# NEBULA



# User Manual Nebula Cosmos Laser / Nebula Cosmos Laser 4K

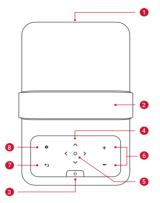
# What's Included



| 1 | Nebula Cosmos Laser / Cosmos Laser 4K |  |
|---|---------------------------------------|--|
| 2 | Nebula 4K Streaming Dongle            |  |
| 3 | Remote Control                        |  |
| 4 | Power Cord                            |  |
| 5 | AAA Batteries x 2                     |  |
| 6 | Quick Start Guide                     |  |

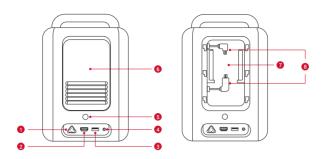
# At a Glance

# **Top and Front Panel**



| 1 | Lens   |  |
|---|--|--|
| 2 | Handle   |  |
| 3 | Power Button   |  |
|   | <ul><li>Press to power on.</li><li>Press and hold for 3 seconds to power off.</li></ul>  |  |
| 4 | Navigation Buttons   |  |
|   | Move through the menu.   |  |
| 5 | Confirm a Selection  |  |
| 6 | Volume Up/Down   |  |
| 7 | Back   |  |
|   | <ul> <li>Return to a previous menu.</li> <li>When in Bluetooth Speaker Mode, press again to switch to<br/>Projector Mode.</li> </ul> |  |
| 8 | Settings (Projector)   |  |

# **Rear View**



| 1 | AC IN  |  |
|---|--|--|
|   | Connect to power supply.                       |  |
| 2 | HDMI   |  |
|   | Connect to a playback device with HDMI output. |  |
| 3 | USB  |  |
|   | Connect to a USB storage device.               |  |
| 4 | AUX  |  |
|   | Connect to headphones or an external speaker.  |  |
| 5 | Infrared Receiver                              |  |
| 6 | Back Cover                                     |  |
| 7 | Streaming Dongle Compartment                   |  |
| 8 | Micro-USB/Micro-HDMI Connectors                |  |
|   | Connect to the Streaming Dongle.               |  |

### **Bottom View**



1/4" Tripod Socket

### **Remote Control**



| 1 | <u></u> | Power on/off or switch to Standby Mode. |
|---|---------|---|
| 2 | ••      | Activate the Google Assistant.          |

| 3   | A                  | <ul> <li>Open an app, move it, or remove it from your home screen favorites.</li> <li>Select a channel to add to or remove from the watch list.</li> </ul> |
|-----|--------------------|--|
| 4   | Navigation Buttons | Move through the menu.   |
| 5   | <b>←</b>           | Return to the previous screen or action.   |
| 6   | + -                | Volume up/down.  |
| 7   | <b>►</b> YouTube   | Open YouTube.  |
| 8   | prime video        | Open Prime Video.  |
| 9   | €                  | Select an input source.  |
| 10  | *                  | Access the settings page.  |
| 11) | Confirm Button     | Confirm a selection.   |
| 12) | 台                  | Guide (Open Live TV EPG)   |
| 13  | n                  | Go to the home screen.   |
| 14) | ^ ~                | Channel up/down.   |
| 15) | <b>∢</b> ×         | Mute or resume the sound.  |
| 16  | NETFLIX            | Open Netflix.  |
| 17  | DIENEP+            | Open Disney+ Video.  |

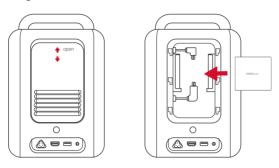


• On the remote, press and hold the Home and Back buttons simultaneously for about 10 seconds. After Bluetooth connected, you can operate by using the remote.

# **Getting Started**

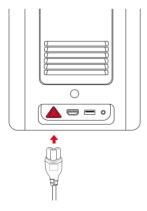
### **Installing 4K Streaming Dongle**

- 1. Press up to open the back cover.
- 2. Correctly connect the included 4K Streaming Dongle to the Micro-USB/Micro-HDMI connectors, then close the dongle compartment by pressing down on the back cover.



