

# **MS-10**

## **Meeting System**

### **User Manual - English**



#### **[Important]**

To download the latest version of Quick Start Guide, multilingual user manual, software, or driver, etc., please visit Lumens  
<https://www.MyLumens.com/support>

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# Chapter 1 Package Contents

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**MS-10**



**Quick Installation Guide**



**Remote Control**



**Power Cord**



Appearance may vary depending on country/region

**Power Adapter**



**3 PIN to 2 PIN Connector**



(For Japan only)

**USB 3.0 Cable  
(Type B-Type A)**



**L-shaped Sheet Metal  
x2**



**TV Mount Bracket  
x2**



**TV Mount Sheet Metal  
x4**



**Screw (1/4"-20UNC)  
x8**



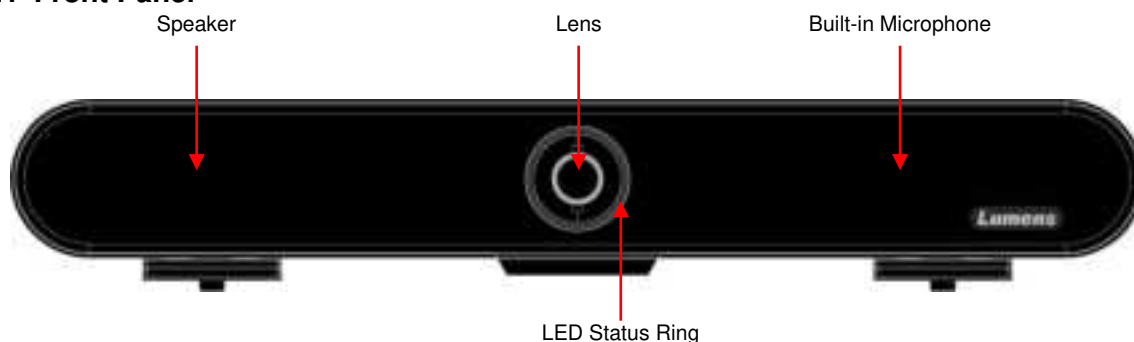
**M6 Screw  
x4**



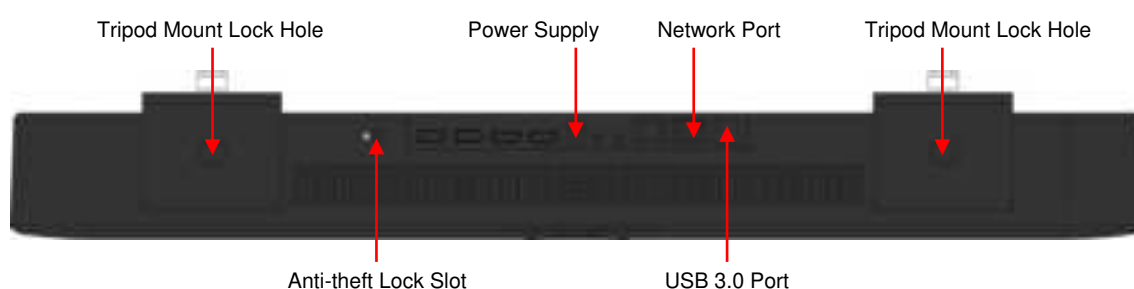
## Chapter 2 Product Overview and Interface

