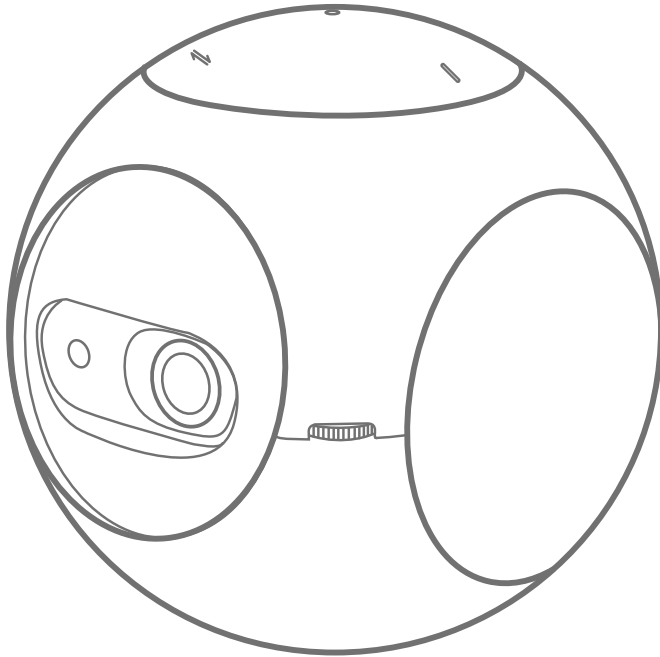


NEBULA

by Anker



User Manual

Nebula Astro

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Safety Instructions

Read all instructions before you use this device. Do not make any changes or create settings that are not described in this manual. If physical injury, loss of data, or damage is caused by failure to follow instructions, the warranty does not apply.

Setup

- To reduce the risk of fire and/or electric shock, do not expose the device to rain or moisture. Objects filled with liquids, such as vases, should not be placed on this device.
- Do not place this device on soft surfaces such as tablecloths or carpets, otherwise the device could be a fire hazard.
- Do not place this device in areas susceptible to excessive dust and dirt or near any appliance generating a strong magnetic field.
- To prevent overheating, do not block or clog the ventilation openings.
- Never place this device in a confined space. Always leave enough space around this device for ventilation.
- Avoid overexposing this device to direct sunlight, heat, large temperature fluctuations, and moisture. Avoid extreme temperatures. The suitable operation and storage temperature for this device and its accessories is 41°F to 95°F / 5°C to 35°C.
- When this device is running for a long period of time, the surface may become hot. If this occurs, shut it down immediately and unplug the charger. Resume operation after the device has cooled down.
- Always handle this device with care. Avoid touching the lens.
- Do not allow children to handle the device without supervision.
- Do not place heavy or sharp objects on this device.
- To avoid electric shock, do not disassemble the device.
- Only use attachments or accessories specified by the manufacturer.
- Avoid extreme vibrations as they may damage the internal components.

Power Supply

- Use only the provided power adapter.
- Power off the device before removing the power supply from the socket.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from this device.
- Unplug this device if there are lightning storms or when unused for a long period of time.
- Where the power plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

- Before you make or change any connections, ensure that all devices are disconnected from the power outlet.
- Never touch the power cable or the power connector with wet hands.

Hearing Safety

- To prevent hearing damage, do not listen for extended periods at high volume. Set the volume to a safe level.

Charging

- The charger type is DST451-150300W-K with output voltage / current of USB-C 5V / 2A. The charger should be installed near this product and should be easily accessible.
- This charger is for indoor use only.
- When charging, place this device in an environment that has a normal room temperature (ranges from 41°F to 77°F / 5°C to 25°C) and good ventilation.
- Due to the enclosure material, this device must only be connected to a USB 2.0 or higher.

Battery

- Do not replace the built-in battery yourself. Contact an authorized service center to replace it.
- The remote control contains batteries which can be swallowed. Keep the remote control out of the reach of children.
- Risk of explosion! Keep batteries away from heat, direct sunlight, or fire. Never dispose of batteries by burning.
- Remove the batteries when the remote control has not been used for a long period of time.
- Replace the remote control batteries only with the same or an equivalent type.
- Batteries contain chemical substances and they should be disposed of properly.
- Charge this device regularly. Do not store this device with a completely discharged battery.

