speco technologies®
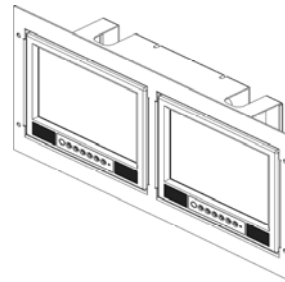
VM8RM2LCD
8.4" Rack Mount Monitor

User's Manual

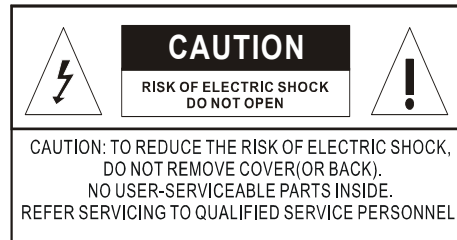**Speco Technologies**
200 New Highway
Amityville, NY 11701
800-645-5516
www.specotech.com

C€   FC

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:

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER(OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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) instructions in the literature accompanying the product.

Important Information

IMPORTANT SAFEGUARDS

1. READ INSTRUCTIONS
All the safety and operating instructions should be read before the unit is operated.

2. RETAIN INSTRUCTIONS
The safety and operating instructions should be retained for future reference.

3. HEED WARNINGS
All warnings on the unit and in the operating instructions should be adhered to.

4. FOLLOW INSTRUCTIONS
All operating and usage instructions should be followed.

5. CLEANING
Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with a dry cloth.

6. ATTACHMENTS
The manufacturer of this unit does not make any recommendations for attachments, as they may cause hazards.

7. WATER AND MOISTURE
Do not use this unit near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

8. ACCESSORIES
Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury, and serious damage to the unit. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

9. VENTILATION
Slots and openings at the rear cabinet and bottom are provided for ventilation, these are to ensure reliable operation of the unit, and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug, or other similar surface. This unit should never be placed near or over a radiator or heat source. This unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

10. POWER SOURCE
This unit should be operated only from the type of power source indicated on the rating plate. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.

11. POWER-CORD PROTECTION
Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

12. LIGHTNING
To protect your unit from 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 unit due to lightning and power line surges.

13. POWER LINES
An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall onto or against such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

14. OVERLOADING
Do not overload wall outlets and extension cords, as this can result in a risk of fire or electric shock.

15. OBJECT AND LIQUID ENTRY
Do not push objects through any openings in this unit, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock. Never spill or spray any type of liquid into the unit.

16. HEAT
The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

17. CONNECTING
When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause a product damage. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.

18. LCD
Do not press on or jolt the LCD panel. Doing so may cause the LCD panel glass to break and injury may occur. Should the LCD panel be broken and liquid leaks out, do not inhale or swallow it. Doing so may cause poisoning. If you have got it into your mouth, wash it out and consult your doctor. If your hands or clothes have touched it, wipe them with alcohol and a cleaning cloth and then wash them well.

Safety Precautions

Federal Communications Commission (FCC) Statement

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.

● You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received including interference that may cause undesired operation

Table of Contents

Components

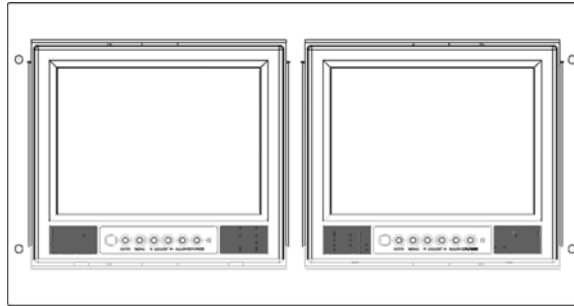|		
(1)	Rack mount	1
(2)	LCD Color Monitor	2
(3)	Accessories	
	(A) Power cord	2
	(B) User Manual	1
	(C) Remote Controller	1
	(D) Adapter	2
	(E) PC audio cord	2
	(F) RCA audio cord	2
	(G) VGA cord	2

5

Features

■ Professional TFT LCD for surveillance in 8.4" with multiple connections

■ Compatible with SVGA (800X600)

■ Picture-In-Picture feature that allow multi-picture display

■ High brightness level and contrast ratio with super wide viewing angle

■ Built-in 3D comb filter and 3D de-interlace for display picture performance

■ Fast response time and refresh rate without time lagging.