### 2.1 I/O functions Introduction

#### 2.1.1 Front Panel



#### 2.1.2 Rear Panel

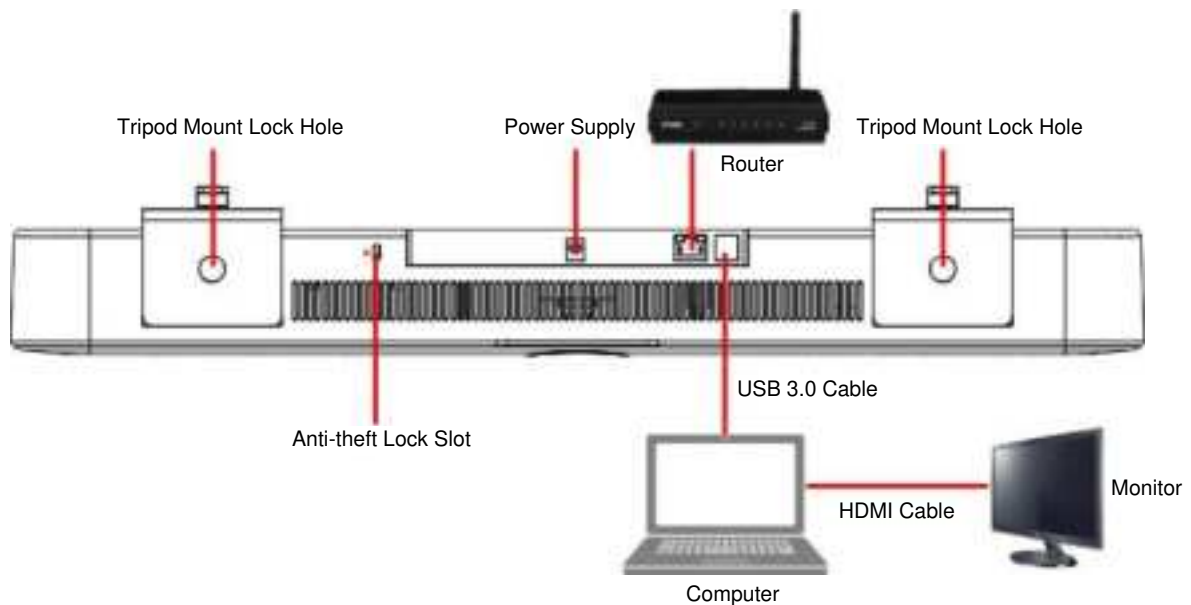


#### 2.1.3 LED Status Ring Indicator Description

| Indicator                     | Description                      |
|-------------------------------|----------------------------------|
| OFF                           | Unpowered/not connected to USB   |
| Green                         | In standby mode                  |
| Red                           | Audio mute                       |
| Blue                          | In use                           |
| Green light increase/decrease | Increase/decrease speaker volume |

# Chapter 3 Connection and Instruction for Installation

## 3.1 How to connect



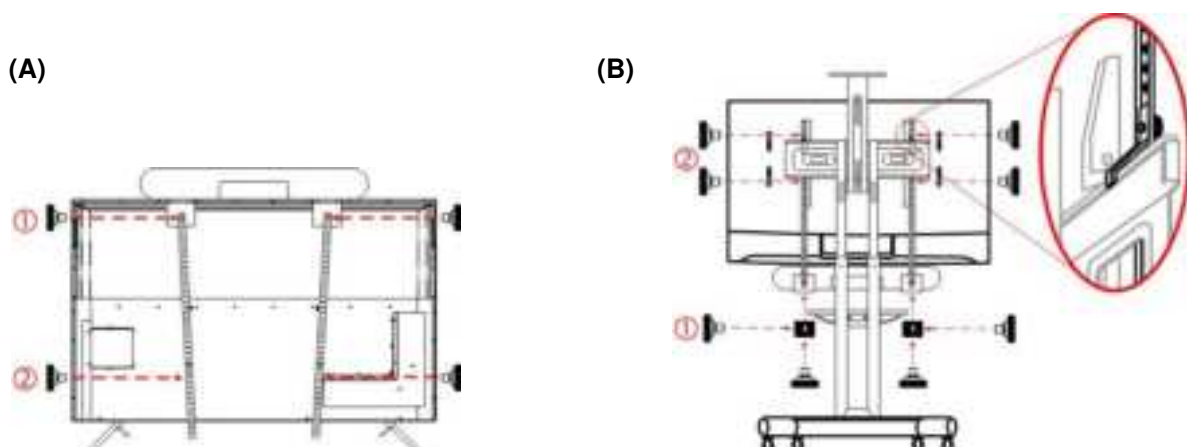
### ■ USB NIC Function

- MS-10 USB 3.0 port supports network interface card function. Connecting the MS-10 network port to the router allows you to access the Internet without connecting an network cable on the computer
- Please download the driver from Lumens website  
<https://www.MyLumens.com/support>
- Supported Operating System

