Dell UltraSharp Webcam

WB7022

User Guide



Regulatory Model: WB7022c

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Overview

The Dell WB7022 webcam offers the following:

- 4K video at 30 fps and Full HD video at 60 fps
- AI Auto-framing
- 5x digital zoom
- Adjustable field-of-view with autofocus
- High Dynamic Range (HDR) and video noise reduction support
- Walk Away Lock and Wake on Approach support
- Windows Hello support
- Additional customization using Dell Peripheral Manager append on Windows and Dell Display and Peripheral Manager on Mac

What’s in the box

Dell WB7022 webcam	
Webcam mount	
USB-C to USB-A cable (USB 3.1 Gen 1, 2 m)	
Tripod adapter **NOTE:** A tripod stand is not included with the product.	
User Documentation (Quick Start Guide, SERI, Warranty Information)	
External privacy cover or Lens cap (Magnetic)	

Views



1. IR LED/Sensor
2. Proximity sensor
3. Multi-element lens and Large 4K Sony© STARVIS™ sensor
4. White LED light indicator
5. Slot for webcam mount or tripod adapter
6. USB-C port
7. Webcam body
8. Webcam mount
9. Tripod adapter*
10. Tripod-adapter thread

**Tripod not included*

Setting up your webcam on a monitor

NOTE: It is recommended to have an active internet connection on your computer for the best setup experience.

1. Connect the USB-C end of the cable to the USB-C port of the webcam.
   NOTE: Insert the cable connector completely into the USB-C port.



2. Align and insert the webcam-mount head into webcam-mount slot on the webcam.



3. Open the webcam-mount base and clamp the webcam-mount along with the webcam to the monitor's bezel.



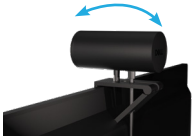
4. Press the base of the webcam mount towards the monitor's back cover to ensure the camera is attached firmly.



5. Remove the magnetic lens cap and place it at the rear of the webcam.



NOTE: The webcam when mounted using the webcam mount can be tilted up and down as required.



6. Connect the USB-A end of the cable to a USB-A 3.0 port on your notebook, desktop or monitor.



7. Follow the instructions on the screen to customize the camera settings using Dell Peripheral Manager application on Windows or Dell Display and Peripheral Manager application on Mac.

Setting up your webcam on a tripod

1. Align the thread on the tripod adapter with the mounting screw on the tripod. Rotate the tripod adapter until it is firmly fixed on the tripod.



2. Connect the USB-C end of the cable to the USB-C port on the webcam.
   NOTE: Insert the cable connector completely into the USB-C port.



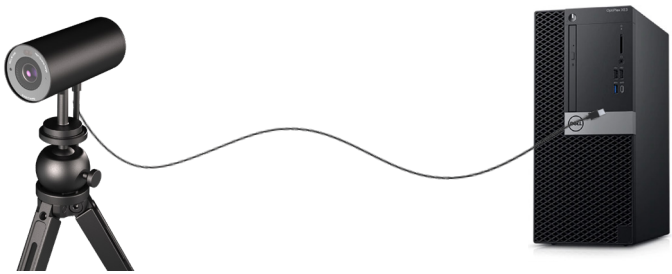
3. Align and insert tripod-adapter mount head into webcam-mount slot on the webcam.



4. Remove the magnetic lens cap and place it at the rear of the webcam.



5. Connect the USB-A end of the cable to a USB-A 3.0 port on your notebook, desktop or monitor.



6. Follow the instructions on the screen to customize the camera settings using Dell Peripheral Manager application on Windows or Dell Display and Peripheral Manager application on Mac.

Features

Adjustable Field of View:

The Dell WB7022 webcam features a 90 degree field of view (FOV) and can be changed to 65 or 78 based on the user's preference. Adjusting the FOV allows you to personalize the video output to your external environment.

Auto-framing (Single user framing) :

If the user is within 2 meters of the webcam, the webcam will enable the Auto-framing (single user framing) feature and adjust the frame to focus on the user. You can enable Autoframing to ensure the camera always keeps you in the center of the frame.