Cleaning

- Use a soft, lint-free cloth. Never use liquid, gaseous, or easily flammable cleansers to clean.
- Do not use any liquid cleaning agents to clean the lens to avoid damaging the coating film on the lens.
- Wipe the surfaces gently. Be careful that you do not scratch the surface.
- Use lens cleaning paper to clean the lens.

Repairs

- Do not make any repairs to this device yourself. Only have your device repaired by an authorized service center.
- Improper maintenance can result in injuries to persons or damage to this device.
- Refer all servicing to qualified service personnel.

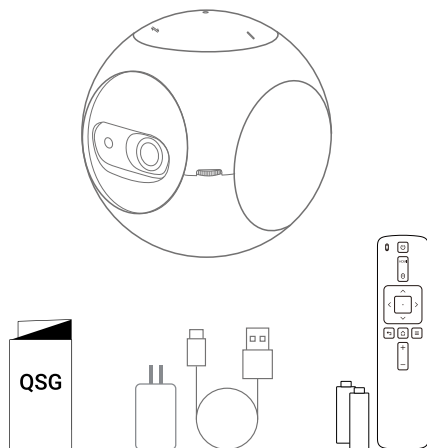
Caution

- Possibly hazardous optical radiation emitted from this device.
- Do not stare directly at the operating beam. The bright light may damage your eyes.

Disclaimer

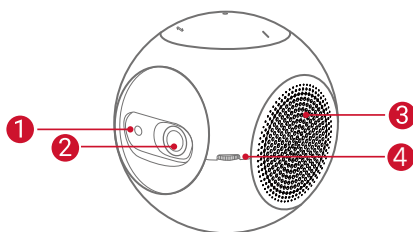
- Make sure you place Nebula Astro on a flat, hard surface, which enables the Eye Guard function to be activated more precisely.
- The distance range set to activate the Eye Guard function is for reference purposes only.
- Keep the lens clean and free from grease, or it may affect the sensitivity of the lens.
- The Eye Guard function is designed for protection only in case that your children accidentally turn the projector towards themselves. DO NOT intentionally turn the projector towards your eyes.

What's Included



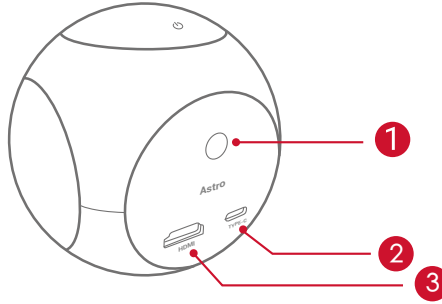
Overview

1. Front View



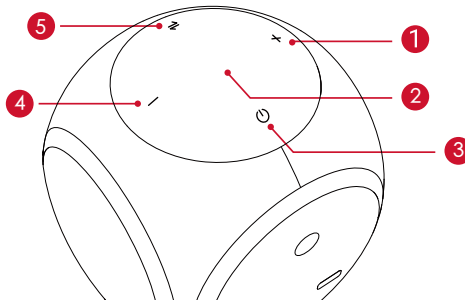
- 1 TOF motion ensor
 - The sensor will be triggered when Eye Guard is activated
- 2 Lens
- 3 Ventilation outlet / inlet
- 4 Focus adjusting knob

2. Rear View



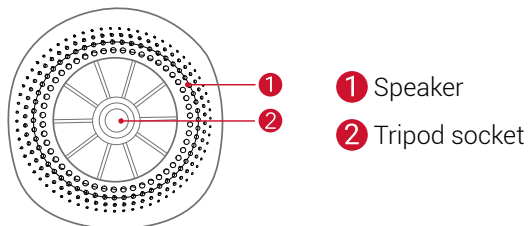
- 1 Infrared receiver
- 2 USB-C port
 - Connect to power supply
- 3 HDMI
 - Connect to a playback device via HDMI output