| OS       | Supported Version                                                   |
|----------|---------------------------------------------------------------------|
| Windows  | Windows XP/7/8: Manual installation<br>Windows 10: Built-in drivers |
| MAC OS X | 10.8 or above                                                       |
| Linux    | USB NIC Linux driver for Kernel up to 5.6                           |

## 3.2 Instruction for installation

The recommended installation height is the horizontal position of the human eyes after sitting down to get the best image



### A. When the screen is placed on the platform

- ① Screw MS-10 to the TV Mount brackets and place it onto the screen.
- ② Screw the TV Mount brackets to the back of the screen, and then tighten the screws that secure MS-10

to the TV mount brackets.

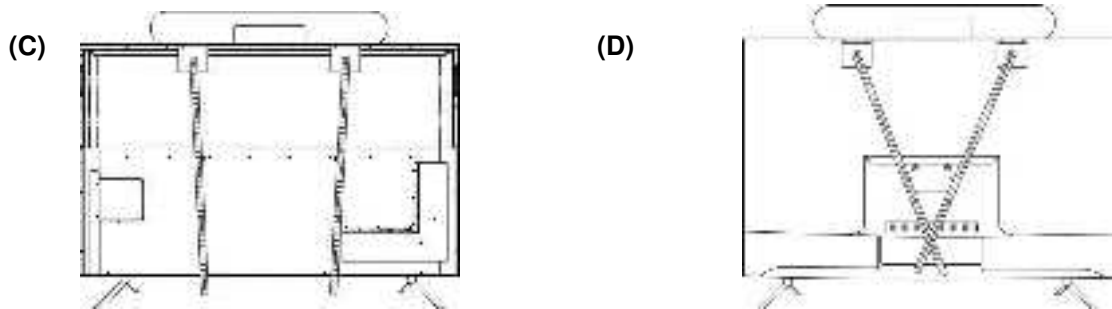
**<Remark>** Please adjust the locking position of the TV Mount brackets according to hole position on the screen.

#### B. When the screen is mounted on the TV Mount brackets

- ❶ Fasten MS-10 to the TV Mount brackets with screws.
- ❷ Place the TV Mount sheet metals on the top/bottom of the TV Mount brackets, and fasten the TV Mount brackets and the TV Mount sheet metals with screws from inside out.

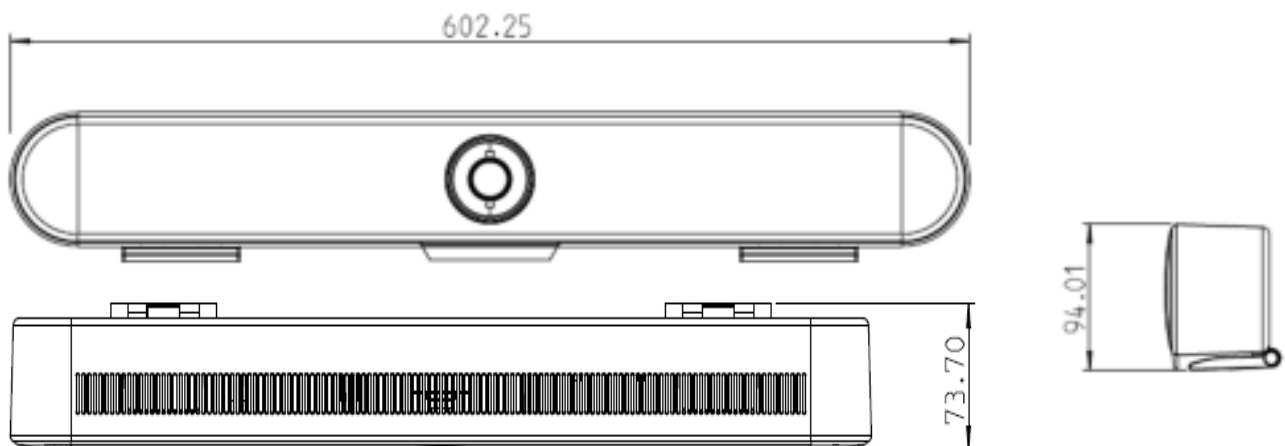
**<Remark>** If MS-10 is installed under the screen, use the L-shaped sheet metals to lock it to MS-10 before starting the installation.

