

# **ThinkVision**

M15 Flat Panel Monitor User's Guide Machine Type: 62CA



# **Product numbers**

ThinkVision M15 62CA-UAR1-WW A21156FX0

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# **Safety information**

#### **General Safety guidelines**

For tips to help you use your computer safely, go to: http://www.lenovo.com/safety

Before installing this product, read the Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza

Antes de instalar este produto, leia as Informações de Segurança.

Läs säkerhetsinformationen innan du installerar den här produkten.

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Pred inštaláciou tohto zariadenia si peèítaje Bezpeènostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Ennen kuin asennat t m n tuotteen, lue turvaohjeet kohdasta Safety Information.

Před instalací tohoto produktu si pročtěte Bezpečnostní informace.

在安装本产品之前,请仔细阅读 Safety Information (安全信息)。

安裝本產品之前,請先閱讀「安全資訊」。

مج، يجب قراءة دات السلامة

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Antes de instalar este producto lea la información de seguridad.

Antes de instalar este produto, leia as Informações de Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Suitable for entertainment purposes at specially controlled luminous indoor environments, to avoid disturbing reflections from the screen.

# Safety and Maintenance Guidelines

## **Important Safety Information**

The power cord is designed for use with your monitor. To use a different cord, use only a power source and connection compatible with this monitor.



**WARNING:** Always connect your monitor, the computer, and other equipment to a grounded (earthed) power outlet. To reduce the risk of electric shock or damage to your equipment, do not disable the power cord grounding feature. The grounding plug is an important safety feature.



**WARNING:** For your safety, be sure that the grounded power outlet you plug the power cord into is easily accessible to the operator and located as close to the equipment as possible. To disconnect power from the equipment, unplug the power cord from the power outlet by grasping the plug firmly. Never pull on the cord.

**CAUTION:** To protect your monitor, as well as your computer, connect all power cords for your computer and its peripheral devices (such as a monitor, printer, or scanner) to a surge protection device such as a power strip with surge protection or uninterruptible power supply (UPS). Not all power strips provide surge protection; the power strips must be specifically labelled as having this ability. Use a power strip whose manufacturer offers a damage replacement policy, so you can replace your equipment if surge protection fails.



**CAUTION:** A certified power supply cord has to be used with this equipment. The relevant national installation and/or equipment regulations shall be considered. A certified power supply cord not lighter than ordinary polyvinyl chloride flexible cord according to IEC 60227 (designation H05VV-F 3G 0.75mm<sup>2</sup> or H05VVH2-F2 3G 0.75mm<sup>2</sup>) shall be used. An alternative flexible cord is synthetic rubber.

## **Safety Precautions**

Use only a power source and connection compatible with this monitor, as indicated on the label/ back plate of the monitor.

■ Be sure the total ampere rating of the products connected to the outlet does not exceed the current rating of the electrical outlet, and the total ampere rating of the products connected to the power cord does not exceed the rating of the power cord. Look on the power label to determine the ampere rating (Amps or A) for each device.

• Install your monitor near a power outlet that you can easily reach. Disconnect the monitor by grasping the plug firmly and pulling it from the outlet. Never disconnect the monitor by pulling the cord.

Do not allow anything to rest on the power cord. Do not walk on the cord.

• While using VESA mount application, the AC Inlet must face to down side. Do not face any other position.

#### **Maintenance Guidelines**

■ To enhance the performance and extend the life of your monitor:

• Do not open your monitor cabinet or attempt to service this product yourself. If your monitor is not operating properly or has been dropped or damaged, contact your Lenovo authorized dealer, reseller, or service provider.

Adjust only those controls that are described in the operating instructions.

Turn your monitor off when not in use. You can substantially increase the life expectancy of the monitor by using a screen saver program and turning off the monitor when not in use.

• Keep your monitor in a well-ventilated area, away from excessive light, heat, or moisture.

■ Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.

• Unplug the monitor from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.

Do not drop the monitor or place it on an unstable surface.

• When removing the monitor base, you must lay the monitor face down on a soft area to prevent it from getting scratched, defaced, or broken.

#### **Cleaning the Monitor**

The monitor is a high-quality optical device that requires special care when cleaning. To clean the monitor, follow these steps:

1. Turn off the computer and the monitor.

2. Unplug your monitor from the power outlet before cleaning.

**CAUTION:** Do not use benzene, thinner, ammonia, or any volatile substance to clean the monitor screen or cabinet.

These chemicals may damage the monitor. Do not use liquid or aerosol cleaners. Never use water to clean an LCD screen.

- 3. Wipe the screen with a dry, soft, clean cloth. If the screen requires additional cleaning, use an antistatic screen cleaner.
- 4. Dust the monitor housing. Use a damp cloth to clean the cabinet. If the cabinet requires additional cleaning, use a clean cloth dampened with isopropyl alcohol.
- 5. Plug in the monitor.

•

6. Turn on the monitor and the computer.

# **Chapter 1.Getting started**

This User's Guide provides detailed operation instructions for the user. For quick instruction overview, please see the Setup Poster for brief information.

