

# VM17LED – VM19LED



**Please read this manual thoroughly before operation and keep it handy for further reference.**

**Introduction**

Congratulations on your purchase. You can expect only the sharpest and most brilliant color images from this monitor. Featuring an easy to use OSD control and built in speakers, you will find this monitor both easy to use and a pleasure to look at.

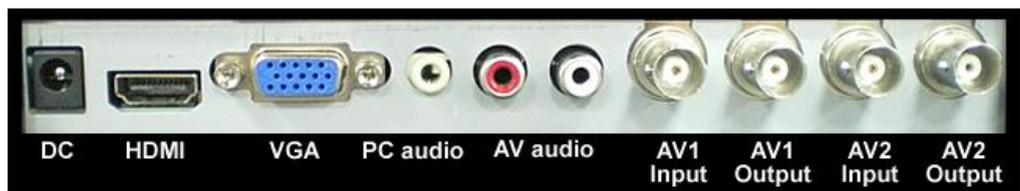
**Package Contents**

- One LED Monitor
- 12V DC Adapter
- Power cord
- D-Sub 15-pin VGA connector Cable
- User's Guide

**Hardware Installation**

The following sections in this guide give clear, step-by-step descriptions of the installation process and explain how to use the monitor for optimum results.

Please pay attention to the Regulations and Warnings Section of this user's manual before setting up the display monitor. Failure to do so may inadvertently result in personal injuries or machine damage.



## Specifications (VM17LED", VM19LED")

Size	17"	19"	
Composite Output	(BNC) x 2		
Composite Input	(BNC) x 2		
Single Connector	(VGA) x 1, (RCA) x 2 (PC Audio) x 1, (HDMI) x 1		
Speaker	1.5W x 2		
Display Mode	Video 1/ Video 2/ PC/ HDMI		
AC power	AC 100~240V 50/60Hz		
Temperature	Operation: 0°~40°C(32° ~104°F) , Storage: -10°~60°C(14° ~140°F)		
Power Consumption	15W Max. in "ON" Mode Under 3W in Power Saving Mode (100 Vac) Under 5W in Power Saving Mode (240 Vac)		
OSD Control	Picture Mode, Contrast, Brightness, Color, Tint, Sharpness, Color Temp, DNR		
OSD Languages	English, German, French, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech		
Auto Adjustment	Yes (Only for VGA mode)		
De-interlace	Yes		
Wall mount	Optional		
Accessories	Adapter, Power code, Manual, VGA cable		
Safety	UL, FCC, CE, ROHS		
Tilt	-5°~15°		
Humidity	10%~90%		
Monitor scan	Microprocessor controlled		
Pixel pitch	0.264x0.264mm	0.294x0.294mm	
Pixel format	1280x1024	1280x1024	
Response time	5ms	5ms	
Color depth	16.7 Million Colors		
Viewing angle	Vertical -80°~80° Horizontal -85°~85°		
Display area (H" x V")	13.3"x10.6"	14.8"x11.8"	
Dimension (W" x H" x D")	15.2" x 15.2" x 6.5"	16.7" x 16.3" x 6.5"	
Weight (monitor only)	Plastic Type	7.5 lbs	7.7 lbs
	Metal Type	14.3 lbs	15.7lbs

## VGA Timing

Item	Resolution	H Freq.(kHz)	V Freq.(Hz)
1	640x400@70	31.460	70.080
2	640x480@60	31.469	59.940
3	640x480@72	37.861	72.809
4	640x480@75	37.500	75.000
5	720x400@70	31.460	70.080
6	800x600@56	35.156	56.250
7	800x600@60	37.879	60.317
8	800x600@72	48.077	72.188
9	800x600@75	46.875	75.000
10	1024x768@60	48.363	60.004
11	1024x768@70	56.476	70.069
12	1024x768@75	60.023	75.029
13	1280x1024@60	63.981	60.020
14	1280x1024@75	79.976	75.025

**Remark:**

**The timings with presetting are recommended.**

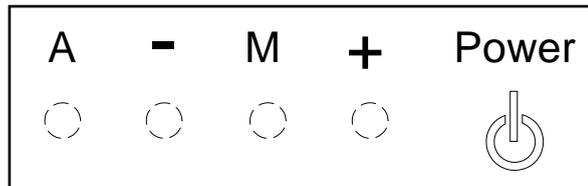
**Users have to adjust the timing manually if it is not included in the presetting list**

### Monitor and OSD Control

The LED color monitor has a simple control layout for controlling the monitor and OSD (On Screen Display) functions. The table below summarizes the control keys and their related functions.