3. Top View

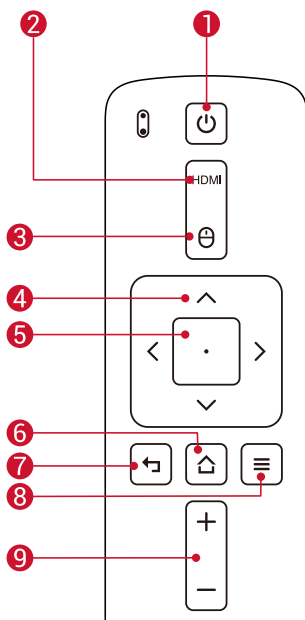


- 1 Volume up
 - Press to turn the volume up
- 2 LED indicator
- 3 Power button
 - Press and hold for 2 seconds to power on / off
- 4 Volume down
 - Press to turn the volume down
- 5 ⇄ button
 - Press to switch between Bluetooth speaker mode and projector mode

4. Bottom View



5. Remote Control



- 1 Power on / off
- 2 Switch to HDMI connection
- 3 Mouse mode
- 4 Navigation
- 5 Confirm the selected content
- 6 Home
- 7 Back
- 8 View more options
- 9 Volume up / down

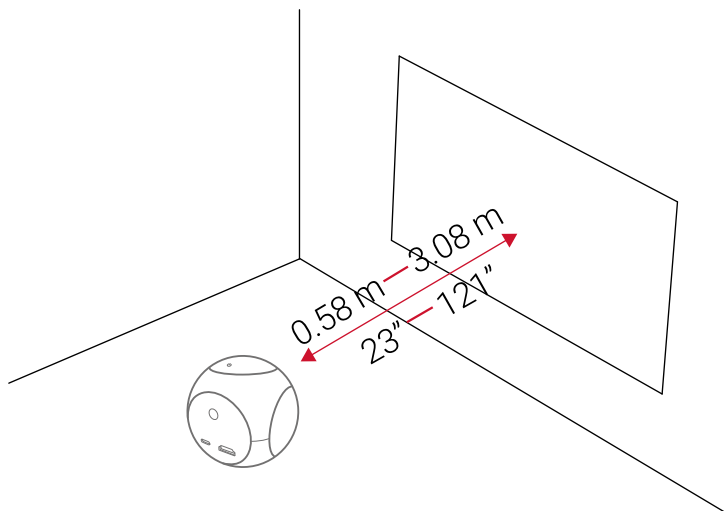
6. LED Indicator

LED Status	Description
Breathing orange	Eye Guard function is activated
Solid red	Charging
Solid green	Fully charged
Flashing red	Low battery (< 20%) / Fault occurs
Solid blue	Power on in projector or Bluetooth speaker mode
Solid orange	Standby in projector mode
Flashing blue	Ready to pair / Bluetooth disconnected (Bluetooth speaker mode)

Getting Started

1. Placement

Place Nebula Astro on a stable, flat surface in front of the projection surface. For the best results, the projection surface should be white and flat. The distance between Nebula Astro and the projection surface must be a minimum of 0.58 meters (23 inches) and a maximum of 3.08 meters (121 inches) to get a projection image between 20 and 100 inches.



- It is unnecessary to tilt Nebula Astro towards the projection surface. You can correct the projection image with the built-in keystone correction.
- The distance between Nebula Astro and the projection surface determines the projection image size. For the best result, position it between 40 and 80 inches away from the projection surface.

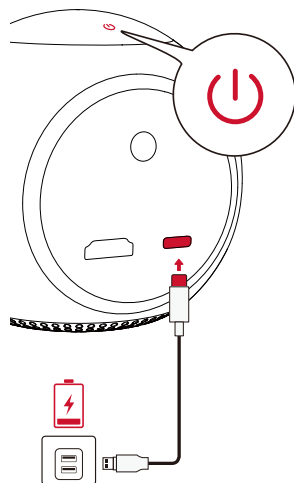
2. Prepare the Remote Control


The remote control comes with two AAA batteries.

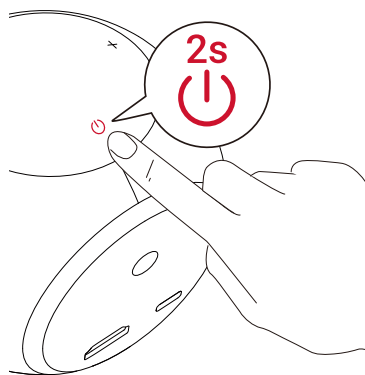
- ① Slide down to open the battery compartment.
- ② To replace the batteries, slide to open the battery compartment, insert new batteries (matching the polarity (+/-) indicated), and close the battery compartment.