ThinkVision M15 supports Lenovo Display Control Center - ThinkColour

## **Shipping contents**

The product package should include the following items:

- Information Flyer
- Flat Panel Monitor
- USB Type C Cable
- Protection bag
- Clip x 2



## **Product overview**

This section will provide information on adjusting monitor positions, setting user controls, and using the cable lock slot.

## Types of adjustments

## Tilt

Please see the illustration below for an example of the tilt range.



## Height Adjustment

After using the support located at the bottom of the base, you can raise the height of the monitor.



#### Cable lock slot

Your monitor is equipped with a cable lock slot. Please follow the instructions that came with the cable lock to attach it.

Your monitor supports the following Lenovo lock:

4XE1B81915(Kensington NanoSaver Cable Lock from Lenovo)

4XE1B81916(Kensington NanoSaver Twin Head Cable Lock from Lenovo)

4XE1B81917(Kensington NanoSaver MasterKey Cable Lock from Lenovo)

4XE1B81918(Kensington NanoSaver Twin Head MasterKey Cable Lock from Lenovo)

4XE1B81919(Kensington NanoSaver/MS 2.0 Cable Lock from Lenovo)

4XE1B81920(Kensington NanoSaver/MS 2.0 MasterKey Cable Lock from Lenovo)



Note: To attach a VESA mount, please see "Wall Mounting (Optional)" on page 2-8.

## **Protection bag**

The protection bag shipped with the monitor can protect your monitor from damage when shipping or storage.

Following illustrations show how to use the protection bag.



#### Setting up your monitor

This section provides information on how to set up your monitor.

#### Connecting and turning on your monitor

Note: Be sure to read the Safety Information located in the Flyer before carrying out this procedure.

1. Power off your computer and all attached devices, and unplug the computer power cord.



2. There are 2 kinds of usage for M15; they are normal usage and charging usage. Both usage can support USB 2.0 data transfer with supported devices.

#### Normal usage:

There are 2 kinds of normal usage for M15; they are notebook and M15, mobile phone and M15.

1) Connect the USB-C port of notebook and M15 with a USB type-C cable.

(Electronically marked cable, current rating: 5A)



2) Connect the USB-C port of mobile phone and M15 with a USB type-C cable. (Electronically marked cable, current rating: 5A).



#### Note:

- For normal usage, devices connected to M15 need to support video signal and power output.
- When you encounter abnormal display condition, please check your devices to see

if they support USB-C Alt-mode display and PD2.0 or above. After checking, please re-connect and try again.

- Not all smart phones can power on M15. Please confirm with your phone manufacturer to be sure if your phone can output at least 10W (5V2A) power with USB-C interface.
- When your phone can't power on M15, please connect M15 with an adapter.

#### **Charging usage:**

There are 2 kinds of charging usage for M15; they are notebook and M15 with power adapter, mobile phone and M15 with power adapter.

1) Connect Type-C power adapter to the left or right side of M15 and connect M15 to the notebook with a USB-C cable.

(Electronically marked cable, current rating: 5A)



2) Connect Type-C power adapter to the left or right side of M15 and connect M15 to the mobile phone with a USB-C cable.

(Electronically marked cable, current rating: 5A)



#### Note:

- When you encounter abnormal charging condition, please check your power capacity of power adapter connected with M15 and make sure it is enough for M15 and other devices.
- In order to use the monitor smoothly, please refer to the display mode **on page 2-5** and power management on page **2-6**.
- Recommend users to set out screen timeout as "never" on phones to avoid monitor screen off.

3. Power on the monitor.



4. To install the monitor driver, you must download it from Lenovo website, (https://pcsupport.lenovo.com/solutions/M15) and follow the instructions on page **3-5**.

## **Registering your option**

Thank you for purchasing this Lenovo<sup>®</sup> product. Please take a few moments to register your Product and provide us with information that will help Lenovo to better serve you in the future. Your feedback is valuable to us in developing product and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the following Web site:

http://www.lenovo.com/register

Lenovo will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

# Chapter 2.Adjusting and using your monitor

This section will give you information on adjusting and using your monitor.

## **Comfort and accessibility**

Good ergonomic practice is important to get the most from your personal computer and to avoid discomfort. Arrange your workplace and the equipment you use to suit your individual needs and the kind of work that you perform. In addition, use healthy work habits to maximize your performance and comfort while using your computer.

#### Arranging your work area

Use a work surface of appropriate height and available working area to allow you to work in comfort.

Organize you work area to match the way you use materials and equipment. Keep your work area clean and clear for the materials that you typically use and place the items that you use most frequently, such as the computer mouse or telephone, within the easiest reach. Equipment layout and setup play a large role in your working posture. The following topics describe how to optimize equipment setup to achieve and maintain good working posture.

