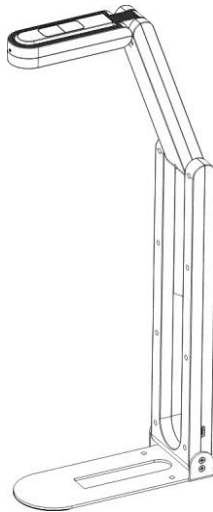


**DC-F20**  
**Document Camera**  
**User Manual - English**



**[Important]**

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

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# Copyright Information

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# Chapter 1 Safety Instructions

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## English

Always follow these safety instructions when setting up and using the Document Camera:

1. Do not place product in tilted position.
2. Do not place the Document Camera on an unstable trolley, stand or table.
3. Do not use the Document Camera near water or source of heat.
4. Use attachments only as recommended.
5. Place the USB cable of Document Camera on a place that it can be unplugged easily.
6. Unplug the USB cable of the Document Camera before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.
7. Do not block the slots and openings in the Document Camera case. They provide ventilation and prevent the Document Camera from overheating. Do not place the Document Camera on a sofa, rug or other soft surface or install in a recessed place unless proper ventilation is provided.
8. Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the Document Camera.
9. Except as specifically instructed in this User Manual, do not attempt to operate this product by yourself. Opening or removing covers may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.
10. Unplug the USB cable during thunderstorms or if it is not going to be used for an extended period. Do not place the Document Camera or remote control on top of heat-emitting equipment or shaking objects such as a car, etc.
11. In case of the following situations, please unplug the USB cable and refer servicing to licensed service personnel:
  - If the USB port becomes damaged or frayed.
  - If liquid is spilled into it or the Document Camera has been exposed to rain or water.

## ■ Precautions

**Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.**

		<div style="border: 1px solid black; padding: 5px;"> <p style="margin: 0;">Caution</p> <p style="margin: 0; background-color: black; color: white; padding: 2px;">Risk of Electric Shock</p> </div>		
<p>Caution: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.</p>				
	<p>This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock.</p>		<p>This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.</p>	

### ■ FCC Warning

This Document Camera has been tested and found to comply with the limits for a Class A computer device, pursuant to Article 15-J of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

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 numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques,” NMB-003 édictée par l’Industrie.

### ■ EN55032 (CE Radiation) Warning

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

This unit is intended to be supplied by an UL Listed product suitable for use at maximum ambient temperature 35°C minimum whose output meets LPS (or PS2) and is rating 5Vdc, minimum 500 mA, altitude during operation 2000m minimum.

# Français

Respectez toujours les instructions de sécurité lors de la configuration et de l'utilisation de la Document Camera :

## 1 Opération

- 1.1 Veuillez utiliser le produit dans l'environnement d'exploitation recommandé, à l'écart de l'eau ou d'une source de chaleur.
- 1.2 N'installez pas le produit sur une position inclinée ou sur un chariot, un support ou une table instable.
- 1.3 Ne pas bloquer les orifices et ouvertures du boîtier du produit. La ventilation qu'elles fournissent empêche le produit de surchauffer.
- 1.4 Ne pas ouvrir ou retirer les couvercles sous peine d'exposer les utilisateurs à des tensions électriques dangereuses et à d'autres dangers. Référez-vous pour tout entretien au personnel de service autorisé.
- 1.5 Débranchez le produit de la prise murale et adressez-vous pour l'entretien au personnel de service autorisé dans les situations suivantes :
  - Si les cordons d'alimentation sont endommagés ou effilochés.
  - Si du liquide est renversé à l'intérieur du produit ou s'il a été exposé à la pluie ou à de l'eau.

## 2 Installation

- 2.1 Pour des raisons de sécurité, veuillez vous assurer que le support de suspension standard que vous avez acheté est conforme aux normes de sécurité UL ou CE et qu'il a été installé par un technicien agréé par des agents.



