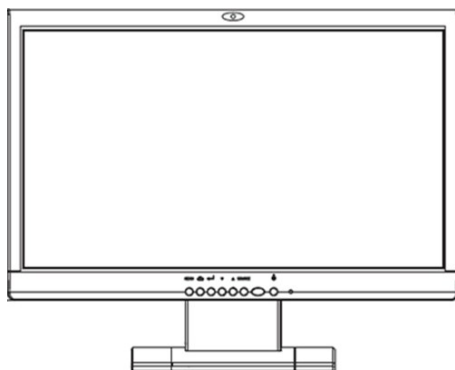




M19LED2 LCD MONITOR with HDMI

M215LED2 LCD MONITOR with HDMI

USER MANUAL



Speco Technologies

200 New Highway

Amityville, NY 11701

800-645-5516

www.specotech.com



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:



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

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Components

- (1) LCD Color Monitor
- (2) Accessories
 - (a) Power cord
 - (b) User Manual
 - (c) PC audio cord
 - (d) *VGA cord
 - (e) Adapter
 - (f) Base plate

(*) VGA cord (pin4 and pin11 N/A)

Feature

1. Professional TFT LCD for surveillance.
2. Compatible with VGA(640 x 480), SVGA(800 x 600),XGA(1024 x 768), SXGA(1280 x 1024) , WXGA(1360 x 768), WXGA+(1440 x 900), WSXGA+(1680 x 1050), (1920 x 1080) resolution, support HDMI1080p
3. All plastic case.
4. Video input HDMI x 1 / BNC x 1 / VGA x 1.
5. Video output BNC x 1.
6. Support media player USB x 1,.
7. Audio input RCA x 2 / phone jack x 1.
8. Audio speaker x 2.
9. High brightness level and contrast ration with super wide viewing angle.
10. Built-in 3D comb filter and 3D de-interlace for crispy picture performance.
11. Fast response time and refresh rate without time lagging.
12. Support 6500K 、9300K color temperature selection.
13. Video Inputs support NTSC / PAL standards.
14. Video looping Output supports 75ohm auto termination.
15. VESA standards (100mm x 100mm) bracket.

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



1	Menu button
2	Select menu function / - VOL+
3	
4	Menu item down button
5	Menu item up button
6	Video source select button / enter
7	IR receiver
8	Power button

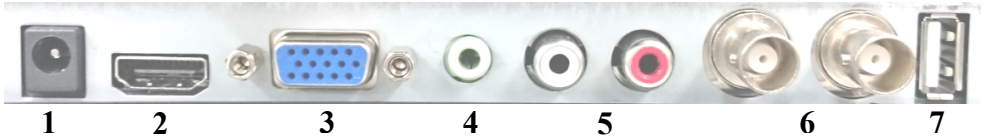
Back



Side



Backside Connections



Back Panel

1. Power in :DC 12V input
2. HDMI: HDMI input(1080p)
3. VGA: VGA input.(VGA cord pin4 and pin11 N/A)
4. PC AUDIO IN: PC audio input
5. AUDIO IN/OUT: RCA jack
6. VIDEO IN: Camera or DVR source input
- VIDEO OUT: Video looping output
7. USB: MP3, JPEG, MPEG4.

Setup your Monitor



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

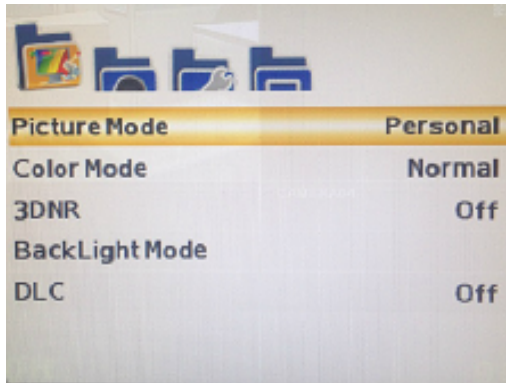
- VOL+: Select menu function / Increase or decrease the value on OSD menu.
▼ ▲ : +: Increase value
-: Decrease value

SOURCE: Select input signal from AV / HDMI / VGA (PC) or USB
Enter function

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

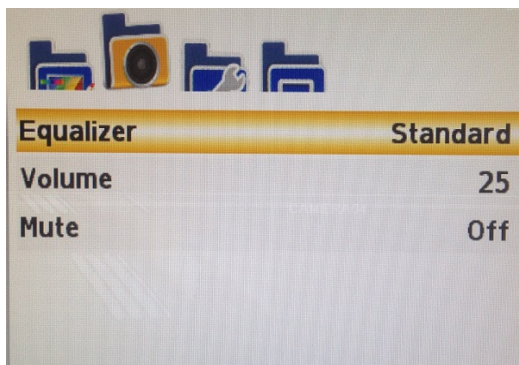
Green Light: ON
Red Light: OFF

Picture setting



- [Picture Mode]** Select the picture mode to Standard, Dynamic, Soft or Personal.
- Contrast:** Permits adjustment of contrast between light and dark areas of the picture.
- Brightness:** Adjustment the intensity of color.
- [Color Mode]** Cool 、 Normal or Warm.
- [3DNR]** Off 、 Weak 、 Middle or Strong.
- [Backlight]** Adjust backlight.
- [DLC]** Dynamic luminance control on/off

