Selection and MUTE button

Audio Selection: press the button to select the monitoring audio of the corresponding monitor. Mutes: press the button again to mute the sound

• To cancel the function, press the button again.

Note: two monitors share one earphone jack, the indicator in lighting shows its audio is being monitored, in flickering shows its audio is being muted of corresponding monitor.

#### 10. Enter

- > Enter the menu items when menu is displayed,
- Enter instant parameters adjustment when menu isn't displayed. The following parameters can be regulated: AUDIO MON, VOLUME, BRIGHTNESS, CONTRAST, SATURATION, SHARPNESS, HUE.

#### **11. EARPHONE JACK**

### **Rear Panel**

#### Connectors

HD-SDI/SDI inputs comply to SMPTE259M, SMPTE292M / ITU-R BT601 Composite Video Inputs comply to SMPTE-170M

All Outputs Require Power to be applied for activation, only SDI signal can be output. Tally lamps active when connected to ground



#### Table 1 Pins of Tally IN

Tally IN (DB-9 Male)							
Pin 1	CH1-R	Pin 3	/	Pin 6	CH1-G	Pin 8	/
Pin 2	CH2-R	Pin 4	/	Pin 7	CH2-G	Pin 9	/
Pin 5	GND						



## Instructions on Monitor Display Status

## **Specifications**

Number of Screens	2
Display (Viewing Area)	8.4" diagonal (6.43"H x 4.09"V) (170.4mm x 127.8mm)
Viewing Angles	160°H x125° V
Screen Colors (Bit Depth)	262K (18 Bit)
Resolution (Dots)	800H × 600V
Dot Pitch	0.213 x 0.213mm
Contrast Ratio	320 :1
Pixel Response	Rise: 7ms, decay: 23ms typical
Dimensions	19" x 6.97" x 1.69" (482.6 x 177 x 43 mm)
Power Consumption	12VDC/10 watts. – (3.8 Amps max –CE & UL complied supply included)
Operating Temperature	0° C to 60° C
System	NTSC/PAL auto recognition
Inputs	HD-SDI / SD-SDI/ Analog Composite (BNC)
Active Outputs	HD-SDI /SD-SDI re-clocked output(BNC)

Note: Specifications are subject to change without notice.

## RMS8424 Menu Description

Item	Parameters	Value			
VIDEO	BRIGHTNESS	Typ. 0, range: -116~139			
	CONTRAST	Typ. 0, range: -128~127			
	SATURATION	Typ. 0, range: -128~127			
	SHARPNESS	Typ. 0, range: 0~15			
	HUE	Typ. 0, range: -32~31			
AUDIO	MET 1 TYPE, MET 2 TYPE, MET 3 TYPE, MET 4 TYPE	VU, PK, VU+PK, NONE			
	MET 1-L SRC	CH1~CH16			
	MET 1-R SRC	CH1~CH16			
	MET 2-L SRC	CH1~CH16			
	MET 2-R SRC	CH1~CH16			
	MET 3-L SRC	CH1~CH16			
	MET 3-R SRC	CH1~CH16			
	MET 4-L SRC	CH1~CH16			
	MET 4-R SRC	CH1~CH16			
	TEST LEV	-20db/-18db			
	HEADPHONE	ON, OFF			
	AUDIO MON	MET 1, MET 2, MET 3, MET 4			
	VOLUME	-30~0db			
MARKER	AREA	2.35:1, 1.85:1, 15:9, 14:9, 13:9, 4:3, OFF			
	SAFE MARKER	ON, OFF			
	CENTER	ON, OFF			
	90%	ON, OFF			
	80%	ON, OFF			
ZOOM	ZOOM	NORMAL, UNDER SCAN			
H/V DELAY	H/V DELAY	H/V, V, H, OFF			
STATUS	STD DISP	AUTO OFF, ON, OFF			
INDICATION	TC DISP, UMD DISP	ON, OFF			
(ON-SCREEN	TC POS, UMD POS	TOP, BOTTOM			
DISPLAY)	UMD COLOR	RED, GREEN, YELLOW, WHITE			
	UMD	an input of up to characters (including alphbet, digits			
		and some symbols) is all owned			
CONFIG	DEFAULT	UNSET, SET			
	F1, F2, F3	H/V DELAY, VOLUME DOWN, VOLUME UP, OSD CONTROL, COLOR BAR, AUDIO MON, AREA MARKER, SAFE MARKER			
	OSD CONTROL	ON, OFF			
	COLOR BAR	DISABLE			

#### **Quick Button Specification**

#### 1 ENTER

When MENU is not used, you can press ENTER to regulate the following parameters: AUDIO MON, VOLUME, BRIGHTNESS, CONTRAST, SATURATION, SHARPNESS, HUE.