**<Remark>** Depending on the screw lock points of different TVs, the stainless steel bracket after installation is as shown in Figure (C) or (D)



### 3.3 Device Size

- Length x Width x Height: 602.25mm x 73.7mm x 94.01mm
- Weight: 1.5 kg



### 3.4 Relative Operation Position



# Chapter 4 Introduction of Remote Control and Setting Menu

## 4.1 Remote Control

|  | No. | Function Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    | 1   | Enable/Mask Images                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                    | 2   | Enable/Disable Auto Frame <ul style="list-style-type: none"> <li>Enable: Displayed in the upper right corner of the screen </li> <li>Disable: Displayed in the upper right corner of the screen </li> </ul> ※ 4K resolution does not support Auto Frame                                                                                                                                                                                                    |
|                                                                                    | 3   | ↑↓↔↔ <ul style="list-style-type: none"> <li>ePTZ: Screen moving direction</li> <li>Setting Menu On: Select function</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                    | 4   | HOME/OK Button <ul style="list-style-type: none"> <li>ePTZ: Back to the wide angle</li> <li>Setting Menu On: Confirm button</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                    | 5   | Increase/decrease speaker volume <ul style="list-style-type: none"> <li>Increase volume: Increment of green light on the LED status ring</li> <li>Decrease volume: Decrease of green light on the LED status ring</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                    | 6   | Turn on/off the setting menu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                    | 7   | Call/Set the preset <ul style="list-style-type: none"> <li>Short press: Call the preset 1~3</li> <li>Press and hold: Save the preset 1~3</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                    | 8   | Mute/Unmute <ul style="list-style-type: none"> <li>Mute: LED status indicator shows red</li> <li>Unmute: LED status indicator shows blue</li> </ul> Press and hold for 3 seconds to switch to:<br>Enable/disable noise reduction <ul style="list-style-type: none"> <li>Enable noise reduction: Displayed in the upper right corner of the screen </li> <li>Disable noise reduction: Displayed in the upper right corner of the screen </li> </ul> |
|                                                                                    | 9   | Reserved button, no function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                    | 10  | Zooming in/out the image                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 4.2 Setting Menu



| 1st Level<br>Major Items | 2nd Level<br>Minor Items | 3rd Level<br>Adjustment Values | Function Descriptions                                                                                                                                                                                 |
|--------------------------|--------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image                    | Auto Frame               | On/ <u>Off</u>                 | The camera can automatically detect the position of the human body and adjust the person to the center of the screen according to the number of people in the meeting scene to present the best image |
|                          | Brightness               | 0~ <u>A</u> ~14                |                                                                                                                                                                                                       |
|                          | Contrast                 | 0~ <u>A</u> ~14                |                                                                                                                                                                                                       |
|                          | Hue                      | 0~ <u>A</u> ~14                |                                                                                                                                                                                                       |
|                          | Saturation               | 0~ <u>A</u> ~14                |                                                                                                                                                                                                       |
|                          | Sharpness                | 0~ <u>A</u> ~15                |                                                                                                                                                                                                       |
|                          | Gamma                    | 0~ <u>A</u> ~4                 |                                                                                                                                                                                                       |
|                          | Gain                     | 0~ <u>A</u> ~14                |                                                                                                                                                                                                       |
|                          | Anti Flicker             | <u>50Hz</u> /60Hz              |                                                                                                                                                                                                       |
|                          | Backlight Comp           | On/ <u>Off</u>                 |                                                                                                                                                                                                       |
| System                   | Language                 | Chinese/ <u>English</u>        |                                                                                                                                                                                                       |
|                          | Mirror                   | On/ <u>Off</u>                 |                                                                                                                                                                                                       |
|                          | Flip                     | On/ <u>Off</u>                 |                                                                                                                                                                                                       |
|                          | Expert Mode              | On/ <u>Off</u>                 | The identifier frame will appear after enabling Auto Frame. It helps users to know the current detection precision and if there is any on-site tracking issue caused by environment interference      |
|                          | Detection Sens.          | Low/Mid/ <u>High</u>           | Adjust the detection sensitivity of Auto Frame                                                                                                                                                        |
|                          | Factory Reset            |                                |                                                                                                                                                                                                       |
| Device Info.             | Firmware Version         |                                |                                                                                                                                                                                                       |

