

**PHILIPS**

NeoPix 520

Home Projector

# User Manual



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# Introduction

## Dear customer

Thank you for purchasing this projector.

We hope you enjoy this product and the many functions it offers!

## About this user manual

The quick start guide supplied with this product allows you to start using this product quickly and easily. Detailed descriptions can be found in the following sections of this user manual.

Read the entire user manual carefully. Follow all safety instructions in order to ensure proper operation of this product (see **General safety information, page 4**). The manufacturer accepts no liability if these instructions are not followed.

## Symbols used

### Notice



This symbol indicates tips that will help you use this product more effectively and easily.

### DANGER!



#### Danger of personal injury!

This symbol gives warning of danger of personal injury. Physical injury or damage can result from improper handling.

### CAUTION!

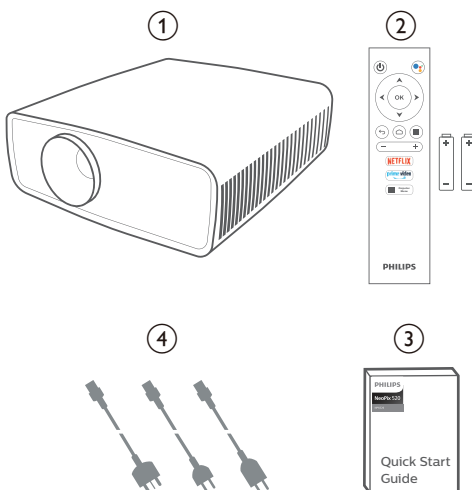


#### Damage to the product or loss of data!

This symbol gives warning of damage to the product and possible loss of data. Damage can result from improper handling.

## What's in the box

- ① NeoPix 520 projector (NPX520/INT)
- ② Remote control with 2 AAA batteries
- ③ Quick Start Guide with Warranty Card
- ④ AC power cables with plugs x 3



## Customer service centre

The Support page, warranty card, and user manuals can be found here:

**Web:** [www.philips.com/support](http://www.philips.com/support)

### Support Contacts:

International Phone: +41 215 391 665

Please ask your provider for international call costs!

**Mail:** [philips.projector.eu@screenio.com](mailto:philips.projector.eu@screenio.com)

### Access our FAQ websites:

<https://support.philipsprojection.com>

<https://community.philipsprojection.com>

# 1 General safety information

Take note of all warning and safety notes indicated. Do not make any changes or settings that are not described in this user manual. Incorrect operation, and improper handling can lead to physical injury, damage to the product or loss of data.

## Setting up the product

This product is for indoor use only. Place the product securely on a stable, flat surface. To help avoid possible injuries to persons or damage to the product itself, position all cables in such a way that no one will trip over them.

Do not operate the product in damp rooms. Never touch the mains cable or the mains connection with wet hands.

Never operate the product immediately after moving it from a cold location to a hot location. When the product is exposed to such a change in temperature, moisture may condense on the crucial internal parts.

The product must have sufficient ventilation and must not be covered. Do not put the product in closed cabinets, boxes, or other enclosures when in use.

Protect the product from direct sunlight, heat, intense temperature fluctuations and moisture. Do not place the product in the vicinity of heaters or air conditioners. Observe the information on temperature listed in the technical data (see **Technical data, page 24**).

Prolonged operation of the product causes the surface to become hot. In case of overheating, the product automatically switches to standby mode.

Do not allow liquids to leak into the product. Turn off the product and disconnect it from the mains supply if liquids or foreign substances leaked into the product. Have the product inspected by an authorised service centre.

Always handle the product with care. Avoid touching the lens. Never place heavy or sharp objects on the product or on the power cable.

If the product gets too hot or emits smoke, shut it down immediately and unplug the power cable. Have your product checked by an authorised service centre. Keep the product

away from open flames (e.g. candles).

### DANGER!



#### **Risk of explosion with incorrect type of batteries!**

There is a risk of explosion if the wrong battery type is used.

Do not expose the batteries (battery pack or embedded batteries) to excessive heat such as sunshine, or open fire.

Under the following conditions, a layer of moisture can appear inside the product which can lead to malfunctions:

- if the product is moved from a cold to a warm area;
- after a cold room is heated;
- when the product is placed in a damp room.

Proceed as follows to avoid any moisture buildup:

- 1 Seal the product in a plastic bag before moving it to another room, in order for it to adapt to room conditions.
- 2 Wait one to two hours before you take the product out of the plastic bag.

The product should not be used in a very dusty environment. Dust particles and other foreign objects may damage the product.

Do not expose the product to extreme vibrations. This may damage the internal components.

Do not allow children to handle the product without supervision. The packing materials should be kept out of the hands of children.

For your own safety, do not use the product during thunderstorms with lightning.

## Repairs

Do not repair the product yourself. Improper maintenance can result in injuries or damage to the product. The product must be repaired by an authorised service centre.

Please find the details of authorised service centres on the warranty card supplied with this product.

Do not remove the type label from this product, as this will void the warranty.