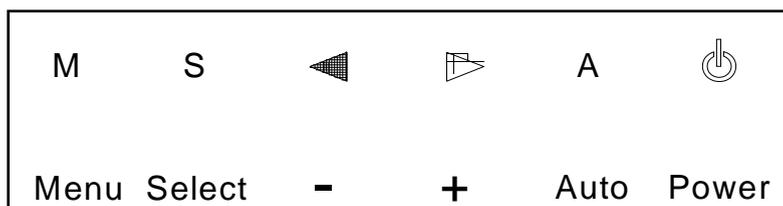
#### 5-Key feature

Keys	Function Description
Power	Toggle the display between standby mode and on/off. (Press "Power" and waiting 6 sec., monitor will be display )
+	Switch setting item. Increase the value of the chose item.
M	Enter the main menu of the on-screen display (OSD).
-	Switch setting item. Decrease the value of the chose item.
A	Switch mode "PC", "AV1", "AV2", "HDMI".



#### 6-Key feature

Keys	Function Description
Power	Toggle the display between standby mode and on. (Press "Power" and waiting 6 sec., monitor will be display )
A / Auto	Automatically adjusts H-Position, V-Position, Pixel Clock and Phase for an optimal image in PC mode only.
+ / ►	Switch setting item. Decrease the value of the chose item.
- / ◄	Switch setting item. Increase the value of the chose item.
S / Select	Switch mode "PC", "AV1", "AV2".
M / Menu	Enter the main menu of the on-screen display (OSD).



## LED Status Display

The following table describes the various power states of the LED monitor as represented by different LED color.

Power State	LED Color
On	Green
Standby	Red
No power	Blank

## OSD Menu

## Picture Mode



1. Picture Mode	Press -/◀ OR +/▶ to select the picture mode "User, Standard, Movie, Vivid "
2. Contrast	This is used to set the brightness of the screen. Press -/◀ OR +/▶ to adjust the parameter.
3. Brightness	This is used to adjust the image contrast. Press -/◀ OR +/▶ to adjust the parameter.
4. Tint	This is used to adjust the image Tint. Press -/◀ OR +/▶ to adjust the parameter.
5. Saturation	This is used to adjust the image saturation. Press -/◀ OR +/▶ to adjust the parameter.
6. Sharpness	Adjust the sharpness. It makes the image become soft. Press -/◀ OR +/▶ to adjust the parameter.
7. Color Temp.	Press -/◀ OR +/▶ to adjust the color tones. " Cool , Warm , Normal "
8. DNR	Press -/◀ OR +/▶ to adjust the noise reduction. "High , Low, Off, Mid "
Note: VGA Mode: Contrast, Brightness, Color Temp., Auto Adjust.	

## Sound Mode



1. Volume	Press -/◀ OR +/▶ to adjust volume level.
2. Mute	Press -/◀ OR +/▶ to select sound " Off, On ".

## Setting Mode

### AV/HDMI Mode



### VGA Mode



1. Language	Press -/◀ OR +/▶ to select language.
2. H. Position	Move the display picture left or right. Press -/◀ OR +/▶ to adjust the parameter.
3. H Zoom	Adjust the H-size of the display picture Press -/◀ OR +/▶ to adjust the parameter.
4. V Position	Move the display picture up or down. Press -/◀ OR +/▶ to adjust the parameter.
5. V Zoom	Adjust the V-size of the display picture Press -/◀ OR +/▶ to adjust the parameter.
6. Clock	Press -/◀ OR +/▶ to adjust the parameter.
7. Phase	Press -/◀ OR +/▶ to adjust the parameter.
8. Scale Mode	Adjust the V-size of the display picture Press -/◀ OR +/▶ to adjust " Full, 16:9 ".
9. Reset	Recall Default value.
Note: " Clock" and "Phase " setting only in VGA Mode	