Audio Setting

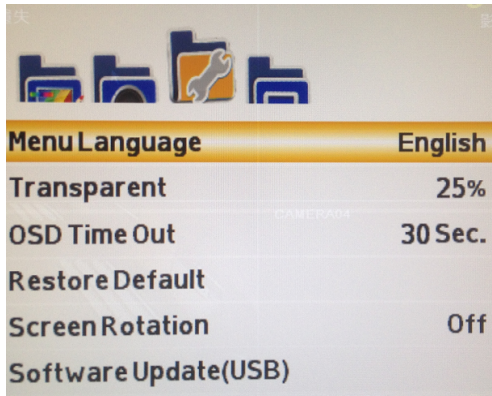


[Equalizer] Select the Equalizer mode to Standard 、 Music 、 Movie 、 Sports or Personal.

[Volume] Control built-in speaker volume.

[Mute] Mute on/off

Setup



[Menu Language] Change the OSD language to English 、 French or Spanish.

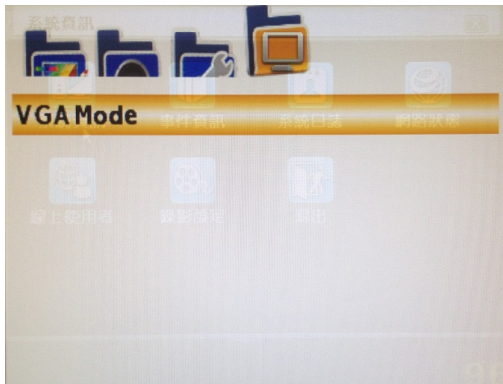
[Transparent] Adjusts the transparent value to 0% 、 25% 、 50% 、 75% or 100%.

[OSD Time out] Adjusts the OSD Time out value to 5sec 、 15sec 、 30sec 、 45sec or 60sec.

[Restore Default] Reset the device to default status.

[Screen Rotation] Rotate screen.

[Software Update(USB)] Update F/W



[VGA Mode]

H-Pos: Adjusts the horizontal position.

V-Pos: Adjusts the vertical position.

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.

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.

Auto : Auto adjusting.

Applicable Timing

VGA Timing

Resolution	H Freq. (kHz)	V Freq. (Hz)	Pixel clock (MHz)	19W (18.5")	22W (21.5")
				1920*1080 60Hz	1920*1080 60Hz
640x350@70	31.469	70.086	25.175	●	●
640x480@60	31.469	59.940	25.175	●	●
640x480@72	37.861	72.809	31.500	●	●
640x480@75	37.500	75.000	31.500	●	●
800x600@56	35.156	56.160	36.000	●	●
800x600@60	37.879	60.317	40.000	●	●
800x600@72	48.077	72.188	50.000	●	●
800x600@75	46.875	75.000	49.500	●	●
1024x768@60	48.363	60.004	65.000	●	●
1024x768@70	56.576	70.069	75.000	●	●
1024x768@75	60.023	75.029	78.750	●	●
1152x864@75	67.500	75.000	108.000	●	●
1280x720@60	45.000	60.000	74.250	●	●
1280x768@60	47.396	59.995	68.250	●	●
1280x1024@60	63.980	60.000	108.000	●	●
1280x1024@70	74.882	69.853	127.000	●	●
1280x1024@75	79.976	75.025	135.000	●	●
1366x768@60	48.540	59.930	80.000	●	●
1680x1050@60	146.250	65.290	59.954	●	●
1920x1080@60	67.500	60.000	148.500	●	●

HDMI Timing

Format	Resolution	Type	Vertical frequency
480i/p	720x480	SD	60Hz
720p	1280x720	HD	60Hz
1080p	1920x1080	Full HD	60Hz

PC RGB Input

Input Signal	Analog RGB 10.7 Vp-p
Input Impedance	75 Ohm ± 2%
Polarity	Positive, Negative
Amplitude	0~0.7 ± 0.05Vp-p
Multi-mode Supported	Horizontal Frequency: 30~80KHz / Vertical Frequency: 50~75Hz