#### Positioning and viewing your monitor

Position and adjust your computer monitor for comfortable viewing by considering the following items:

- Viewing distance: Optimal viewing distances for monitors range from approximately 510mm to 760mm (20 in to 30 in) and can vary depending on ambient light and time of day. You can achieve different viewing distances by repositioning your monitor or by modifying your posture or chair position. Use a viewing distance that is most comfortable for you.
- **Monitor height:** Position the monitor so your head and neck are in a comfortable and neutral (vertical, or upright) position. If your monitor does not have height adjustments, you might have to place books or other sturdy objects under the base of the monitor to achieve the desired height. A general guideline is to position the monitor such that the top of the screen is at or slightly below your eye-height when you are comfortably seated. However, be sure to optimize your monitor height so the line of site between your eyes and the center the monitor suits your preferences for visual distance and comfortable viewing when your eye muscles are in a relaxed state.
- Tilt: Adjust the tilt of your monitor to optimize the appearance of the screen content and to accommodate your preferred head and neck posture.
- General location: Position your monitor to avoid glare or reflections on the screen from overhead lighting or nearby windows.

The following are some other tips for comfortable viewing of your monitor:

- Use adequate lighting for the type of work you are performing.
- Use the monitor brightness, contrast, and image adjustment controls, if equipped, to optimize the image on your screen to meet your visual preferences.
- Keep your monitor screen clean so you can focus on the screen's contents.

Any concentrated and sustained visual activity can be tiring for your eyes. Be sure to periodically look away from your monitor screen and focus on a far object to allow your eye muscles to relax. If you have questions on eye fatigue or visual discomfort, consult a vision care specialist for advice.

## Quick tips for healthy work habits

The following information is a summary of some important factors to consider to help you remain comfortable and productive while you use your computer.

- Good posture starts with equipment setup: The layout of your work area and the setup of your computer equipment have a large effect on your posture while using your computer. Be sure to optimize the position and orientation of your equipment by following the tips outlined in "Arranging your work area " on page 2-1 so you can maintain a comfortable and productive posture. Also, be sure to use the adjustment capabilities of your computer components and office furniture to best suit your preferences now and as your preferences change over time.
- Minor changes in posture can help avoid discomfort: The longer you sit and work in front of your computer, the more important it is to observe your working posture. Avoid as summing any one posture for an extended period of time. Periodically make minor modifications in your posture to help deter any discomforts that might arise. Make use of any adjustments that your office furniture or equipment provide to accommodate changes in posture
- Short, periodic breaks help ensure healthy computing: Because computing is primarily a static activity, it is particularly important to take short breaks from your work. Periodically, stand up in front of your work area, stretch, walk for a drink of water, or otherwise take a short break from using your computer. A short break from work gives your body a welcome change in posture and helps to ensure you remain comfortable and productive while you do work.

## **Eye Strain**

#### Break Times

Computer users should take some time away from the screen especially if working for prolong hours. Generally, it is recommended to take short breaks (5 - 15 min.) after 1 - 2 hours of continuous computer works. Taking short and frequent breaks is more advised than longer breaks.

#### • Looking at Distant Objects

Users often blink less when in front of monitor screen. To minimize eye strain and dryness, users should rest the eye periodically by focusing on objects that are far away.

#### • Eye Exercises:

- 1. Alternate looking up and looking down while keeping the body and head upright.
- 2. Slowly roll your eyes to look to the left and right.

3. Roll eyes to look at objects on the upper right corner and then on lower right. Do same thing to look at objects on the upper left and lower left.

## Low Blue Light

Concerns on blue light affecting eye health have risen over the years. Blue light have wavelength between 300 nm to 500 nm. The monitors have a factory setting that reduces blue light emissions.

Press Low blue Light key to enable/disable Low blue light.



## Adjusting your monitor image

This section describes the user control features used to adjust your monitor image.

#### Using the direct access controls

The direct access controls can be used when the On Screen Display (OSD) is not displayed. *Table 2-1. Direct access controls* 

Icon	Control	Description
<u>X</u>	Brightness	Press + or - key for Brightness adjustment.
Ŋ.	Contrast	Press and hold + key over 3 seconds for Contrast adjustment.
	Low blue light	Press to enable / disable Low Blue Light.
	Over drive	Press and hold for 3 seconds to enable/disable the Overdrive.

#### Note:

- When Brightness adjustment bar is displayed on screen, use + or for adjustment.
- When Contrast adjustment bar is displayed on screen, use + or for adjustments.
- Low Blue Light Mode is reducing the blue light content.
- The use of Extreme Mode (response time) may result in reduced display quality when fast moving video graphics are displayed. Users should check Extreme Mode (response time) to verify if it is compatible with any applications they would like to use it with.



Energy Star is an energy saving program for consumer electronics led by the U.S. government. It was launched in 1992 by EPA and DOE to reduce energy consumption and greenhouse gas emissions. Energy Star logo is a symbol of energy conservation and environmental protection. It improves the concept of energy efficiency of consumers and manufacturers, and effectively guides the market.