## PIP/POP Setup Mode



1. Multi Window	Press -/◀ OR +/▶ to select "PIP, POP, Off " mode.
2. Sub Source	Press -/◀ OR +/▶ to select "AV, VGA" mode.
3. Size	Adjust the size of Sub Source window. Press -/◀ OR +/▶ to select "Large, Small, Mid "
4. Position	Move the position of Sub Source window. Press -/◀ OR +/▶ to select "L U, R D, R U, L R" position.
5. Border Color	Choose the border color of Sub Source window. Press -/◀ OR +/▶ to select "Black, Blue" color.
6. Sound Source	Press -/◀ OR +/▶ to select "Main, Sub" mode.
7. Swap	Press S/Select to Swap the Source of Main and Sub.

### Note:

1. AV1 and AV2 , HDMI and VGA cannot be displayed at the same time on the monitor in PIP / POP mode.
2. If POP mode is selected both images are scaled to fit the screen.

**Caring for your LED Monitor**

The LED color monitor is a sensitive piece of electronic equipment. Proper care can prevent accidentally damaging the LED panel or the monitor itself. By following these guidelines you can ensure many years of trouble free use.

1. The LED monitor's plastic casing and LED glass panel can be cleaned with a soft, lint-free cloth. **Never use scrub pads or other cleaning materials with abrasive surfaces to clean your LED monitor!**
  - a. A slightly damp cloth or newspaper may be used to clean the glass plate of fingerprints or smudges.
  - b. For the plastic case, a mild detergent may be used to clean the surface. However, you should ensure not to use too much detergent or water as this could leak into the interior of the casing.
2. Do NOT use cleaning fluids based on alcohol, methylated spirit, or ammonia. The glass plate has a hard surface coating to prevent scratches. However, the use of strong chemical cleaning agents may damage this coating. Use only a mild soap or detergent and water or specially formulated cleaners made for cleaning glass panels.
3. Avoid direct contact with water or other liquids. Never use the LED monitor in or around areas where water may pose a potential hazard to normal operation.
4. Only use the LED monitor indoors, and avoid monitor contact with oil, vapor, steam, moisture and dust. The LED monitor should be used in a clean and low humidity environment.
5. Keep the LED monitor away from heaters or other heat sources such as lighting equipment or direct sunlight.
6. Keep the LED monitor away from sharp object to touch the screen like fingernail and pencil.

**WARNING:** Any unauthorized modification to this equipment could result in the revocation of the authorization to operate the equipment and void the product warranty.

**Power button does not respond**

- Check the power cord to ensure that it is securely plugged into the monitor base and also into the electrical outlet.
- Ensure there is electrical power coming from the AC outlet. Use another device to check for power.
- Unplug the power cord of the monitor from the AC outlet, wait a few minutes, then to plug the power cord into the AC outlet again. This will reset the monitor and power supply.

**No image on the screen**

- Ensure that the DB-15 signal cable is properly connected to the display card/computer.
- Check the DB-15 signal cable connector on both ends for bent or pushed-in pins.
- The display card should be properly seated in its card slot.
- Ensure that the computer's power switch is ON.
- Ensure that the monitor's power switch is ON.
- Unplug the power cord of the monitor from the AC outlet, wait a few minutes, then to plug the power cord into the AC outlet again. This will reset the monitor and power supply.

**Power LED is RED (with no image on the screen)**

- Check the DB-15 signal cable to ensure that it is properly attached to the graphics display card.
- Check the DB-15 signal cable on both ends for bent or pushed-in pins.
- Make sure the computer is not in a power-saving mode (move the mouse or press a key on the keyboard).

**No sound coming from the audio speakers**

- The audio cable should be connected to the lineout on the audio card and the line-in on the monitor. Ensure that the audio cable is properly connected.
- Inspect the audio cable for any apparent damage. Double check by switching to another audio cable to see if the audio works.