3. Get Started

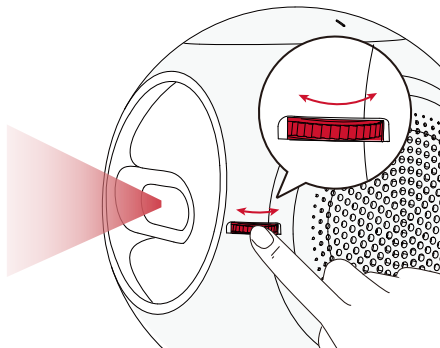
- ① For first-time use, fully charge the built-in battery using the provided cable and adapter.



- ② Hold  for 2 seconds on the projector to turn it on.



- ③ Turn the device towards a suitable projection surface or wall.
- ④ Rotate the knob to adjust the focus.



⑤ For first-time use, follow the on-screen instructions to complete the basic setup.



To give your Nebula Astro the fastest, safest charge, only use the provided adapter.

Nebula Connect App

To easily control Nebula Astro, we recommend downloading the Nebula Connect app. With this app, you can operate your mouse using your phone screen.

① Download the **Nebula Connect** app from the App Store (iOS devices) or Google Play (Android devices).



② Enable Bluetooth on your smartphone.

③ Open the **Nebula Connect** app and select [**Nebula-XXXXXX**] as the device to be connected.

④ Follow the on-screen instructions to complete the connection setup.





To make your experience more enjoyable, we recommend you use the Nebula Connect app instead of remote control.

Settings

Go through the setup process when you power on Nebula Astro for the first time. Determine the distance range to trigger Eye Guard, set your name, birthday, and password.

1. Network


This projector can be connected to the Internet via a wireless (Wi-Fi) connection.

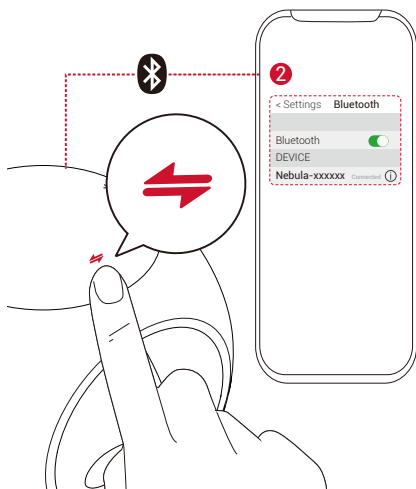
- ① Select  to access the **Settings** page. Select **[Network]** and press .
- ② Follow the on-screen instructions to complete the network connection.

2. Bluetooth

Bluetooth Speaker Mode



You can use this projector as a standalone Bluetooth speaker.

- ① Press  to switch to Bluetooth speaker mode.
- ② Enable Bluetooth on your smartphone and select **[Nebula-XXXXXX]** as the device to be connected.




Projector Mode

You can connect a Bluetooth speaker or pair of headphones to Nebula Astro while in projector mode.

- ① On the home menu, select  to access the **Settings** page. Select **[Bluetooth]** and press . Enter the password if needed.
- ② Follow the on-screen instructions to complete the Bluetooth connection.

3. Projector

On the home menu, select the **Settings** icon to access the Settings page. Select **[Projector]**, and press .

[Image Mode]	[Auto] / [Standard Mode] / [Battery Mode]
[Eye Comfort Mode]	[On] / [Off] Enable or disable eye comfort mode.
[Eye Guard Tech]	[Off] : The Eye Guard function is disabled. It is set to Off by default. [< 20cm] / [< 40cm] / [< 60cm] : When the projector is set to < 20cm / < 40cm / < 60cm , Eye Guard Tech will be activated and your projector will be disabled within a certain distance.
[Auto Keystone Correction]	Enable / disable auto keystone correction.
[Projector Mode]	[Front Projection] : The projector is located in front of the projection surface. [Rear Projection] : The projector is located behind the projection surface. [Inverted Front Projection] : The projector is hanging from the ceiling in an upside down position. The image is rotated by 180 degrees. [Inverted Rear Projection] : The projector is hanging from the ceiling in an upside down position behind the projection surface. The image is rotated by 180 degrees and horizontally mirrored.




4. Parental Controls

On the home menu, select  to access the Settings page. Select **[Parental Controls]**, and press .