■ Provides 6500 K and 9300 K color temperature selection for user's preference

■ Provides Key Lock and power memory function for easy management

■ CCD mode control that enable auto-adjust incoming video signal level

■ Video looping output supports 75ohm auto termination

■ Support audio and live-out function with stereo phone jack output

■ Remote Controller included for convenient usage

■ Video inputs support NTSC / PAL standards

■ VESA standards bracket (75mm x 75mm)
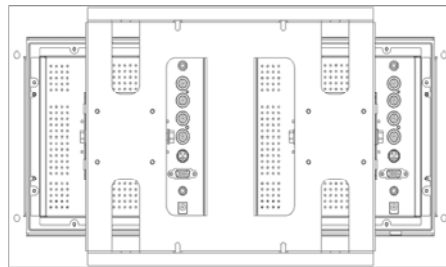
■ Rack mount for standard 19" Rack.

Exploring Your New Monitor

You can operate your monitor by using the buttons on the front panel. The side panels provide the inputs to connect other equipment to your monitor.
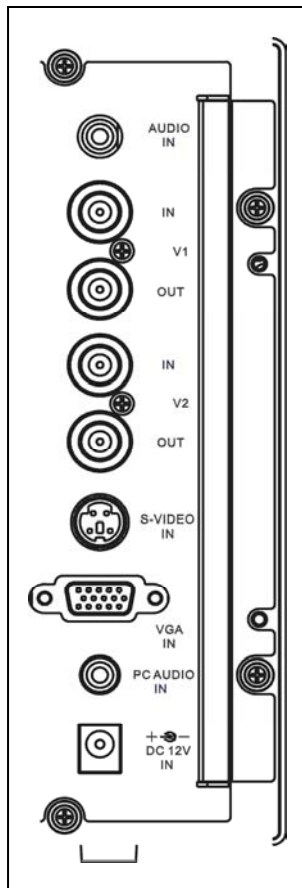
Front Panel

Back   **Side**
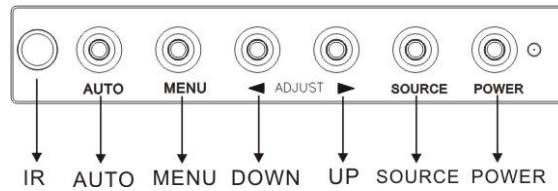
7

1. **AUDIO IN (R, L)**
   Stereo Audio Signal Input, this input is for
   VIDEO1 , VIDEO2 , S-VIDEO
   (Refer to Note below)

2. **VIDEO 1 IN**
   Composite signal Input for VIDEO 1
   VIDEO 1 OUT
   Video looping output for VIDEO 1

3. **VIDEO 2 IN**
   Composite signal Input for VIDEO 2
   VIDEO 2 OUT
   Video looping output for VIDEO 2

4. **S-VIDEO IN**
   Y/C separated signal input

5. **VGA IN**

6. **PC AUDIO IN**

7. **DC POWER SOCKET**
   DC 12V / 5A

8

AUTO: Auto-optimize displaying picture under PC mode.
                  Enter: This " Auto" Button can be either "Enter" function in OSD Menu)

MENU: OSD menu ON / OFF control.(EXIT Item)

ADJUST: Increase or decrease the value on OSD menu.
       ▶ **Up:** Increase value or turn ON / OFF function.
      ◀ **Down:** Decrease value or turn ON / OFF function

SOURCE: Select input signal from AV1, AV2, S-Video or VGA (PC).

POWER: Monitor power ON / OFF. At OFF mode, monitor will be at standby status.
                Green Light: ON Mode
                Light OFF: OFF Mode

9

Picture	PIP	Function	VGA
Brightness		< 55 >	
Contrast		< 50 >	
Sharpness		< 10 >	
Hue		< 50 >	
Saturation		< 50 >	
Color Temp		< 6500 >	
AspectRatio		< 4:3 >	

Brightness: Picture brightness adjustment

Min. ~ Max.:0~100 / Default:55

Contrast: Picture Contrast adjustment

Min. ~ Max.:0~100 / Default:50

Sharpness: Sets the desired sharpening enhancement to the picture

Min. ~ Max.:0~100 / Default:5

Hue: To adjust the color tint value

Min. ~ Max.:0~100 / Default:50

Saturation: Picture Saturation adjustment

Min. ~ Max.:0~100 / Default:70

Color Temp: Selects color temperature of 6500°K or 9300°K.

Aspect Ratio: To change the display mode 4:3/16:9/Under/Over.

10

Picture	PIP	Function	VGA

Multi Picutre	<	None	>
Source	<	CVBS2	>
PIP Swap		OK	

Multi Picture: This function allows the PIP mode to be selected.

Source: The function allows the PIP Sub source to be selected.

PIP Swap: Enable PIP sources switching.