**FCC compliance**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: 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 generation, 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 to 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.

**Precautions**

\* Read all of these instructions and save them for later use.

\* Follow all warnings and instructions on the product.

\* Product

- Do not cover or block the vent holes in the case.
- Do not insert sharp objects or spill liquid into the LED monitor through cabinet slots. They may cause accident fire, electric shock or failure.
- Disconnect the power plug from the AC outlet if you will not use it for an indefinite period of time.
- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage potentials or other risks.
- Do not touch the screen directly with your fingers. You may damage the screen, and oil from your skin is difficult to move.
- Do not apply pressure to the screen. The LED is very delicate.

\* Power

- Use the type of power indicated on the marking label.

\* Plugs

- Do not remove any of the prongs of the monitor's three-pronged power plug.
- Disconnect the power plug from the AC outlet under following conditions:
  - ⊙ If you will not use it for an indefinite period time.
  - ⊙ When the power cord or plug is damaged or frayed.
  - ⊙ If the product does not operate normally when the operation instructions are followed. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - ⊙ If the product has been dropped or the cabinet has been damaged.
  - ⊙ If the product exhibits a distinct change in performance, indicate a need for service.

\* Power and extension cords

- Do not allow anything to rest on the power cord.
- Do not locate this product where persons will walk on her cord.
- Use the proper power cord with correct attachment plug type. If the power source is 120 V AC, use a power cord that has UL and C-UL approvals. If the power source is a 240 V AC supply, use the tandem (T blade) type attachment plug with ground conductor power cord that meets the respective European country's safety regulations, such as VDE for Germany.
- Do not overload wall outlets or power cords. Ensure that the total of all units plugged into the wall outlet does not exceed 10 amperes.
- Ensure that the total ampere rating of all units plugged into the extension cord is not over the cord's rating.
- If the power supply cord, which came with your monitor, is to be connected to the PC instead of the wall outlet, this equipment is to be used with UL/TUV approved computers with receptacle rated 100~240V AC, 50/60Hz, 2.0A(minimum).

\* Environment

- Place the monitor on a flat and leveled surface.
- Place the monitor in a well-ventilated place.
- Keep the monitor away from:  
Extremely hot, cold or humid places, places directly under sunlight, dusty surroundings, equipment that generate strong magnetic fields.



**LIMITED WARRANTY**

THIS WARRANTY IS VALID ONLY ON PRODUCTS PURCHASED AND USED IN THE UNITED STATES OF AMERICA. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL USER.

SUBJECT TO CONDITIONS AND EXCLUSIONS FOUND BELOW, THIS PRODUCT IS WARRANTED AGAINST MANUFACTURING DEFECTS IN MATERIAL AND WORKMANSHIP FOR THE FOLLOWING PERIOD FOR PARTS AND LABOR:

<b>SPECO TECHNOLOGIES CAMERAS:</b>	<b>5 YEARS</b>
<b>SPECO TECHNOLOGIES MONITORS:</b>	<b>1 YEAR</b>
<b>BALANCE OF SPECO TECHNOLOGIES LINE:</b>	<b>1 YEAR*</b>
<b>* IR LEDs, Time lapse VCR Drum Assemblies &amp; Heads:</b>	<b>90-DAYS</b>

SPECO TECHNOLOGIES WILL REPAIR OR REPLACE (AT OUR DISCRETION) ANY PARTS FOUND TO BE DEFECTIVE FOR THE WARRANTY PERIOD SPECIFIED. WE WILL PROVIDE A REPLACEMENT FOR ANY DEFECTIVE PART.

**CONDITIONS**

**1. YOU MUST OBTAIN A RETURN AUTHORIZATION NUMBER FOR ANY MERCHANDISE BEING RETURNED TO SPECO TECHNOLOGIES, WHETHER FOR RETURN/EXCHANGE OR REPAIR, WHETHER IN OR OUT OF WARRANTY.**

- 2. THIS WARRANTY WILL BE HONORED ONLY UPON PRESENTATION OF THE ORIGINAL DATED BILL OF SALE OR SALES SLIP.
- 3. TRANSPORTATION OF THE PRODUCT TO OUR SERVICE DEPARTMENT IS THE RESPONSIBILITY OF THE USER. REPAIRED OR REPLACED PRODUCT WILL BE RETURNED PREPAID DURING THE WARRANTY PERIOD.