## 3 Stock.

- 3.1 N'installez pas le produit à un emplacement où le cordon peut être piétiné car cela risque d'effiloche ou d'endommager le cordon ou la prise.
- 3.2 Débranchez le produit pendant les orages ou s'il n'est pas utilisé pendant une longue période.
- 3.3 Ne placez pas le produit ou les accessoires sur le dessus d'un équipement vibrant ou des objets chauffés.

## 4 Nettoyage

- 4.1 Débranchez tous les câbles avant de nettoyer et essuyez la surface avec un chiffon sec. N'utilisez pas d'alcool ou de solvants volatils pour le nettoyage.

### ■ Précautions

	Ce symbole indique que cet équipement peut contenir une tension dangereuse qui risque de causer une décharge électrique. Ne retirez pas le couvercle (ou la partie arrière). Il n'y a aucune pièce réparables par l'utilisateur à l'intérieur. Veuillez vous référer au personnel de service autorisé.		Ce symbole indique qu'il y a des instructions d'opération et d'entretien importantes dans le manuel d'utilisation accompagnant cet unité.
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### ■ Avertissement de la FCC

Cet équipement a été examiné et avéré être conforme aux limites pour un dispositif numérique de la classe A, conformément à la partie 15 des règlements de la FCC. Ces limites sont conçues pour assurer une protection raisonnable contre une interférence nocive lorsque l'équipement est actionné dans un environnement commercial.

Notice :

Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler le droit de l'utilisateur à utiliser l'équipement.

### ■ Avertissement de l'IC

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: "Appareils

Numeriques," NMB-003 edictee par l'Industrie.

■ **Avertissement EN55032 CE**

L'utilisation de cet équipement dans un environnement résidentiel peut provoquer des interférences radio.

Cet appareil est destiné à être alimenté par un produit répertorié UL adapté à une utilisation à une température ambiante maximale de 35°C minimum dont la sortie est conforme à LPS (ou PS2) et est de 5Vdc, minimum 500mA, altitude pendant le fonctionnement 2000m minimum.

# Chapter 2 Package Contents

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DC-F20



Quick Installation  
Guide



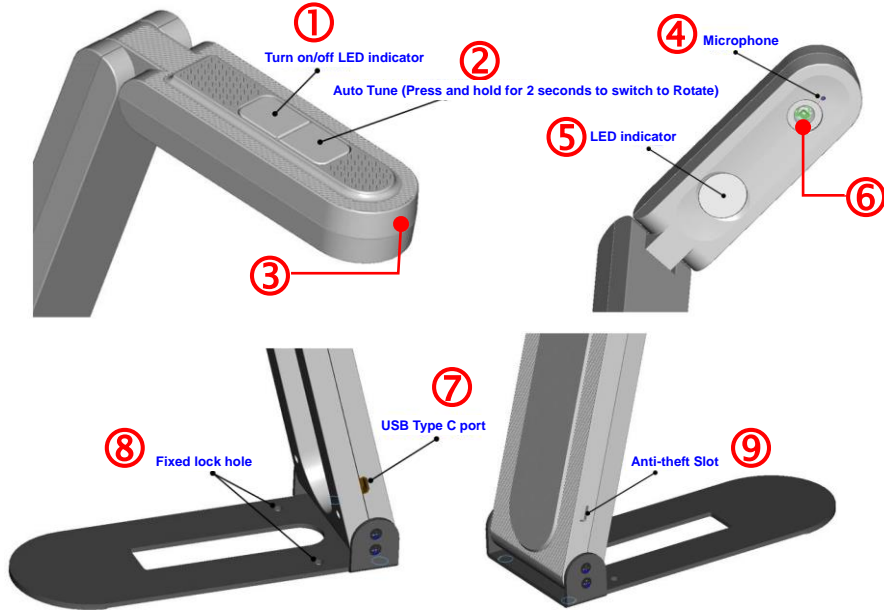
USB 2.0 cable, 1.8 M



(Type-C to Type-A)