The regulation of Energy Star improves energy efficiency and reduces air pollution by using more energy-efficient equipment in homes, offices and factories. One way to achieve this goal is to use management to reduce energy consumption when products are not in use. The default settings for monitors conform to Energy Star certification. Any changes by users for more features and functionalities may increase power consumption, which will exceed the limitation of Energy Star's standard. For more information, please refer to (www.energystar. gov/products). All products of Energy Star will be posted online and can be accessed directly by governments, public institutions and consumers.

## Selecting a supported display mode

The display mode the monitor uses is controlled by the computer. Therefore, refer to your computer documentation for details on how to change display modes.

The image size, position and shape might change when the display mode changes.

Unlike CRT monitors, which require a high refresh rate to minimize flicker, LCD or Flat Panel technology is inherently flicker-free.

Note: If your system has previously been used with a CRT monitor and is currently configured to a display mode outside the range of this monitor, you may need to re-attach the CRT monitor temporarily until you have re-configured the system; preferably to 1920x1080 at 60Hz, which is the Native Resolution Display mode. Response time: 6ms with overdrive @60Hz

Addressability	Refresh rate
PAL	50Hz
640x350	70Hz
640x480	60Hz, 66Hz,72Hz,75Hz
720x400	70Hz
800x600	60Hz,72Hz,75Hz
1024x768	60Hz,70Hz,75Hz
1152x864	75Hz
1280x768	60Hz
1280x800	60Hz
1280x1024	60Hz,72Hz,75Hz
1366x768	60Hz
1440x900	60Hz,75Hz
1600x1200	60Hz,70Hz
1680x1050	60Hz
1920x1080	60Hz

Table 2-3. Factory set display modes

**Note:** The video signal source connected to M15 needs to support USB-C DP Alt-mode video output.

## Understanding power management

Power management is invoked when the computer recognizes that you have not using your mouse or keyboard for a user-definable period. There are several states as described in the table below.

For optimal performance, switch off your monitor at the end of each working day, or whenever you expect to leave it unused for long periods during the day.

State	Power Indicator	Screen	Restoring Operation	Compliance
On	Steady white	Normal		
Standby/Suspend	Steady amber	Blank	Press a key or move the mouse. There may be a slight delay reappears. <b>Note:</b> Standby also occurs if there is no image output to the monitor.	ENERGY STAR
Off	Off	Blank	Press power key to switch on There may be a slight delay before the image reappears.	ENERGY STAR

*Table 2-4. Power indicator* 

#### **Power Management Modes**

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	White	Max Consumption *: 9.5 W(without Type C output) 87 W(with 65W output) Typical Consumption : 8 W(without Type C output) 80 W(with 65W output)
Active-off mode	Inactive	Inactive	Off	Amber	Less than 0.3 W
Switch off	-	-	-	Off	Less than 0.3 W

Energy Star	Power Consumption
P <sub>on</sub>	7 W
E <sub>TEC</sub>	25.5 kWh

\*\* Maximum power consumption with max luminance.

This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered and shall have no obligation to update such information. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied.

#### **Power Input and Output Definition:**

- 1. M15 can be powered on by devices more than 10W with USB-C interfaces that can support 5V, 9V, 15V and 20V power delivery input. The permitted maximum input power of M15 is DC 100W.
- 2. The maximum power delivery output of M15 is 65W and monitor can support 5V, 9V, 15V and 20V power delivery output.
- 3. If you connect M15 with mobile phones only, mobile phones need to support USB-C PD2.0 output or above, and supply at least 10W power to power on M15.
- 4. The power capacity of power adapter connected with M15 will affect the charging capability of M15 to devices.
  - Recommend to use 65W or above of type-C adapter to use with M15 when you want to charge your notebook.
  - Recommend to use 18W or above of type-C adapter to use with M15 when you want to charge your mobile phone.
- 5. While plugging with adapters without USB-C PD function and another type-C side connecting with phone or notebook, M15 may consume power from phones or notebook.

#### **Recommendation of USB-C devices:**

Because notebooks and mobile phones with a USB Type-C port released on the market are very various, we can't guarantee that the monitor can charge all types of notebooks and mobile phones with a USB Type-C port. Make sure that the USB Type-C cable complies with the USB PD specification. Otherwise, your devices may be damaged. So please use the attached USB Type-C cable.

For charging usage, Lenovo 65W Standard AC adapter (USB Type-C): PN: 4X20M262\*\*(the\*\* can be 68 to 83, for sales area use only) is recommended. You can also go to the following link to purchase https://accessorysmartfind.lenovo.com/#/products/4X20M26268

## **Caring for your monitor**

Be sure to turn off the power before you perform any maintenance on the monitor.

#### Do not:

- Apply water or liquid directly to your monitor.
- Use solvents or abrasives.
- Use flammable cleaning materials to clean your monitor or any other electrical equipment.
- Touch the screen area of your monitor with sharp or abrasive items. This type of contact may cause permanent damage to your screen.
- Use any cleaner which contains an anti-static solution or similar additives. This may harm the coating of the screen area.