[Settings Password]	[[On] / [Off]
[Change Password]	When Settings Password is set to On , Change Password is enabled. This option enables you to change and reset your password. If you forget your password, try the master code. The master code is case-sensitive and includes serial number + Nebula by default. (eg.: XXXXXXXXXXXXXNebula)
[Time Limit]	Set the time limit or time duration when your child is allowed to access the projector daily.

5. Apps Control

The Apps Control enables you to show, hide or sort the app in the desired order on the Home screen in Kids mode.

- ① On the home menu, select  to access the Settings page. Select **[Apps Control]**, and press .
- ② Press and hold  to relocate the selected app.

6. App Manager

- ① On the home menu, select  to access the Settings page. Select **[App Manager]**, and press .
- ② Select an app and check the current version, open or force stop the app, check the storage used or clear data, or uninstall the app.

7. Others

On the home menu, select  to find more setting options.

[General]

[Language]	Select an on-screen display language.
[Keypad Tone]	Turn on / off the keypad tone.
[Automatic Sleep Interval]	5 min / 15 min / 30 min
[Background]	Select a background.
[Clear Cache]	Clear the cached data stored on the projector.
[Screen Mirroring]	Activate screen mirroring.

[Date & Time]

[Automatic Date & Time]	Enable / disable automatic date and time.
[Select Time Zone]	Select time zone.
[Use 24-Hour Format]	Select 24-hour format or 12-hour format.

[Upgrade]

[Check Update]	Check if it is the latest version. Follow the on-screen instructions to upgrade the firmware version.
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[About]



[Recovery]	All data on the built-in storage will be erased.
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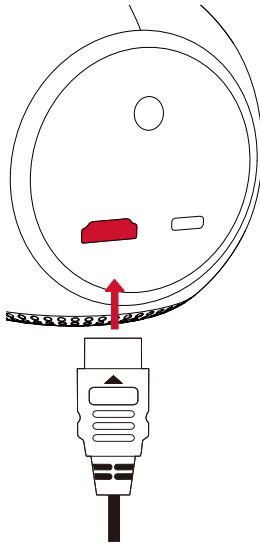
Using the Nebula Astro

1. Play from HDMI Playback Devices

Nebula Astro can be connected to various HDMI playback devices such as a TV box, TV stick, DVD player, set-top box (STB), gaming consoles, or other devices.



To play content from HDMI playback devices:

- ① Connect Nebula Astro to an HDMI playback device with an HDMI cable (not provided).
 - ② Press  to access the home menu, select **[HDMI]**, and press .
- It will automatically start HDMI playback once connected to an HDMI playback device for the first time.



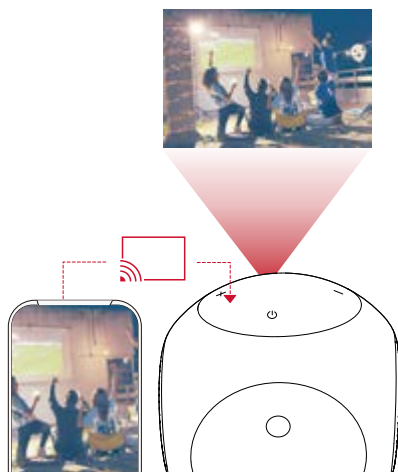
2. Install Apps

Once connected to a wireless network, you can access online services, enjoy movies, music and pictures, and browse online. Aside from the pre-installed apps, you can also install additional apps from the Nebula App Store.

- ① Press  to access the home menu.
- ② Select an Internet service, and press .




3. Screen Mirroring

You can wirelessly cast the screen of your smartphone or tablet onto the projection surface.



For Android users:

To use screen mirroring:

- ① Press  to access the home menu, select  > **[General]** > **[Screen Mirroring]**, and press .
- ② Follow the on-screen instructions to complete the process.
 - Nebula Astro will mirror the screen of your smartphone phone or tablet.

For iOS users:

- ① Open Control Center.
 - On iPhone X or later or iPad with iOS 12 or later: Swipe down from the upper-right corner of the screen.
 - On iPhone 8 or earlier or iOS 11 or earlier: Swipe up from the bottom edge of any screen.
- ② Tap Screen Mirroring.
- ③ Select **Nebula-xxxxxx** from the list. Nebula Astro will mirror the screen of your iPhone or iPad.