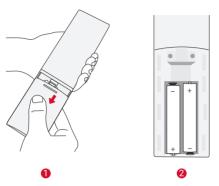
### **Connecting to Power**

Connect the power cord to the device, and then to the power supply.



### **Preparing the Remote**

- 1. Press and slide down to open the battery cover.
- 2. Insert 2 new AAA batteries, matching the polarity (+ / -) as indicated. Close the battery cover until it clicks into place.





 The distance between the remote and the projector should not exceed 10 m / 33 ft.

## **Positioning Your Projector**

You can position your projector in the following ways.

- Front: The projector is placed on the table in front of the screen.
   This is the most common way to position the projector for quick setup and portability.
- Rear: The projector is placed on the table behind the screen. A special rear projector screen is required.
- Front Ceiling: The projector is suspended upside-down in front of the screen. The ceiling/wall mount kit is required.
- Rear Ceiling: The projector is suspended upside-down from behind the screen. A special rear projector screen and ceiling/ wall mount kit are required.



• After powering on the projector, press the Settings button on

the projector, then go to **Advanced Settings** > **Projector Mode** and select a setting.

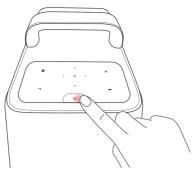
- It is unnecessary to tilt the projector toward the projection surface. This device is featured with autofocus and autokeystone correction.
- You may also install the projector onto a tripod (sold separately) if necessary.
- The distance between the projector lens and the screen determines the projection image size.

| Screen Size | Distance Between Projector Lens and Screen |
|-------------|--|
| 60 inches   | 1.68 m / 5.51 ft                           |
| 70 inches   | 1.97 m / 6.46 ft                           |
| 80 inches   | 2.25 m / 7.38 ft                           |
| 90 inches   | 2.53 m / 8.30 ft                           |
| 100 inches  | 2.81 m / 9.22 ft                           |
| 110 inches  | 3.10 m / 10.17 ft                          |
| 120 inches  | 3.37 m / 11.06 ft                          |
| 130 inches  | 3.65 m / 11.98 ft                          |
| 140 inches  | 3.93 m / 12.89 ft                          |
| 150 inches  | 4.22 m / 13.85 ft                          |

# **Powering On/Off**

Press the power button to power on.

Press and hold the power button for 3 seconds to power off.



|  | Steady Blue | Powered On   |
|--|-------------|--------------|
|  | Steady Red  | Standby Mode |
|  | Steady Red  | Powered Off  |



- When powered on, press the power button to switch to Standby Mode
- In HDMI Source Mode, the projector will switch to Standby Mode after 10 minutes of button inactivity or when no signal is detected.
- When Standby Mode lasts for 1 hour, the projector will automatically power off.

# Setup

When using the projector for the first time, follow the on-screen display (OSD) instructions to complete the basic setup.

- · Bluetooth connection
- Select your language
- Set up your TV with your Android phone (Optional)
- · Wi-Fi connection
- · Sign in with your Google account

### **Remote Buttons**

For the best experience, add Nebula to the TV list and set up the remote buttons. Follow the on-screen instructions to complete the setup. After

a successful setup, you can control the volume, power, and input of your device by using the remote.

- 1. Press the **Settings** button on the remote.
- 2. Select **Set Up Remote Buttons** > **Add Device** > **TV**, then select Nebula as the TV

### **AutoFocus Keystone**

When you power on the projector or move it to another location, the projector will automatically focus and perform keystone correction.

- After setting up the remote controls, you can also press and hold the **Input Source** button on the remote to activate this feature.
- You can also manually adjust the focus and perform keystone correction in the **Settings** menu. (See **Device Settings**)

### **Auto Screen Fit**

This projector can automatically adjust the alignment to your screen size.

 To activate this function, press the Settings button on the projector, then select Image Correction > Auto Screen Fit.