The user can adjust the following Auto-Framing settings when it is switch on:

1. Camera Transition: Enables smooth transition by panning and zooming when the camera readjusts your position in the frame.

2. Tracking Sensitivity: Quickly adjust the camera to respond to your movement and re-adjust your position in the frame.

3. Frame Size: Adjust the frame size to narrow or standard.

NOTE: Update your webcam firmware to the latest version to access the Auto-Framing settings.

HDR and Video Noise Reduction :

The Dell WB7022 webcam's Digital Overlap HDR guarantees superior picture quality in extreme lighting environments, while video noise reduction automatically eliminates grainy images in low light.

Specifications

Webcam camera stream data ports	One USB 3.1 Gen 1 (USB-C) port
Stream video out ports and resolutions	MJPEG encoding engine
Video format supported	4K UHD at 30 fps Full HD at 30 or 60 fps HD at 30 or 60 fps
Field of View	65 / 78 / 90 degree
Focus	Auto
Zoom	5x digital zoom
Auto Light Correction	• HDR and Auto White Balance • Video Noise Reduction
LED indicators	**ON:** Webcam is in use **OFF:** Webcam is turned off or not in use
Supported operating system	Windows 10, 64-bit Windows 11, 64-bit Mac OS 12.3.1
Operating temperature (maximum)	The webcam can operate at a maximum ambient temperature of 40°C.

Dell Peripheral Manager

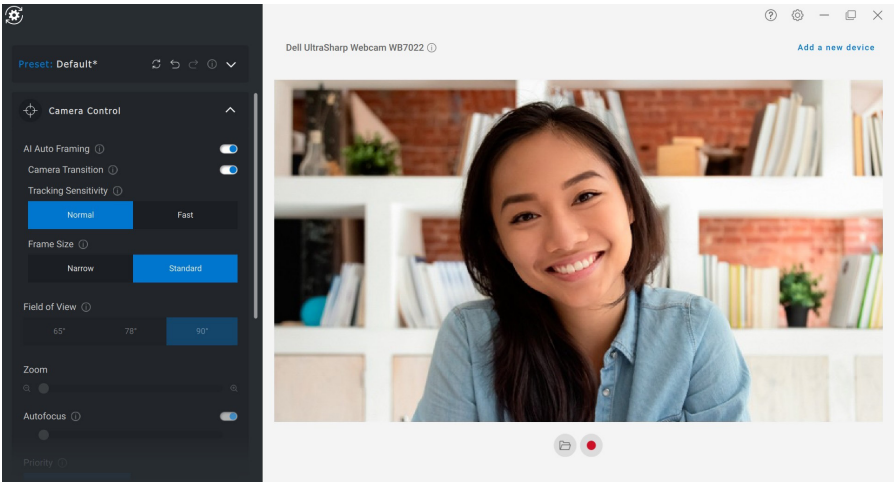
What is Dell Peripheral Manager?

The Dell Peripheral Manager application helps you manage and set up various Dell Peripherals connected to your Windows OS computer. It allows the user to make changes to settings of the device and provides additional customization like enabling HDR, AI Auto Framing, adjusting Field of View to 68, 4x Zoom, and more.

Installing Dell Peripheral Manager on Windows

When you connect the device to your computer for the first time, Dell Peripheral Manager is downloaded and installed automatically through the Windows Update process.

NOTE : If Dell Peripheral Manager does not appear within a few minutes, you can manually install the software by checking for updates.



Download the Dell Peripheral Manager from www.dell.com/support/wb7022.

For more details on the application and the customizations for Dell WB7022 on Windows OS, refer to the Dell Peripheral Manager's User's Guide at www.dell.com/support/wb7022.