- Make sure Nebula Astro and your phone are connected to the same network.
- Certain content cannot be cast on Nebula Astro due to copyright restrictions. In this case, you can stream the content via the same app installed on your Nebula Astro.

Specifications



Specifications and design are subject to change without notice.

Power supply: DC 5V $\overline{=}$ 2A

Power consumption: < 10W

Standby power consumption: < 0.5W

Display technology: 0.2 in 854 x 480p DLP

Light source: RGB LED

Projection image size: 20-100 in

Resolution: 854 x 480p

Brightness: 100 ANSI Lumens

Contrast ratio: 400:1

Throw ratio: 1.3

Throw distance: 0.58 m to 3.08 m

CPU: Quad core A7

OS: Android 7.1

RAM: 1GB DDR

ROM: 8GB eMMC

Speaker drivers: 3W

Wi-Fi: IEEE802.11a/b/g/n Dual Frequency 2.4G / 5G

Bluetooth version: 4.2

USB file system: FAT32

Built-in battery type: Li-Polymer

Capacity: 3250 mAh 3.63V

Movie playtime: approximately 2.5 hours in battery mode

Music playtime: approximately 14 hours in Bluetooth speaker mode

Remote control batteries: AAA x 2

Recommended ambient temperature: 41°F to 95°F / 5°C to 35°C

Relative humidity: 15% ~ 85% (non-condensing)

Storage temperature and humidity: < 149°F / 65°C, < 90% humidity

Dimensions (H x L x W): 91.2 x 82 x 89.2 mm / 3.6 x 3.2 x 3.5 in

Weight: 370 g / 13.1 oz

Troubleshooting

- ① Could not turn on the projector with the remote control?
 - Hold ① for 2 seconds on the projector to turn it on.
 - When powered off, you cannot use the remote control to turn it on.
- ② The remote control doesn't work?
 - Make sure the batteries are already installed in the remote control.
 - Replace the batteries.
- ③ Blurred image?
 - Rotate the focus adjusting knob.
- ④ Cannot connect to a Wi-Fi network?
 - Refresh the list of available networks and retry.
 - Reboot the wireless router or the projector and retry.
- ⑤ How do I update the firmware?
 - When a new version is detected you will be asked to reboot and update.

Notice



This product complies with the radio interference requirements of the European Community.

Declaration of Conformity

Hereby, Anker Innovations Limited. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. For the Declaration of Conformity, visit the Web site www.SeeNebula.com.

RF exposure information: The Maximum Permissible Exposure (MPE) level has been calculated based on a distance of $d=20$ cm between the device and the human body. To maintain compliance with RF exposure requirement, use product that maintain a 20cm distance between the device and human body.

CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

BT Maximum output power: 6.23 dBm; BT Frequency band: 2402~2480 MHz;
Wi-Fi Max Output Power: 17.42 dBm (2.4G); 17.70 dBm (5G);
Wi-Fi Frequency Band: 2412~2472 MHz (2.4G); 5150~5250 MHz, 5725~5850 MHz (5G).
5150~5250 MHz can be used indoor only.

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

Anker Innovations Deutschland GmbH | Georg-Muche-Strasse 3-5, 80807 Munich, Germany

Anker Technology (UK) Ltd | Suite B, Fairgate House, 205 Kings Road, Tyseley, Birmingham, B11 2AA, United Kingdom



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.



This symbol means the product must not be discarded as household waste, and should be delivered to an appropriate collection facility for recycling. Proper disposal and recycling helps protect natural resources, human health and the environment. For more information on disposal and recycling of this product, contact your local municipality, disposal service, or the shop where you bought this product.

FCC Notice

This device complies with the FCC rules, Part 15. 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.

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

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body. This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

The following importer is the responsible party.

Company Name: Fantasia Trading LLC

Address: 5350 Ontario Mills Pkwy, Suite 100, Ontario, CA 91764

Telephone: 1-909-484-1530

IC Statement

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device."

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IC RF Statement:

When using the product, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.

Lors de l'utilisation du produit, maintenez une distance de 20 cm du corps afin de vous conformer aux exigences en matière d'exposition RF.

Anker Innovations Limited

Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong

Trademarks



HDMI, and HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI licensing LLC in the United States and other countries.



The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Anker Innovations Limited is under license. Other trademarks and trade names are those of their respective owners.

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 warranted 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.