#### Do:

- Lightly dampen a soft cloth with water and use this to gently wipe the covers and the screen.
- Remove grease or finger marks with a damp cloth and a little mild detergent.

## Wall Mounting (Optional)

Refer to the instructions that come with the VESA compatible base mounting kit.

- 1. Place the monitor face down on a non-abrasive surface on stable flat table.
- 2. Use clips to lock the monitor.



- 3. Attach the mounting bracket from the wall mounting kit to the monitor.
- 4. Mount the monitor on the wall by following the instructions that come with the base mounting kit.

#### Note:

- For use only with UL and GS Listed Wall Mount Bracket with minimum weight/load bearing capacity of 6.00 kg.
- When you use a flexible arm, do not tilt the monitor downward by more than 5 degrees.



# **Chapter 3.Reference information**

This section contains monitor specifications, instructions to manually install the monitor driver, troubleshooting information.

# **Monitor specifications**

Dimensions	Height	235.50 mm (9.27 in.)
	Depth	16.30 mm (0.64 in.)
	Width	360.00 mm (14.17 in.)
Stand	Tilt	Range: 0°~90°
Image	Viewable image size	394.97 mm (15.6 in.)
	Maximum height	193.59 mm (7.62 in.)
	Maximum width	344.16 mm (13.55 in.)
	Pixel pitch	0.17925 mm (V)
	Response time	On:6ms
		Off:14ms
Power input	Supply voltage	5V or 9V or 15V DC 3A
	/current	or 20V DC 5A Max.
USB Type C PD	Supply voltage/current	5V or 9V or 15V DC 3A
Function		or 20V DC 3.25A Max.
Power consumption	Max Consumption	9.5 W(without Type C output)
Note: Power	-	87 W(with 65W output)
consumption figures are for the monitor only.	Typical Consumption	8 W(without Type C output)
for the monitor only.		80 W(with 65W output)
	Standby/Suspend	< 0.3W
	Off	< 0.3W
Video input (Digital)	Input signal	Туре С
	Horizontal addressability	1920 pixels (max)
	Vertical addressability	1080 lines (max)
	Clock frequency	210 MHz (max)
Communications	VESA DDC	CI
Supported Display Modes	Horizontal frequency	30 kHz – 90 kHz
(VESA Standard modes	Vertical frequency	50 Hz – 75 Hz
between noted ranges)	Native Resolution	1920 x 1080 at 60 Hz

Temperature	Operating	0° to 40°C (32°F to 104° F)
	Storage	-20° to 60°C (-4°F to 140° F)
	Shipping	-20° to 60°C (-4° F to 140° F)
Humidity	Operating	10% to 80% non-condensing
	Storage	5% to 95% non-condensing
	Shipping	5% to 95% non-condensing

## Troubleshooting

If you have a problem setting up or using your monitor, you might be able to solve it yourself. Before calling your dealer or Lenovo, try the suggested actions that are appropriate to your problem.

Table 3-2. Troubleshooting

Problem	Possible cause	Suggested action	Reference
The words" Out of Range" are shown on the screen, and the power indicator is flashing white.	The system is set to a display mode which is not supported by the monitor	<ul> <li>If you are replacing an old monitor, reconnect it and adjust the display mode to within the specified range for your new monitor.</li> <li>If using a Windows system, restart the system in safe mode, then select a supported display mode for your computer.</li> <li>If these options do not work, contact the Customer Support Centre.</li> </ul>	"Selecting a supported display mode" on page 2-5
The image quality is unacceptable	The video signal cable is not connected with the monitor or system completely.	Be sure the signal cable is firmly plugged into the system and monitor.	"Connecting and turning on your monitor" on page 1-6
The power indicator is not lit and there is no image.	<ul> <li>The monitor's power switch is not switched on.</li> <li>The power cord is loose or disconnected.</li> <li>There is no power at the outlet.</li> </ul>	<ul> <li>Be sure the power cord is connected properly.</li> <li>Be sure the outlet has power.</li> <li>Power on the monitor.</li> <li>Try using another power cord.</li> <li>Try using another electrical outlet.</li> </ul>	"Connecting and turning on your monitor" on page 1-6
Screen is blank and power indicator is steady amber or flashing white	The monitor is in Standby / Suspend mode	<ul> <li>Press any key on the keyboard or move the mouse to restore operation.</li> <li>Check the Power options settings on your computer.</li> </ul>	"Understanding power management" on page 2-6
The power indicator is white, but there is no image	The video signal cable is loose or disconnected from the system or monitor	Be sure the video cable is connected with the system properly	"Connecting and turning on your monitor" on page 1-6
	The monitor brightness is at the lowest setting.	Adjust the brightness setting on the Brightness control.	"Adjusting your monitor image" on page 2-4
One or more of the pixels appear discolored	This is a characteristic of the LCD technology and is not an LCD defect	If there are more than five pixels missing, contact the Support Center	"Appendix A, Service and Support" on page A-1