**EXCLUSIONS**

- 1. THIS WARRANTY SHALL NOT COVER ADJUSTMENT OF CUSTOMER OPERATED CONTROLS AS EXPLAINED IN THE APPROPRIATE MODEL'S INSTRUCTION MANUAL OR PRODUCTS WHICH HAVE BEEN ALTERED, ABUSED, OR HAVE MISSING OR ALTERED SERIAL NUMBERS.
- 2. THIS WARRANTY SHALL NOT APPLY TO UNCRATING, SETUP, INSTALLATION, OR THE REMOVAL AND REINSTALLATION OF PRODUCTS AFTER REPAIR.
- 3. THIS WARRANTY SHALL NOT APPLY TO REPAIRS OR REPLACEMENTS NECESSITATED BY ANY CAUSE BEYOND THE RESULT OF MANUFACTURE INCLUDING, BUT NOT LIMITED TO, ANY MALFUNCTION, DEFECTS OR FAILURE CAUSED BY OR RESULTING FROM UNAUTHORIZED SERVICE OR PARTS, IMPROPER MAINTENANCE, MODIFICATION OR REPAIR BY THE USER, ABUSE, MISUSE, NEGLIGENCE, ACCIDENT, FIRE, FLOOD, OR OTHER ACTS OF NATURE, INCORRECT LINE VOLTAGE, DAMAGE OR IMAGE BURNS TO TELEVISION PICTURE TUBES CAUSED BY OR ATTRIBUTABLE TO THE USE OF ANY ACCESSORY, ELECTRONICS GAME OR DEVICE, OR DAMAGE CAUSED TO IMAGE PICKUP DEVICES BY EXCESSIVE LIGHT.

THE FOREGOING IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES AND WE DO NOT AUTHORIZE ANY PARTY TO ASSUME FOR US ANY OTHER OBLIGATION OR LIABILITY. IN NO EVENT SHALL WE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF THIS PRODUCT, OR FOR ANY DELAY IN THE USE OF THIS PRODUCT DUE TO CAUSES BEYOND OUR CONTROL.

SOME STATES DO NOT ALLOW LIMITATIONS OF HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF CONSEQUENTIAL DAMAGES. THE ABOVE LIMITATIONS ON IMPLIED WARRANTY AND CONSEQUENTIAL DAMAGES MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

**NOTE: FOR YOUR PROTECTION IN THE EVENT OF THEFT OR LOSS OF THIS PRODUCT, PLEASE FILL IN THE INFORMATION REQUESTED BELOW AND RETAIN WITH YOUR SALES RECEIPT.**

MODEL NO.: \_\_\_\_\_ SERIAL NO.: \_\_\_\_\_  
(LOCATED ON BACK OR BOTTOM OF UNIT)

DATE OF PURCHASE: \_\_\_\_\_

WHERE PURCHASED: \_\_\_\_\_ PURCHASE PRICE: \_\_\_\_\_

Speco Technologies 200 NEW HIGHWAY AMITYVILLE, NY 11701 www.specotech.com	FOR MORE INFORMATION REGARDING SERVICE OR RETURN, CALL US TOLL FREE: 1-800-645-5516 IN METRO NY: 631-957-8700
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**ALWAYS USE DISCRETION WHEN INSTALLING VIDEO AND/OR AUDIO SURVEILLANCE EQUIPMENT ESPECIALLY WHEN THERE IS AN EXPECTATION OF PRIVACY. INQUIRE REGARDING FEDERAL, STATE AND/OR LOCAL REGULATIONS APPLICABLE TO THE LAWFUL INSTALLATION OF VIDEO AND/OR AUDIO RECORDING OR SURVEILLANCE EQUIPMENT. PARTY CONSENT MAY BE REQUIRED.**