11

Picture	PIP	Function	VGA
Language		< English >	
OSD Menu Timer		< 60 >	
Mute		< Off >	
Display Input		< Off >	
Auto Source		< Off >	
Reset		OK	

Language: English

OSD Menu Timer: Select 5 ~ 60 to determine the time menu show on screen.

Default: 30

Mute: To disable the audio function. Default: OFF

Display Input: Select ON/OFF. Default: ON

Auto Source: The monitor will auto detect the video source when power ON.

Select ON / OFF. Default: OFF

Reset: Restore all settings to Factory default.

Picture	PIP	Function	VGA
H Position		< 51 >	
V Position		< 39 >	
Phase		< 6 >	
Clock		< 40 >	
Auto Adjust		OK	

H-position :   Allows adjustment for horizontal position.

V-position :   Allows adjustment for vertical position.

Phase :   Is used to adjust best picture quality.   It adjusts the sampling phase across one pixel time.   When the phase is not adjusted properly, the picture will be unclear.   Therefore this value should be carefully adjusted.
Note: improper adjustment will cause image failure.

Clock :   Is used to adjust best picture quality. It adjusts the numbers of the pixel clock across one line time. Therefore it can affect the picture position and size.
Note: improper adjustment will caused image failure.

Auto Adjust :   Auto detect screen detail data such as clock and phase.

13

Troubleshooting

Before calling a service technician, please check the following table for a possible cause of the problem and some solution.

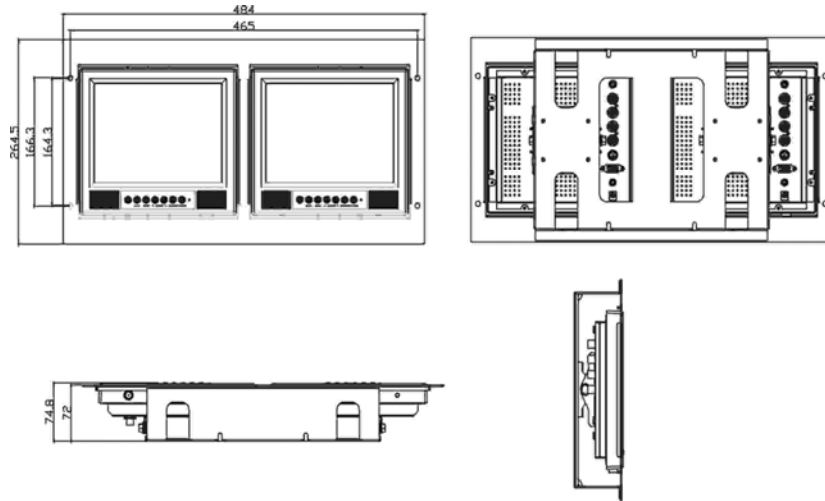| Symptom	Solution
Monitor will not turn on	● Makes sure the power cord is plugged in, then press POWER button.
No picture, no sound	● Check cable connections.
No sound, picture OK	● Check audio Cable Connections
	● Try pressing Volume up button in the Menu.
Poor color, sound OK	● Check cable connections
	● Adjust Video set up menu.
Poor color or no color	● Adjust Color and / or TINT (NTSC only)

Specification

Model	8.4" LCD
Button Control	Power / Source / Adjust / Menu / Auto
Display Resolution	800 x 600 @ 56/60/72/75
Active Area	170.4(H) x 127.8(V)mm
Dot Pitch	0.213 (H)x 0.213(V)mm
Display Ratio	4:3
Brightness (Central)	250cd/m2 (*1)
Contrast Ratio	600 :1 Typ.
Viewing Angle	Left 75° / Right 75° / Up 60° / Down 70° CR>10
Response Time	16ms
Input Voltage	DC12V In
Input Signal	1Vp-p composite video
Input Impedance	75 ohm
Output Impedance	75 ohm (Auto Termination)
Scanning System	NTSC: 525 lines, 60 fields / sec ; PAL: 625 lines, 50 fields / sec
VGA Input	15 pin D-SUB connector x 1
Video Input/ Output	BNC x 2 / BNC x 2 Looping Output Auto Termination
Audio Input(L/R)	Ear Phone x 2
S-Video	4-pin DIN connector x 1
Speaker	1W + 1W
Power Consumption	17.2W
Dimension	484(W) x264.5(H) X74.8(D) mm
Weight	N.W./ G.W.: 1.24kg / 2.35kg

(∗1) The brightness specification is from panel specification. Design and Specifications are subject to change without notice.

8.4" rack mount

Speco Technologies is constantly developing product improvements.   We reserve the right to modify

product design and specifications without notice and without incurring any obligation.

Rev. 08/26/10.