# Chapter 3 Product Function Descriptions

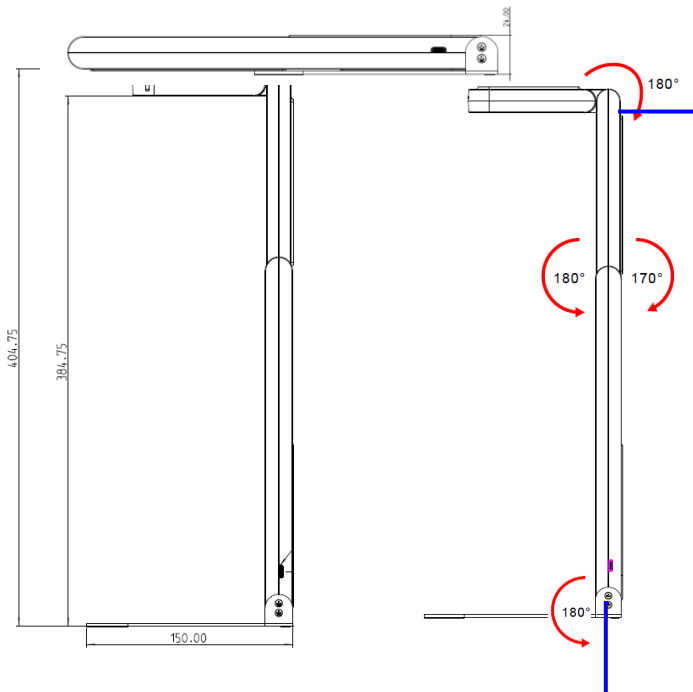
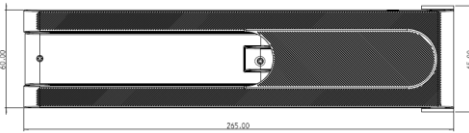


Items	Function	Description
1	LED indicator button	Adjust the brightness of LED indicator (High/Intermediate/Low/Off)
2	Auto Tune/Rotate button	Short press: Automatically adjust the image to have the best brightness and focusing performance Press and hold for 2 seconds: Rotate the image (0°/180°)
3	LED Indicator	LED off: Disable the image LED blue indicator: Image Display
4	Microphone	Built-in microphone
5	LED indicator	Trigger the brightness switch by pressing the upper button
6	Camera lens	HD camera lens
7	USB Type C port	The USB port is for connecting to the USB port of the computer and providing USB signal images ※Support up to 2592 x 1944/30 fps
8	Fixed lock hole	Tighten the screws and place the device in the platform
9	Kensington lock hole	Safety lock slot

# Chapter 4 Installation and Connections

## 4.1 Document Camera Size

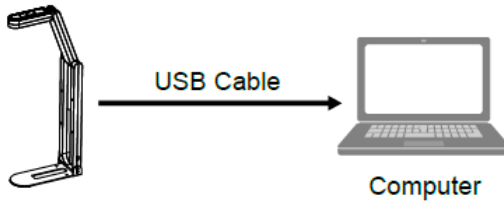
- Length x Width x Height:  
Storage compartment: 265 x 65 x 24 mm  
Display: 150 x 65 x 404.75 mm
- Weight: 310 g



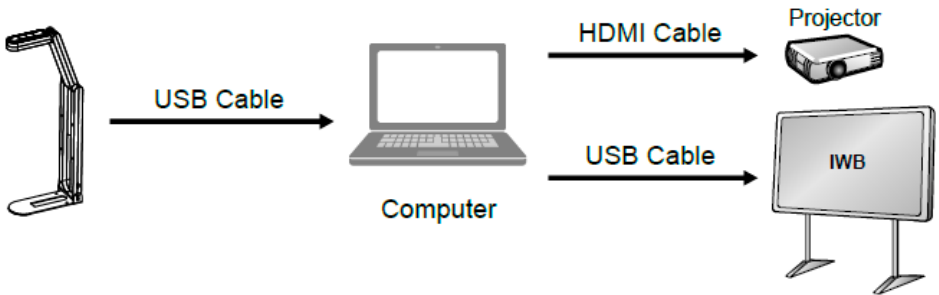
※ Please only operate in the extended angles as illustrated. Improper usage may damage the machine.