Power Supply

Input Voltage	100~240VAC, 50/60Hz
Output Voltage	+12V DC, 5A

Environment

Operation Condition	Temperature	32°F to 122°F
	Relative Humidity	20% to 85%
Storage Condition	Temperature	14°F to 140°F
	Relative Humidity	5% to 85%

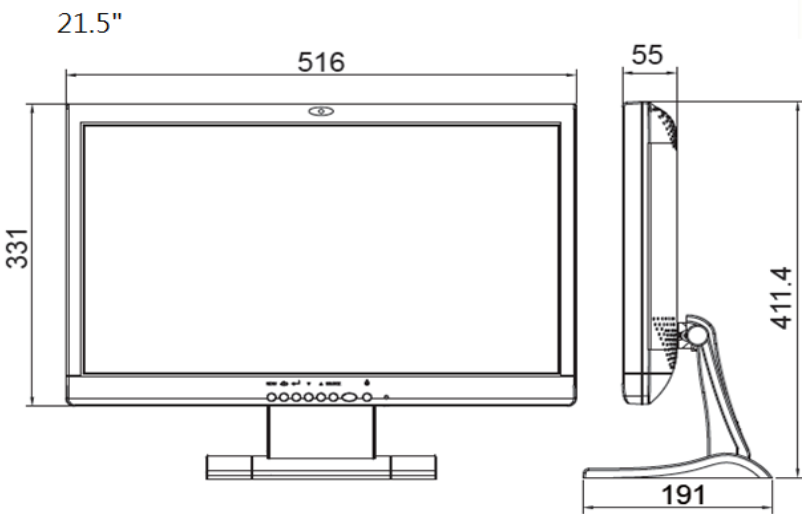
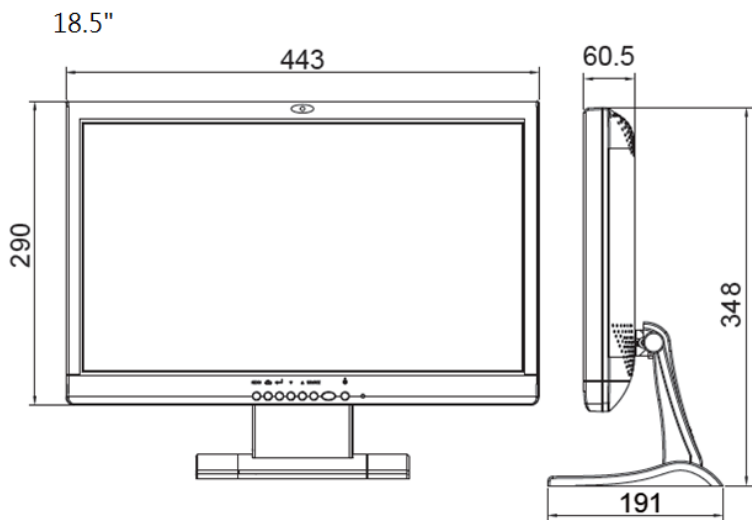
LCD Color Monitor Specification

Model	M19LED2	M215LED2
Button Control	Power / OSD Control / Source	
Display Resolution	1366 x 768 @ 60 (Max)	1920 x 1080 @ 60 (Max)
Active Area	409.8(H) x 230.4(V)mm	476.64.1(H) x 268.11(V)mm
LCD Panel Type	TN mode, Normally white	
Dot Pitch	0.3(H) x 0.3(V)mm	0.248(H) x 0.248(V)mm
Display Ratio	16:9	
Display Color	16.7M colors	
Brightness (Central)	250cd/m2	
Contrast Ratio	1000:1	
Viewing Angle	Left 85° / Right 85° / Up 80° / Down 80° CR>10	
Response Time	5ms	
Input Voltage	DC12V	
Input Signal	1.0Vp-p	
Input Impedance	75 ohm	
Output Signal	1.0Vp-p±0.2Vp-p composite video (Auto Termination)	
Scanning system	NTSC:525 lines, 60 fields / sec ; PAL:625 lines, 50 fields / sec	
Video Input / Output	HDMI x1, Video In x 1 (BNC), Video Out x 1 (BNC), VGA x 1,	
Audio Input	Audio In x 2(L/R), PC-Audio In x 1	
Operating Temperature	32°F ~ 122°F	
Storage Temperature	-4°F ~ 140°F	
Dimension	443(W) x 348(H) x 60.5(D)mm	516(W) x 411.4(H) x 55(D)mm
Weight	N.W./G.W.: 6.614lb (6lb 9.822 oz) / 9.921lb (9lb 14.73 oz)	N.W./G.W.: 7.937lb (7lb 14.99 oz) / 11.68lb (11lb 10.95oz)

- (1) The brightness specification is from panel spec, it is not guaranteed for all the specified range.
 (2) Design and Specifications are subject to change without notice.

*VESA mount M4x10L

Dimensions



Unit: mm