### **Nebula Connect App**

To easily control the projector, we recommend you to download the devoted **Nebula Connect** app.

- Download the **Nebula Connect** app from the App Store (iOS devices) or Google Play (Android devices).
- 2. Enable Bluetooth on your phone and select this projector as the device to be connected.
- 3. Open the **Nebula Connect** app and follow the on-screen instructions to complete the connection setup.

### **System Update**

To fully enhance your experience with this product with the latest features, you are recommended to update the system from time to time. (See Settings)

# **Settings**

# **Device Settings**

Go through the setup process when you turn on the projector for the first time. Press the **Settings** button on the projector to access the settings menu of this device.

| Picture      |  |  |
|--------------|--|--|
| Brightness   | Adjust brightness based on your environment.   |  |
| Picture Mode | The projector is preset with several predefined picture modes so that you can choose one to suit your environment and input source.  • Standard: Keeps natural looking colors with a balance of warm and cool tones.  • Vivid: Provides more picture details and color sharpness.  • Soft: Provides warm colors with lower light.  • Movie: Provides the best colors for watching movies.  • Game: Increases the brightness and response time level for playing video games.  • Picture Custom: Manually set the contrast, saturation, sharpness, color temperature, and gamma, or reset the values. |  |
| Aspect       | Adjust the width and the height proportion of the display. You can select from these options: Auto, 16:9, 16:10, 4:3.  |  |
| HDR          | Turn High-Dynamic Range on or off. HDR enables the projector to automatically detect the brightness and darkest points of the input source and optimize settings to reproduce contents under high dynamic range.   |  |

| Audio  |  |  |
|--------|--|--|
| Volume | Adjust the volume of the built-in speaker. |  |

| Audio Mode | The projector is preset with several predefined sound modes so that you can choose one to suit your environment and input source.  • Standard: Keeps the original sound.  • Music: Enhances the treble for listening to the music.  • Movie: Creates a surround-sound listening experience for watching movies.  • News: Make voices more clear and dynamic for listening.  • Audio Custom: Manually set audio settings such as bass, midrange, and treble. |
|------------|---|
| Dolby      | Adjust the Dolby DRC Mode.  |

| Image Correction                              |   |  |
|---|---|--|
| One-Click Focus<br>and Keystone<br>Correction | Automatically focus and perform keystone correction.  |  |
| Keystone<br>Correction                        | Automatically or manually perform keystone correction. Manual keystone correction is only available when auto keystone correction is off. |  |
| Focus   | <ul> <li>Autofocus: Activate or deactivate Autofocus.</li> <li>Manual Focus Correction: Manually adjust the focus.</li> </ul>             |  |
| Screen Zoom                                   | Zoom in or out of the projection image.   |  |
| Auto Screen Fit                               | Activate to automatically adjust the image size to your surface.  |  |

| HDMI         |  |
|--------------|--|
| Input Access | Select Android TV or HDMI as the input source. |
| HDMI 2.0     | Auto/Off/On                                    |

| About          |   |
|----------------|---|
| Projector Info | Check the current system firmware version and the projector firmware version. |

|                | Check our regional hotlines to contact our customer service team. |  |
|----------------|---|--|
| Nebula Connect | Scan the QR code to install the Nebula Connect app.               |  |

| Advanced Settings   |   |  |
|---------------------|---|--|
| Language            | Select your language.   |  |
| Projector<br>Mode   | <ul> <li>Front: The device is located in front of the projection surface.</li> <li>Rear: The device is located behind the projection surface.</li> <li>Front Ceiling: The device is hanging from the ceiling in an upside-down position. The image is rotated by 180 degrees.</li> <li>Rear Ceiling: The device is hanging from the ceiling in an upside-down position behind the projection surface. The image is rotated by 180 degrees and horizontal mirrored.</li> </ul> |  |
| Eyesight Protection | Activate or deactivate the eyesight protection function.  |  |
| ToF Calibration     | If the picture is still unclear after cleaning the lens, calibrate the Time-of-Flight (ToF) sensor.   |  |
| Back to Default     | Restore settings to default.  |  |