Problem	Possible cause	Suggested action	Reference
<ul> <li>Fuzzy lines in text or a blurryimage</li> <li>Horizontal or vertical lines through the image.</li> </ul>	<ul> <li>Image setup has not been optimized</li> <li>Your system DisplayProperties setting have not</li> </ul>	Adjust the resolution settings on your system to match the native resolution for this monitor: 1920 x 1080 at 60 Hz. When working in the native	"Selecting a supported display mode" on page 2-5 See the Advanced
	been optimized.	additionalimprovements by adjusting the Dots Per Inch (DPI) setting on your system	see the Advanced section of your system's display properties
Monitor consumes power from notebook or phones when connected with adapter.	Adapter has no USB-C PD function.	Use USB C to C adapter connecting with M15 and charging your notebook or phone.	"Understanding power management" on page 2-6
M15 can't be powered on by notebooks or phones.	<ul> <li>USB C ports of notebooks or phones can't support power output or Alt-mode.</li> <li>Notebooks or phones have no enough power to support M15.</li> </ul>	<ul> <li>Check the USB C ports of notebooks or phones and make sure they support PD 2.0 and DP 1.2 Alt mode.</li> <li>Connect M15 with adapter then power on.</li> </ul>	"Connecting and turning on your monitor" on page 1-6 and "Understanding power management" on page 2-6
Normally display when M15 connecting with 45W power adapter and notebook, but no charging symbol showing in notebook.	Power input of notebook must be 45w or above, M15 can't provide enough power for notebook.	<ul> <li>You can connect the adapter and M15 with notebook, then notebook can be charged by adapter and can power on M15.</li> <li>Use 65W or above adapter to connect with M15, and then charge notebook.</li> </ul>	"Understanding power management" on page 2-6
Monitor blink or screen off when connecting with smart phones	<ul> <li>Smart phones can't supply enough power for monitor</li> <li>Smart phones screen off when timeout</li> </ul>	<ul> <li>Connecting adaptor with monitor, then monitor connecting with smart phones.</li> <li>Set screen timeout as "never" on smart phones to avoid monitor screen off.</li> </ul>	"Understanding power management" on page 2-6

## Manually installing the monitor driver

Below are steps for manually installing the monitor driver in Microsoft Windows 7, Microsoft Windows 10.

#### Installing the monitor driver in Windows 7

To install the device driver in Microsoft<sup>®</sup> Windows 7, do the following:

- 1. Turn off the computer and all attached devices.
- 2. Ensure that the monitor is connected correctly.
- 3. Turn on the monitor and then turn on the computer. Allow your computer to boot into Windows 7 operating system.
- 4. From the Lenovo website https://pcsupport.lenovo.com/solutions/M15, find the corresponding monitor driver and download it to a PC to which this monitor is connected (such as a desktop).
- 5. Open the Display Properties window by right-clicking Start, Control Panel, Hardware and Sound icon, and then click the Display icon.
- 6. Click the Change the display settings tab.
- 7. Click the Advanced Settings icon.
- 8. Click the Monitor tab.
- 9. Click the Properties button.
- 10. Click the Driver tab.
- 11. Click Update Driver, then click Browse the computer to find the driver program.
- 12. Select Pick from the list of device driver program on the computer.
- 13. Click the Have Disk button. By clicking the Browse button, browse and point to the following path:
  - X:\Monitor Drivers\Windows 7
  - (Where X indicates "the folder in which the downloaded driver is located" (such as a desktop)
- 14. Select the "M15.inf" file and click the Open button. Click the OK button.
- 15. Select Lenovo M15 and click Next.
- 16. After the installation is complete, delete all downloaded files and close all windows.
- 17. Restart the system. The system will automatically select the maximum refresh rate and corresponding Colour Matching Profiles.

**Note:** On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. Lenovo recommends using either 1920 x 1080 at a refresh rate of 60 Hz, or 640 x 480 at refresh rate of 60 Hz.

#### Installing the monitor driver in Windows 10

To use the Plug and Play feature in Microsoft Windows 10, do the following:

- 1. Turn off the computer and all attached devices.
- 2. Ensure that the monitor is connected correctly.
- 3. Turn on the monitor and then turn on the computer. Allow your computer to boot into Windows 10 operating system.
- 4. From the Lenovo website https://pcsupport.lenovo.com/solutions/M15, find the corresponding monitor driver and download it to a PC to which this monitor is connected (such as a desktop).
- 5. On the Desktop, move mouse to bottom-left corner of screen, right-click to choose Control Panel, then double click the icon of Hardware and Sound, and then click Display.
- 6. Click the Change the display settings tab.
- 7. Click the Advanced Settings button.
- 8. Click the Monitor tab.
- 9. Click the Properties button.
- 10. Click the Driver tab.
- 11. Click Update Driver, then click Browse the computer to find the driver program.
- 12. Select "Let me pick from a list of device drivers on my computer".
- 13. Click the Have Disk button. By clicking the Browse button, browse and point to the following path:X:\Monitor Drivers\Windows 10 (where X indicates "the folder in which the downloaded
  - driver is located" (such as a desktop)
- 14. Select the "M15.inf" file and click the Open button. Click the OK button.
- 15. In the new window, select Lenovo M15 and click Next.
- 16. After the installation is complete, delete all downloaded files and close all windows.
- 17. Restart the system. The system will automatically select the maximum refresh rate and corresponding Color Matching Profiles.