## Power supply

Use only a power adapter which is certified for this product (see **Technical data, page 24**). Check whether the mains voltage of the power supply matches the mains voltage available at the setup location. This product complies with the voltage type specified on the product.

The power outlet shall be installed near the product and shall be easily accessible.

### CAUTION!



Always use the  button to turn the projector off.

Turn off the product and unplug from the power outlet before cleaning the surface (see **Cleaning, page 20**). Use a soft, lint-free cloth. Never use liquid, gaseous or easily flammable cleaners (sprays, abrasives, polishes, alcohol). Do not allow any moisture to reach the interior of the product.

### DANGER!

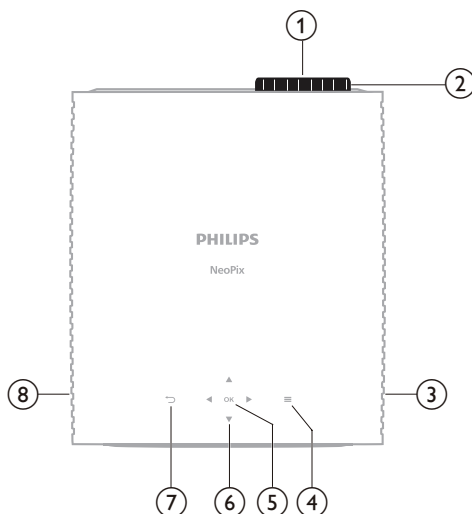




#### Risk of eye irritation!

This product is equipped with a high power LED (Light Emitting Diode), which emits very bright light. Do not look directly into the projector lens during operation. This could cause eye irritation or damage.

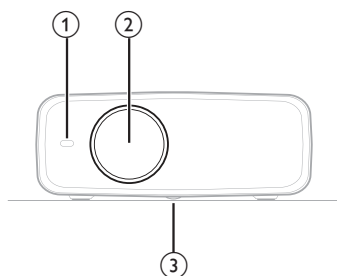
## 2 Overview

### Top view



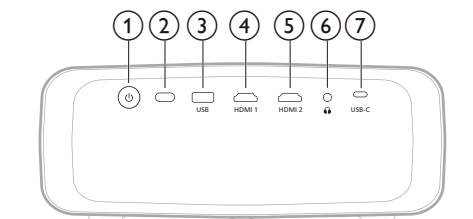
- ① **Projection lens**
- ② **Focus adjustment knob**  
Adjust image sharpness.
- ③ **Right speaker**
- ④   
Quick access to the setup options (e.g. picture and sound options).
- ⑤ **OK**  
Confirm a selection or change the value for the current setting.
- ⑥ **Navigation buttons (Up, Down, Left, Right)**
  - Navigate items on the screen.
  - Press ▲/▼ or ◀/▶ to change the value for the current setting.
  - Press ◀/▶ to move backward or forward in the current video.
- ⑦   
Return to the previous screen.
- ⑧ **Left speaker**

## Front view



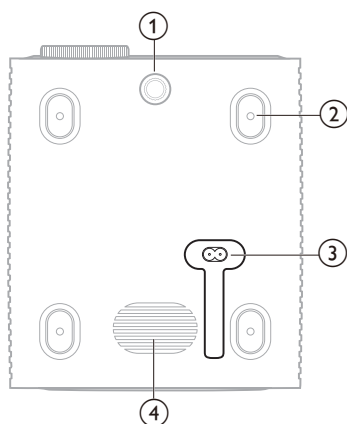
- ① **Front IR sensor**
- ① **Projection lens**
- ② **Angle adjustment knob**  
Turn the knob to adjust screen height.

## Rear view



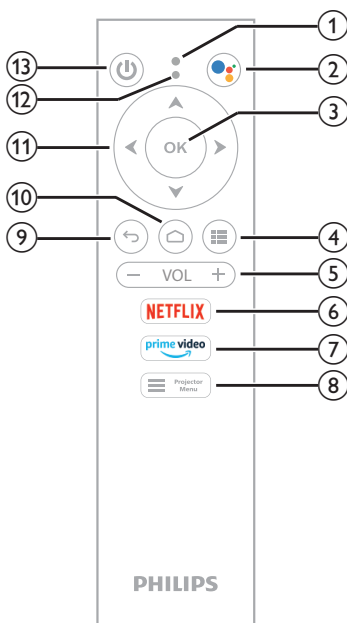
- ① **Power button**
  - Switch the projector on or to standby mode.
  - When the projector is on, the LED lights up in white.
  - When the projector is in standby mode, the LED lights up in red.
- ② **Rear IR sensor**
- ③ **USB**  
Connect to a USB input device, USB storage device or dongle.
- ④ **HDMI 1**  
Connect to an HDMI™ output port on a playback device.
- ⑤ **HDMI 2**  
Connect to an HDMI™ output port on a playback device.
- ⑥ **Audio output**  
3.5 mm audio output; connect to external speakers or headphones.
- ⑦ **USB-C**  
Connect to a USB-C port on a playback device.