# **System Settings**

On the remote, press the Settings button to access the setting menus of the system.

| Network & Internet | See available networks.                     |  |
|--------------------|---|--|
| Accounts & Sign-In | Sign in to make the most of the Android TV. |  |
| Apps               | See all apps installed.                     |  |

| Device<br>Preferences    | <ul> <li>About: Check the product information, upgrade firmware, reset the system, or rename the device.</li> <li>Date &amp; Time: Set date and time. Select time zone, time format, and automatic time calibration.</li> <li>Language: Select an on-screen display language.</li> <li>Keyboard: Check and manage keyboards.</li> <li>Sound: Select the sound formats.</li> <li>Storage: View the internal storage usage.</li> <li>Home Screen: Set the channels and apps on the home screen.</li> <li>Google Assistant: Sign in to get better voice control of your TV.</li> <li>Chromecast Built-in: Choose to show notifications on all Android devices connected to your Wi-Fi and let them control media casting to this device.</li> <li>Screen Saver: Change the screen saver settings.</li> <li>Location: Check the location status.</li> <li>Usage &amp; Diagnostics: Automatically send diagnostic information to Google, like crash reports and usage data from your device, apps, and Chromecast built-in.</li> <li>Accessibility: Set the caption settings.</li> </ul> |
|--------------------------|---|
|                          | <ul> <li>Reboot: Reboot the system or cancel.</li> <li>Display: Adjust screen resolution, display mode, and screen position.</li> <li>HDMI CEC: Enable HDMI CEC to allow this projector to communicate back and forth with</li> </ul>   |
| TV Settings              | your TV through HDMI ports. This projector and your TV can control each other. <b>One Key Play</b> allows this projector to use the TV as the active source when playback starts.  • Audio Output: Adjust Dolby DRC mode.   |
| Remotes &<br>Accessories | Search for accessories for pairing.   |

| Set Up Remote |  |
|---------------|--|
| Buttons       |  |

**Add Device:** Add a TV, AV receiver, or a soundbar to experience remote button controls. With the remote control, you can control volume, power, and input on TVs, AV receivers, and soundbars.

# Wi-Fi Settings

You can enable the Wi-Fi connection on your projector using one of the following methods:

- 1. Press the Settings button (the cogwheel icon) on the remote control, and navigate to **Settings > Network & Internet**.
- 2. Use the touch panel on the projector to access **Settings > Network & Internet**.
- 3. Open Nebula Connect app on your device, and select your projector's model, then proceed to **Settings > Network & Internet**.

# **Using Your Projector**

### Select an App

Once connected to a wireless network, you can access online services, enjoy movies, music, and pictures, and browse online. Apart from the pre-installed apps, you can also download more apps from Google Play.

### **Voice Assistant**

After setup, press the Google Assistant button on the remote, you can speak to the Google Assistant and request your commands.

### **Wireless Screen Mirroring**

Wirelessly cast movies, games, and music from your compatible iOS, MacOS, Android, or Windows device right to Nebula Cosmos Laser / Cosmos Laser 4K.



 Make sure that Nebula projector and your device are connected to the same network. The network can be a WiFi network or your

### phone's hotspot.

 Certain content may be unavailable to be cast due to copyright restrictions. In this case, you can stream the content via the same app installed on the projector. For example, copyrighted content from Netflix cannot be mirrored or cast. You need to download Netflix from Google Play.

### **iOS Devices**

iOS devices support **AirPlay** while your Nebula projector does not have **AirPlay** preloaded. You need to install the Nebula Manager app from Google Play, and then install the **AirScreen** app from the Nebula Manager app to enable **AirPlay** on your Nebula projector.

### Screen Mirroring From iPhone or iPad:

- 1. Swipe up to display the control console and tap the **AirPlay** icon.
- 2. Select "D2341/D2350" as the device you want to cast to.