## 4.2 Connecting to a computer

※ Once the USB is connected to the computer, the power is ON. If the LED is still off, turn on the image via software, and the LED will show blue indicator.



## 4.3 Connecting to an Interactive Whiteboard (IWB)



## 4.4 Installing Application Software

The Lumens Ladibug software installed on the computer enables you to:

- Control DC-F20
- Capture and record images
- Annotate the image, highlight important details and save it
- Support the full screen function.

※ **Please refer to the software user manual for installation steps and software operation.**

- Windows: [Ladibug 4K Software User Manual](#)
- MAC: [Ladibug 3.0 Software User Manual](#)

# Chapter 5 Start Using

<Note> Please make sure that the USB cable is connected and Ladibug application software is installed at first. Please refer to [Chapter 4 Installation and Connections](#) in this manual.

1. After installing Ladibug software, double-click the icon to open the software to view the images and control DC-F20  
POWER Frequency setting page will display during the first use, please complete the settings following the instructions on the screen

**Windows:**



Ladibug 4K

**MAC:**

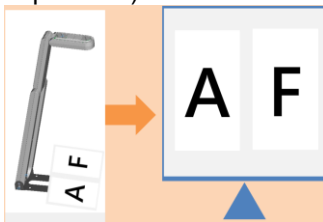


Ladibug MAC 3.5



2. Place an object to be displayed under the camera (For placement of document and display direction of monitor, please refer to the picture below)

※DC-F20 camera coverage is 420 mm x 297 mm (4:3, Size A3 is possible)



3. Adjust the support arm and lens to the appropriate positions.
4. Press [AUTO TUNE] button to optimize the image.
5. You are ready to teach/present.

※ Please download Ladibug software from Lumens website  
※ When connected to a computer via a USB cable, DC-F20 can also be used with video software, such as Skype and Zoom.


# Chapter 6 Descriptions of Major Functions

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## 6.1 Control the Camera

1. Please download Lumens Ladibug software at Lumens website.
2. Please refer to Ladibug Software User Manual for software-related functions.

## 6.2 Use Skype for Video Conference

Please refer to **Chapter 4 Installation and Connections** to finish connecting the 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 DC-F20]
3. Select [Lumens DC-F20 Audio]

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

※ It can also be used with Zoom, Teams, Google Meet and other video software

# Chapter 7 Troubleshooting

This chapter describes problems you may encounter while using DC-F20. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact your distributor or the service center.

No.	Problems	Solutions
1	When the device is turned on, the LED indicator is off.	Once the USB is connected to the computer, there is no picture output. If the LED indicator is still off, turn on the image via software, and the LED will show blue indicator.
2	No screen with Ladibug software	<ol style="list-style-type: none"><li>1. Change the USB cable</li><li>2. Please try the USB port on the back of the computer or other USB port</li><li>3. Make sure no other application software has DC-F20 images open at the same time. If other software is already using DC-F20 images, Ladibug software cannot output the screen</li></ol>
3	Unable to focus	Probably the document is too close. Press the pull away the distance between the lens and the document, and then press the upper Auto Tune button to automatically adjust the focal length of image.
4	DC-F20 cannot operate normally	The machine cannot operate normally probably because the power supply of the USB port at the front end of the computer is insufficient. Try to connect to a USB port at the rear end or a USB hub with a power adapter.
5	Output screen flicker	The presetting value of Ladibug current frequency is 60 Hz. If current frequency of your local country is 50 Hz, output screen flicker may occur during the use of Ladibug. Please refer to the <a href="#">Camera Settings section</a> of the Software Manual to change the power frequency setting to 50 Hz.