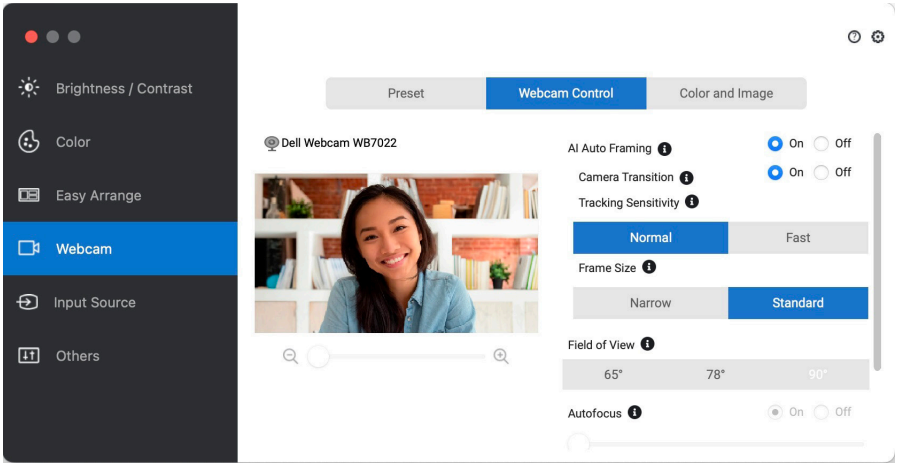
Dell Display and Peripheral Manager

What is Dell Display and Peripheral Manager on Mac?

Dell Display and Peripheral Manager (DDPM) is an Apple macOS application used to manage a monitor or a group of monitors or webcams.

Dell Display and Peripheral Manager allows manual adjustment of the displayed image, assignment of automatic settings, energy management, window organization, image rotation, webcam preview, webcam settings and other features on selected Dell monitors and webcams.

The application supports most of the webcam customization features excluding Presence Detection, ExpressSign-In, Capture and Auto Installation.



Download the Dell Display and Peripheral Manager from www.dell.com/support/wb7022.

For more details on the application and the customizations available for Dell Display and Peripheral Manager on Mac for Dell WB7022, refer to the User's Guide for Dell Display and Peripheral Manager on Mac at www.dell.com/support/wb7022.

Frequently asked questions

1. **What is the recommended configuration to install the Dell WB7022 webcam?**
   Windows 10 64-bit or newer
   Mac OS 12.3.1 or newer
   One USB 3.0 type-A port
2. **What is Windows Hello camera?**
   Windows Hello is an authentication method offered on Windows 10 and 11. It allows the user to authenticate themselves using fingerprint, facial recognition, or a secure PIN. The Dell WB7022 webcam supports Windows Hello and allows you to login to your PC using facial recognition.
   To enable Windows Hello, go to **Settings > Accounts > Sign-in options** and configure Windows Hello.
3. **What is a proximity sensor and what does it do?**
   Proximity sensors are used to detect the presence of any object if they come into the field of view of the sensor. The Dell WB7022 webcam has a proximity sensor that triggers Windows Hello and authenticates the user using facial recognition. The sensor also detects your presence and wakes up your computer from sleep. So when you approach your computer, it is ready to log you in using Windows Hello. Additionally, it detects when you walk away from the system and locks it providing complete security
4. **Why should I use USB 3.0 or higher to setup my Dell WB7022 webcam?**
   The Dell WB7022 webcam supports 4K video resolution only when it is connected to a USB 3.0 port. If it is connected to a USB 2.0 port, due to the data transfer limitation, you may experience lower image quality and authentication issues.
5. **How do I know if my camera is on?**
   The Dell WB7022 webcam has a status-LED on the front lens that stays on (white light) when the camera is in use. The status-LED behaviour is as follows:
   Webcam in use - Status LED is solid white
   Windows Hello authentication in progress - IR LED blinks repeatedly
6. **How do I configure Windows Hello through the Dell WB7022 webcam?**
   Currently Windows 10 (October 2020 update or earlier) does not support external webcam for Windows Hello facial recognition. However, you can set the Dell WB7022 webcam to work with Windows Hello by following these steps: Go to **Camera Control** in **Dell Peripheral Manager** > Check "**Prioritize External Webcam**" option. For more information, go to the Dell Peripheral Manager.
7. **Can I use the Dell WB7022 webcam with a docking station or a USB Hub?**
   Yes, you can configure the webcam through a docking station or a USB hub connected to your computer
8. **Why doesn't Wake on Approach work when I put my computer to sleep?**
   If you put your computer to sleep manually, the Dell WB7022 webcam detects you in the FOV (field of view) before the system goes to sleep. This is when the Wake on Approach feature does not work. By design, it works only when the Walk Away Lock triggers the computer to go to sleep. When your presence is detected later, Wake on Approach will take less than 10 seconds to wake up the system.