### Streaming Video From iPhone or iPad:

- Open the streaming apps you want to cast on the Nebula projector and select a video to play.
- 2. Click the **AirPlay** icon or cast icon in the top right corner to cast to the projector.

### **Screen Mirroring From Mac:**

Click the **AirPlay** icon on the Mac and select the Nebula projector to start mirroring.

- To stop mirroring, click the AirPlay icon again and then select Turn AirPlay Off.
- The AirPlay icon in the menu bar is blue when the function is active.

### **Android Devices**

Your Nebula projector supports Chromecast, which means you can mirror or stream videos from your Android devices that support Chromecast.

### **Screen Mirroring:**

- Go to Settings > Connected Devices > Connection Preferences > Cast on your phone.
- 2. Select "D2341/D2350" as the device you want to cast to.

### **Streaming Videos:**

Chromecast can only open applications that support Chromecast, such as YouTube and Prime Video. To find more information about apps that support Chromecast, please install the Google Home app on your phone.

- 1. Play a video and click the Chromecast button at the top to search for a Chromecast-compatible device.
- 2. Select "D2341/D2350" as the device you want to cast to.

### Windows 10 PC

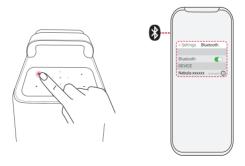
You can stream videos from a Windows 10 PC to your Nebula projector by using the Chrome browser.

- 1. Launch the Chrome browser on your Windows 10 computer, at the top right corner of the browser. Click **More > Cast**.
- 2. Select "D2341/D2350" as the device you want to cast to.

### **Bluetooth Speaker Mode**

You can use this projector as a standalone Bluetooth speaker.

- Press the Settings button on the projector, then select Bluetooth Speaker Mode. You can also enter Bluetooth Speaker Mode in the Nebula Connect app.
- 2. Enable Bluetooth on your phone and select "**Nebula-XXXXXX**" as the device to be connected.





- The projector light will be shut off shortly.
- Press the **Back** button to exit Bluetooth Speaker Mode.

### **Playing Video from HDMI Devices**

This projector supports connections with vairous HDMI playback devices such as TV sticks, TV boxes, DVD players, set-top boxes (STB), game consoles, or othre devices.

- 1. Connect this projector to an HDMI playback device with an HDMI cable (not included).
- 2. Press the **Input Source** button on the remote to select your HDMI playback device as the input source. Alternatively, select **HDMI** on the home menu and press the **Confirm** button.





- The HDMI port and USB port cannot be used for video or audio streaming simultaneously.
- The projector will automatically start the HDMI playback when connected to an HDMI playback device for the first time.

### **Connecting to USB Storage Device**

With this projector, you can enjoy music, video, and pictures that are stored on a USB storage device (not inlcuded).

To play from a USB storage device:

- 1. Download the **File Explorer** app from Google Play.
- 2. Insert the USB storage device into the USB port.
- 3. Select music, videos, or photos from the USB drive that you want to play.
- 4. Open the pre-installed multimedia player app and select the desired files to play. If no multimedia player app is available, download one from Google Play.





 The maximum memory capacity of the supported USB storage device is 4 TB.

### **Connecting to External Sound Devices**

This projector can also be connected to external sound output devices, including headphones and speakers; when connected to external speakers, the built-in speaker system is disabled.

To play sound through external sound devices:

- 1. Use a 3.5mm audio cable or an adapter (not included) to connect your headphones or external speaker.
- 2. Connect the other end of the audio cable to the **AUX** port on this projector.
- You will hear audio from your external sound devices.





 Before connecting headphones, turn down the volume to avoid hurting your ears.