**Note:** On LCD monitors, unlike CRTs, a faster refresh rate does not improve display quality. Lenovo recommends using either 1920 x 1080 at a refresh rate of 60 Hz, or 640 x 480 at a refresh rate of 60 Hz.

## **Service information**

#### **Customer responsibilities**

The warranty does not apply to a product which has been damaged due to accident, misuse, abuse, improper installation, usage not in accordance with product specifications and instructions, natural or personal disaster, or unauthorized alterations, repairs or modifications.

The following are examples of misuse or abuse and not covered by warranty:

- Images burned on to the screen of a CRT monitor. Burned image is preventable by utilizing a moving screen saver or power management.
- Physical damage to covers, bezel, base and cables.
- Scratches or punctures on monitor screens.

#### Getting further help

If you still can't solve your problem, please contact the Customer Support Centre. For more information on contacting the Customer Support Centre, please see Appendix A,"Service and Support" on page A-1.

#### Service parts

The following parts are for use by Lenovo service, or Lenovo authorized dealers to support the customer warranty. Parts are for service use only. The table below shows information for model (A21156FX0/ ThinkVision M15/ 62CA-UAR1-WW).

FRU (Field Replaceable Unit) Part number	Description	Machine Type Model (MTM)	colour
5D11C92089	M15 - 15.6 inch FRU Monitor	62CA	Raven Black
5C11C92090	M15 -USB C-C cable (1 m)	62CA	Raven Black
5CF1C92091	M15 -Protect Bag	62CA	Gray surface with red liner

*Table 3-3. List of service parts* 

# **Appendix A. Service and Support**

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your Lenovo Statement of Limited Warranty for a fully explanation of Lenovo warranty terms.

## **Registering your option**

Register to receive product service and support updates, as well as free and discounted computer Accessories and content. Go to: http://www.lenovo.com/support

## **Online technical support**

Online technical support is available during the life of your product through the Lenovo Support Web site at http://www.lenovo.com/ support

Product replacement assistance or exchange of defective components also is available during the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your option is installed in a Lenovo computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

## **Telephone technical support**

Installation and configuration support through the Customer Support Center will be withdrawn or made available for a fee, at Lenovo's discretion, 90 days after the option has been withdrawn from marketing, Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

To assist the technical support representative, have available as much of the following information as possible:

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number, and manual
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

## Worldwide telephone list

Phone numbers are subject to change without notice. For the most current phone Numbers, go to http://www.lenovo.com/support/phone

Country or Region	Telephone Number	
Argentina	0800-666-0011 (Spanish, English)	
Australia	1-800-041-267 (English )	
Austria	0810-100-654 (local phone) (German)	
Belgium	Warrant service and support: 02-339-36-11 (Dutch, French)	
Bolivia	0800-10-0189 ( Spanish)	
Brazil	Calls made from within the Sao Paulo region: 11-3889-8986 Calls made from outside the Sao Paulo region: 0800-701-4815 (Portuguese)	
Brunei Darussalam	800-1111 (English)	
Canada	1-800-565-3344 (English, French)	
Chile	800-361-213(Spanish )	
China	Technical Support Line: 400-100-6000 (Mandarin)	
China (Hong Kong S.A.R.) China (Macau S.A.R.)	(852) 3516-8977 (Cantonese, English, Mandarin) 0800-807 / (852) 3071-3559 (Cantonese, English, Mandarin)	
Colombia	1-800-912-3021 (Spanish)	
Costa Rica	0-800-011-1029( Spanish )	
Croatia	385-1-3033-120(Croatian)	
Cyprus	800-92537(Greek)	
Czech Republic	800-353-637(Czech)	
Denmark	Warranty service and support: 7010-5150 (Danish)	
Dominican Republic	1-866-434-2080(Spanish )	
Ecuador	1-800-426911 (OPCION 4) (Spanish )	
Egypt	Primary: 0800-0000-850 Secondary:0800-0000-744 (Arabic, English)	
El Salvador	800-6264 (Spanish)	
Estonia	372-66-0-800 (Estonian, Russian, English)	
Finland	Warranty service and support: +358-800-1-4260(Finnish)	
France	Warranty service and support (hardware): 0810-631-213(French)	