Troubleshooting

Problem	Possible solutions
Recommended steps for webcam issues	For any issues with the Dell WB7022 webcam, it is recommended to start by following these steps: **1.** Update the BIOS on your computer to the latestavailable version. **2.** Update the operating system to the latest available version. **3.** Update the USB-host and Thunderbolt driver on your computer. **4.** Update the firmware on the Dell WB7022 webcam to the latest version from www.dell.com/support/wb7022.
Webcam not detected	**1.** Try disconnecting and reconnecting the USB cable. **2.** Check if the webcam is detected in Device Manager. **3.** Disconnect the webcam from any docking stations or USB hubs, and connect it directly to the computer. **4.** Ensure the webcam cable is inserted completely into the USB-C port of the webcam.
Unable to select 4K resolution in camera settings	**1.** Ensure the webcam cable is inserted completely into the USB-C port of the webcam. **2.** Check if the webcam is connected to a USB 3.0 port on your computer so that it has enough through-put to support 4K video.
Walk Away Lock and Wake on Approach do not work	The Dell WB7022 webcam cannot utilize Walk Away Lock and Wake on Approach features on systems that support S3 state. For more details on the S3 state, see System Sleep States.
Image or video shows artefacts and flickering, due to interference from LED or Florescent light sources	To resolve this issue, additional customization is needed based on your environmental lighting. For details on how to resolve this, go to **DDM or DDPM** > **Color and Image**: **1 .**Switch on the Anti Flicker toggle. **2 .**Toggle between 50Hz and 60Hz to check which option eliminates the flickering.

Webcam's proximity detection feature does not work	This feature is not supported on non-Dell computers. If you are using a Dell computer, update the BIOS and drivers to the latest available version from the Dell support site.
Unable to install Dell Peripheral Manager on ARM-based Windows computers	Dell Peripheral Manager is not supported on ARMbased Windows computers.
Webcam does not work with Dell Peripheral Manager and Windows Camera app after hot-plugging the webcam to the computer	Wait for a few seconds after unplugging the camera before re-connecting it to the computer.
Webcam not detected when connected to a docking station or USB hub	**1.** Connect the dock or hub to a USB 3.0 port on the computer. **2.** Update the firmware on the dock to the latest version.
Webcam is unable to automatically set the frame-rate and exposure	Auto-exposure and frame rate feature only function at low light condition and it is supported when HDR is turned off. Toggle off HDR on the Dell Peripheral Manager to use auto-exposure and frame rate.
Auto-framing does not work when camera is set to run at 60 fps	The Dell WB7022 webcam does not support 60 fps at 4K. Auto-framing will stop working at 60 fps to avoid resolution drops. The webcam can only support autoframing when the webcam is configured to run at 24 or 30 fps.

Statutory information

Warranty

Limited warranty and return policies

Dell WB7022 webcam ships with a 3-year limited hardware. If purchased together with a Dell system, it will follow the system warranty.

For U.S. customers:

This purchase and your use of this product are subject to Dell's end user agreement, which you can find at www.dell.com/terms This document contains a binding arbitration clause.

For European, Middle Eastern and African customers:

Dell-branded products that are sold and used are subject to applicable national consumer legal rights, the terms of any retailer sale agreement that you have entered into (which will apply between you and the retailer) and Dell's end user contract terms.

Dell may also provide an additional hardware warranty—full details of the Dell end user contract and warranty terms can be found by going to www.dell.com, selecting your country from the list at the bottom of the "home" page and then clicking the "terms and conditions" link for the end user terms or the "support" link for the warranty terms.

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Getting Help

Contacting Dell

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

Steps

1. Go to www.dell.com/support.
2. Select your support category.
3. Verify your country or region in the Choose a Country/Region drop-down list at the bottom of the page.
4. Select the appropriate service or support link based on your need.