# **Specifications**

• Specifications are subject to change without notice.

| Input                        | 100-240V~ 50/60 Hz, 2.5A  |
|------------------------------|---|
| Power Consumption            | < 200 W   |
| Standby Power<br>Consumption | < 0.5 W   |
| Resolution                   | 1920x1080 (D2341); 3840x2160 (D2350)  |
| Compatible Resolutions       | 480i (60Hz), 480p (60HZ), 576i (50Hz),<br>576p (50Hz), 720p (30Hz), 720p<br>(50Hz), 720p (60Hz), 1080p (24Hz),<br>1080p (30Hz), 1080p (50Hz), 1080p<br>(60Hz), 1080i (50Hz), 1080i (60Hz),<br>4K2K (23.976Hz), 4K2K (25Hz), 4K2K<br>(30Hz), 4K2K (50Hz), 4K2K (60Hz), 4096<br>(23.976Hz), 4096 (25Hz), 4096 (30Hz),<br>4096 (50Hz), 4096 (60Hz) |
| Aspect Ratio                 | 16:9  |
| Screen Size                  | 60"-150"  |
| Throw Ratio                  | 1.27:1  |
| Light Source                 | Laser (ALPD 3.0)  |
| Focus                        | Auto  |
| Keystone Correction          | Auto  |
| Speaker Output Power         | 20 W (D2341); 30 W (D2350)  |
| Noise                        | 28 dB   |
| Wi-Fi                        | MIMO Wi-Fi 2.4GHz/5.0GHz 802.11 a/b/g/n/ac  |
| Bluetooth Version            | 5.0   |
| Bluetooth Range              | 25 m / 82 ft  |
| Video Format                 | H.265 10-bit 4K*2K@75fps, VP9 4K*2K<br>@75fps, AVS2-P2 up to 4K*2K@75fps,<br>H.264 AVC 4K*2K@30fps, MPEG1/2/4<br>ASP, WMV/VC-1, AVS+, RealVideo8/9/10<br>and other video formats  |

| Audio Format             | MPEG1/2/4, MVC, MP3, WMA/WMA-pro, FLAC, OGG (AC3, Dolby Digital Plus) and other audio formats |
|--------------------------|---|
| Photo Format             | HD JPEG, BMP, PNG   |
| USB Format               | FAT, FAT32, NTFS, EXFAT   |
| Operating Temperature    | 0°C-35°C / 32°F-95°F  |
| Remote Control Batteries | AAA x 2   |

# **Troubleshooting**

### 1. No image appears?

 Check the connection and make sure to select the correct input source.

### 2. Is the image too large or too small?

- · Move the projector closer to or further from the screen.
- Press the **Settings** button on the projector, then select **Screen Zoom** and adjust the image size.

### 3. Blurry image?

· Place on a stable, flat surface and wait until the autofocus works.

### 4. Reversed image?

Press the Settings button on the projector, then select Advanced
 Settings > Projector Mode and switch to a correct state.

### 5. No sound?

- Make sure that mute isn't on.
- Please refer to the audio file formats supported. (See Specifications)

### 6. The remote doesn't work?

- Make sure that the remote has been successfully paired with the projector.
- Make sure there are not any obstacles between the remote and the projector.
- Change batteries if they are depleted.

### **Trademarks**



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# **D**Olby

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# Warranty

### 30-Day Money-Back Guarantee for Any Reason

You may return your undamaged product and packaging within 30 days of purchase to receive a FULL REFUND for any reason. If the reason for return isn't quality-related, the customer must pay for the return shipping.

### 12-Month Warranty for Quality-Related Issues

Nebula's products are warrantied to be free from material and workmanship defects for 12 months from the date of purchase. Within this period, Nebula will provide a replacement and cover any return shipping costs for products that fail in normal use.

Please Note: Any provided shipping labels must be used within 20 days from the date they're issued by Nebula Support.

Default Open Ports: Wi-Fi (2.4 GHz / 5 GHz)

Port Description:

- 1. Upon initial power-on or after a reset, if no Wi-Fi information has been configured, the device will begin scanning for available SSIDs.
- 2. In normal operating mode, the device will automatically connect to the previously saved router SSID and password.
- 3. To change the Wi-Fi configuration, you can go to Settings > WiFi, or follow the instructions in the manual to reset and reconfigure the network connection.