Country or Region	Telephone Number	
Germany	Warranty service and support: 0800-500-4618 (toll-free)(German)	
Greece	Lenovo Business Partner (Greek)	
Guatemala	Dial 999-9190, wait for operator, and request to reach 877-404-9661 (Spanish)	
Honduras	Dial 800-0123(Spanish)	
Hungary	+36-13-825-716 (English, Hungarian)	
India	Primary: 1800-419-4666 (Tata) Secondary: 1800-3000-8465 (Reliance) Email: commercialts@lenovo.com (English and Hindi)	
Indonesia	1-803-442-425 62 213-002-1090 (Standard Charges Apply) (English, Bahasa Indonesia)	
Ireland	Warranty service and support: 01-881-1444 (English)	
Israel	Givat Shmuel Service and Center: +972-3-531-3900 (Hebrew, English)	
Italy	Warranty service and support: +39-800-820094 (Italian)	
Japan	0120-000-817 (Japanese, English)	
Kazakhstan	77-273-231-427(Standard charges Apply) (Russian, English)	
Korea	080-513-0880 (Collect Call) 02-3483-2829 (Toll Call) (Korean)	
Latvia	371-6707-360(Latvian, Russian, English)	
Lithuania	370 5278 6602(Italian, Russian, English )	
Luxembourg	ThinkServer and ThinkStation: 352-360-385-343 ThinkCentre and ThinkPad: 352-360-385-222 (French)	
Malaysia	1-800-88-0013 03-7724-8023 (Standard Charges Apply) (English)	
Malta	356-21-445-566(English, Italian, Maltese Arabic)	
Mexico	001-866-434-2080(Spanish)	
Netherlands	020-513-3939 (Dutch)	
New Zealand	0508-770-506 (English )	
Nicaragua	001-800-220-2282 (Spanish)	
Norway	8152-1550(Norwegian)	
Panama	Lenovo Customer Support Center: 001-866-434(Toll-Free)(Spanish)	
Peru	0-800-50-866 (OPCION 2) (Spanish)	
Philippines	1-800-8908-6454 (GLOBE subscribers) 1-800-1441-0719 (PLDT subscribers) (Tagalog, English)	
Poland	Laptops and tablets branded with logo Think: 48-22-273-9777 ThinkStation and ThinkServer: 48-22-878-6999 (Polish, English )	

Country or Region	Telephone Number	
Portugal	808-225-115 (Standard Charges Apply) (Portuguese)	
Romania	4-021-224-4015(Romanian)	
Russia	+7-499-705-6204 +7-495-240-8558 (Standard Charges Apply)(Russian)	
Singapore	1-800-415-5529 6818-5315 (Standard Charges Apply) (English, Mandarin, Bahasa Malaysia)	
Slovakia	ThinkStation and ThinkServer: 421-2-4954-5555	
Slovenia	386-1-2005-60 (Slovenian)	
Spain	34-917-147-833(Spanish)	
Sri Lanka	+9477-7357-123 (Sumathi Information systems) (English)	
Sweden	Warranty service and support: 077-117-1040 (Swedish)	
Switzerland	Warranty service and support: 0800-55-54-54 (German, French, Italian)	
Taiwan	0800-000-702 (Mandarin)	
Thailand	001-800-4415-734 (+662) 787-3067 (Standard Charges Apply)(Thai, English)	
Turkey	444-04-26 (Turkish)	
United Kingdom	Standard warranty support: 03705-500-900 (local rate) Standard warranty support: 08705-500-900(English)	
United States	1-800-426-7378 (English)	
Uruguay	000-411-005-6649 (Spanish)	
Venezuela	0-800-100-2011 (Spanish)	
Vietnam	120-11072 (Toll Free) 84-8-4458-1042 (Standard Charges Apply) (Vietnamese, English)	

# **Appendix B.Notices**

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#### **Recycling information**

Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. For information on recycling Lenovo products, go to:

http://www.lenovo.com/recycling

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#### Collecting and recycling a disused Lenovo computer or monitor

If you are a company employee and need to dispose of a Lenovo computer or monitor that is the property of the company, you must do so in accordance with the Law for Promotion of Effective Utilization of Resources. Computers and monitors are categorized as industrial waste and should be properly disposed of by an industrial waste disposal contractor certified by a local government. In accordance with the Law for Promotion of Effective Utilization of Resources, Lenovo Japan provides, through its PC Collecting and Recycling Services, for the collecting, reuse, and recycling of disused computers and monitors. For details, visit the Lenovo Web site at www.ibm.com/jp/pc/service/recycle/ pcrecycle/. Pursuant to the Law for Promotion of Effective Utilization of Resources, the collecting and recycling of home-used computers and monitors by the manufacturer was begun on October 1, 2003. This service is provided free of charge for home-used computers sold after October 1, 2003. For details, visit the Lenovo Web site at www.ibm. com/jp/pc/service/recycle/personal/.

Disposing of Lenovo computer components

Some Lenovo computer products sold in Japan may have components that contain heavy metals or other environmental sensitive substances. To properly dispose of disused components, such as a printed circuit board or drive, use the methods described above for collecting and recycling a disused computer or monitor.

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## **India RoHS**

RoHS compliant as per E-Waste(Management & Handling)Rules,2011.

## Power cords and power adapters

Use only the power cords and power adapters supplied by the product manufacturer. Do not use the ac power cord for other devices.