# Chapter 5 Descriptions of Major Functions

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## 5.1 Control the Camera

1. Use the remote control to control MS-10.
2. It can be controlled using “**USB PTZ Camera Controller**” software.  
Please download software from the Lumens website and [USB PTZ Camera Controller Manual](#).

## 5.2 Use Skype for Video Conference

Please refer to [Chapter 3 Installation and Connections](#) to finish connecting the MS-10 and computer. Start Skype, select a contact, and press  to start the video conference.

If it doesn't work, please refer to the following steps to setup the camera:

1. Start Skype -> [Setting] -> [Audio & Video]
2. Select [**Lumens MS-10 Camera**]
3. Select Speaker/Microphone [**Lumens MS-10 Speakphone**]

After the setting is completed, the video conference is ready to begin.

<Remark> It can also be used with Zoom, Teams, Google Meet and other video software

## 5.3 Save the current screen position data

Press and hold the remote control number keys [1 ~ 3] to save the preset, and [**Save OK**] will display in the upper right corner of the screen.

After saving, short press the number keys to call the preset.

## 5.4 Adjust the direction and position of the screen (ePTZ)

1. Confirm that the screen is Zoom+
2. Press [▲] or [▼] on the **remote control** to adjust the angle upward or downward.
3. Press [►] or [◄] on the **remote control** to adjust the angle to the right or left.

## 5.5 Use the Auto Frame

Press [**Auto Frame**]  on the remote control. The camera will automatically detect the locations of people, and automatically adjust the zoom to the most appropriate size to accommodate all the participants according to change of the conference venues and the number of people.

## Chapter 6 Output Resolution

The default output resolution of MS-10 is 1920x1080. Please go to the connected video conference software setting to adjust the video conference output resolution.

**<Remark> Some video conference software do not have the option of adjusting the resolution, such as Skype**

| Format | Resolution  | FPS Setting |    |    | Note                          |
|--------|-------------|-------------|----|----|-------------------------------|
|        |             | 30          | 25 | 20 |                               |
| MJPEG  | 3840 x 2160 | V           | V  | NA | Zoom in/out is not supported. |
|        | 1920 x 1080 | V           | V  | NA | Default resolution            |
|        | 1280 x 720  | V           | V  | NA |                               |
|        | 640 x 360   | V           | V  | NA |                               |
| H.264  | 3840 x 2160 | NA          | NA | V  | Zoom in/out is not supported. |
|        | 1920 x 1080 | V           | V  | NA |                               |
|        | 1280 x 720  | V           | V  | NA |                               |
|        | 640 x 360   | V           | V  | NA |                               |

## Chapter 7 Troubleshooting

This chapter describes problems you may encounter while using MS-10. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact our distributors or service center.