Press ENTER seven times, parameters will revolve. You can get the exact value combined with buttons of  $\land$  (up) or  $\lor$ (down).

AUDIO MON: Have four options of MET1, MET2, MET3 and MET4. When MET1 is selected, the first audio source will be monitored. Likewise, if you select other MET, the corresponding audio source will be monitored.

VOLUME(音量): Used to regulate the volume. Range: -30~0dB, the maximum: 0dB.

BRIGHTNESS(亮度): Used to regulate the brightness, range: -116~139, the typical: 0.

CONTRAST(对比度): Used to regulate the contrast of image, range: -128~127, the typical: 0.

SATURATION(饱和度): Used to regulate the saturation of image, range: -128~127, the typical: 0.

SHARPNESS(视觉敏锐度): Used to regulate the sharpness of image, range: 0~15, the typical: 0.

HUE(色调): Used to regulate the hue of image, range: -32~31, the typical: 0.

Note: regulate the option DEFAULT of sub-MENU CONFIG in the MENU, make DEFAULT at SET, and you can reset the following parameters of BRIGHTNESS, CONTRAST, SATURATION, SHARPNESS, HUE to zero.

#### 2 F1, F2, F3

Set steps: press MENU, combined with buttons of  $\land$  (up) or  $\lor$ (down), you can find CONFIG in the sub-MENU, also combined with buttons of  $\land$  (up) or  $\lor$ (down), and you will find F1, F2, F3.

F1, F2, F3 can be used as quick-button, and each has the same eight options to define. When you choose one option, for example, if you have already set F1 at H/V DELAY, you can press F1 directly to realize each function of H/V DELAY, and need not set in the MENU. Of course you can set F1 at other option accordingly.

The function of F1, F2 and F3 can be set in the MENU. The options are the following: H/V DELAY, VOLUME DOWN, VOLUME UP, OSD CONTROL, COLOR BAR, AUDIO MON, AREA MARKER and SAFE MARKER. And each option will be specified as follows.

H/V DELAY: H/V, V, H, OFF. Function: horizontal blank, vertical blank, horizontal/vertical blank, or no blank.

VOLUME DOWN: Volume become down gradually.

VOLUME UP: Volume become up gradually.

OSD CONTROL: Display TC code, UMD code and audio meter or not.

COLOR BAR: Display COLOR BAR or not.

AUDIO MON: Monitor one audio source of four audio sources.

AREA MARKER: Images show with one scale of 2.35:1, 1.85:1, 15:9, 14:9, 13:9, 4:3 or OFF.

SAFE MARKER: Display CENTER mark, 90% mark and 80% mark or not.

Note: Please set F1, F2 and F3 to meet your actual requirement. For example, if you often use H/V DELAY, you'd better set F1, F2 or F3 at H/V DELAY.

3 MENU

When you want to change the value of a parameter, you may use MENU, and you can follow four steps.

Step 1:

Press MENU, and you can enter the main MENU.

➤ Step 2:

Press buttons of  $\land$  (up) or  $\lor$ (down) to choose a option, and when you get one, press ENTER, and you can enter the sub-MENU.

➤ Step 3:

Press buttons of  $\land$  (up) or  $\lor$ (down) to choose a parameter, then press ENTER, and press  $\land$  or  $\lor$  to acquire the exact value.

► Step 4:

Press MENU to return. You can follow the same step to set other parameters.

In a word, when you set a parameter, the buttons of ENTER, MENU,  $\land$  and  $\lor$  will be used frequently. The function of each button is listed below.

ENTER: Enter the sub-menu

MENU: Return to the super-menu

 $\land$  (up) or  $\lor$ (down): Switch the options in the same menu or set the value of a parameter.