| No. | Problems                                                                            | Solutions                                                                                                                                                                                                                                                                                                                                                            |
|-----|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | <b>There is no image output from MS-10</b>                                          | <ol style="list-style-type: none"><li>1. Replace the USB cables and make sure they are not faulty.</li><li>2. Verify whether the computer or equipment has detected the MS-10 camera and is connected correctly.</li></ol>                                                                                                                                           |
| 2.  | <b>MS-10 cannot be operated by remote control</b>                                   | <ol style="list-style-type: none"><li>1. Try to replace the batteries of the remote control.</li><li>2. Please confirm that MS-10 has been connected to the computer, and launch video software.</li><li>3. Please verify the MS-10 LED indicator. When the signal from the remote control received by the device is normal, the LED indicator will flash.</li></ol> |
| 3.  | <b>MS-10 output resolution is low</b>                                               | <p>The default output resolution of MS-10 is 1920x1080. Please go to the connected video conference software setting to adjust the video conference output resolution.</p> <p><b>&lt;Remark&gt;</b> Some video conference software do not have the option of adjusting the resolution, such as Skype.</p>                                                            |
| 4.  | <b>↑↓↔ directional keys on the remote control cannot adjust the screen position</b> | <p>Please make sure the screen is Zoom+.</p> <p>MS-10 supports ePTZ. The direction can be adjusted only under the Zoom+ screen.</p>                                                                                                                                                                                                                                  |
| 5.  | <b>Cannot use the Auto Frame function</b>                                           | <p>Please check the resolution. 4K resolution does not support Auto Frame.</p>                                                                                                                                                                                                                                                                                       |

# Chapter 8 Safety Instructions

Always follow these safety instructions when setting up and using the MS-10 Meeting System:

## 1 Operation

- 1.1 Please use the product in the recommended operating environment, away from water or source of heat.
- 1.2 Do not place the product on a tilted or unstable trolley, stand or table.
- 1.3 Please clean the dust on the power plug prior to usage. Do not insert the product's power plug into a multiplug to prevent sparks or a fire.
- 1.4 Do not block the slots and openings in the case of the product. They provide ventilation and prevent the product from overheating.
- 1.5 Do not open or remove covers, otherwise it may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
- 1.6 Unplug the product from the wall outlet and refer servicing to licensed service personnel when the following situations happen:
  - If the USB port becomes damaged or frayed.
  - If liquid is spilled into the product or the product has been exposed to rain or water.

## 2 Installation

- 2.1 For security considerations, please make sure the standard hanging rack you bought is in line with UL or CE safety approbations and installed by technician personnel approved by agents.

## 3 Storage

- 3.1 Do not place the product where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.
- 3.2 Unplug this product during thunderstorms or if it is not going to be used for an extended period.
- 3.3 Do not place this product or accessories on top of vibrating equipment or heated objects.

## 4 Cleaning

- 4.1 Disconnect all the cables prior to cleaning and wipe the surface with a dry cloth. Do not use alcohol or volatile solvents for cleaning.

## 5 Batteries (for products or accessories with batteries)

- 5.1 When replacing batteries, please only use similar or the same type of batteries.
- 5.2 When disposing of batteries or products, please adhere to the relevant instructions in your country or region for disposing of batteries or products.

## ■ Precautions

|                                                                                     |                                                                                                                                                                                                                               |                                                                                      |                                                                                                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
|  | This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock. Do not remove the cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel. |  | This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit. |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|

## ■ FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

Notice :

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

## ■ IC Warning

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe A prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.

## ■ EN55032 CE Warning

Warning: Operation of this equipment in a residential environment could cause radio interference.

# Copyright Information

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# **Supplier's Declaration of Conformity**

## **47 CFR § 2.1077 Compliance Information**

**Manufacturer :** Lumens Digital Optics Inc.

**Product Name :** MS-10

**Model Number :** Meeting System

### **Responsible Party – U.S. Contact Information**

**Supplier :** Lumens Integration, Inc.

4116 Clipper Court, Fremont, CA 94538, United States

**e-mail :** support@mylumens.com

### **FCC Compliance Statement**

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.