## Bottom view



- ① **Angle adjustment knob**  
Turn the knob to adjust screen height.
- ② **Screw hole for ceiling mount**
- ③ **AC power jack**  
Connect to a supplied power cable.
- ④ **Subwoofer**

## Remote control



① **Microphone**



Access the voice command or search function (Google Assistant).

③ **OK**

Confirm a selection or change the value for the current setting.



Display installed apps and access the app store.

⑤ **VOL +/-**

Increase or decrease the volume of Android TV or the projector.

⑥ **NETFLIX**

Quick access to the Netflix service.

⑦ **prime video**

Quick access to the Amazon Prime Video service.



Access or exit the projector's settings menu.



Return to the previous screen.



Access the Android TV home screen.

⑪ **Navigation buttons (Up, Down, Left, Right)**

- Navigate items on the screen.
- Press ▲/▼ or ◀/▶ to change the value for the current setting.
- Press ◀/▶ to move backward or forward in the current video.

⑫ **LED indicator**

- Each time you press a button on the remote control, the indicator flashes.
- Blue light indicates the remote control is in Android TV mode and you can use it to navigate the Android TV user interface.
- Red light indicates the remote control is accessing the projector's settings menu and you cannot use it to navigate the Android TV user interface.



Switch the projector on or to standby mode.

## 3 Initial setup

### Notice



Make sure all devices are disconnected from their power supplies before establishing or changing any connections.

## Install the projector

You can install the projector in four different ways. Follow the guidelines below to correctly install the projector.

### Notice



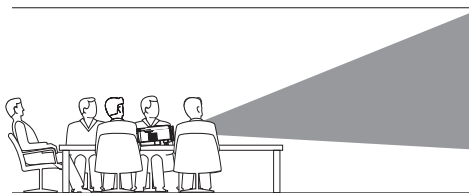
For overhead mounting on ceiling, purchase a projector mount recommended by an installation professional and follow the instructions that come with the mount.



Before mounting on the ceiling, make sure the ceiling can support the weight of the projector and mounting kit.

For ceiling installation, this product must be securely attached to the ceiling in accordance with the installation instructions. An improper ceiling installation may result in accident, injury or damage.

### Front

- 1 Place the projector on a flat surface such as a table in front of the projection surface. This is the most common way to position the projector for quick setup and portability.

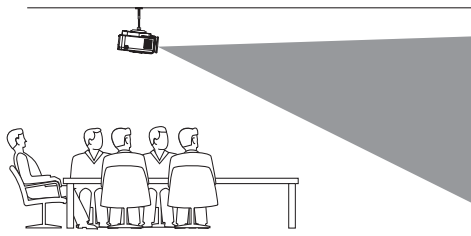


- 2 If the projection direction is incorrect, access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > Install Mode > Front*.

Input >	Location >	Front ✓
Picture >	Install Mode >	Rear
Sound >	Aspect Ratio >	Front Ceiling
Projector >	V/H Keystone	Rear Ceiling
System >	Four Point Keystone	

### Front Ceiling

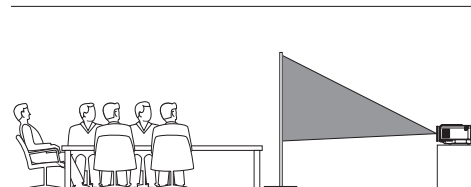
- 1 Mount the projector on the ceiling with upside up in front of the projection screen. A projector mount is required to mount the projector on ceiling.





- 2 Access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > Install Mode > Front Ceiling*.

### Rear

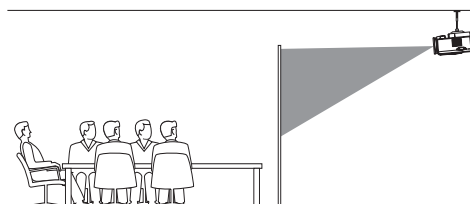
- 1 Place the projector on a table behind the projection screen. A special rear projection screen is required.



- 2 Access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > Install Mode > Rear*.

### Rear Ceiling

- 1 Mount the projector on ceiling with upside up behind the projection screen. To mount the projector on ceiling behind the screen, a projector mount and a special rear projection screen are required.




- 2 Access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > Install Mode > Rear Ceiling*.

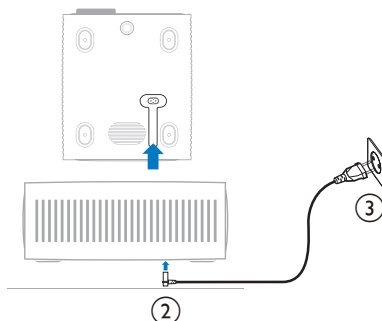
## Connect to power supply

### CAUTION!



Always use the  button to turn the projector on and off.

- 1 Select a supplied power cable with the correct plug (EU/UK/US).
- 2 Connect the power cable to the power jack at the bottom of the projector.
- 3 Connect the power cable to an electrical socket.
  - The power LED on the projector lights up in red.



# Prepare the remote control

## CAUTION!



The improper use of batteries can lead to overheating, explosion, risk of fire and injury. Leaking batteries can possibly damage the remote control.

Never expose the remote control to direct sunlight.

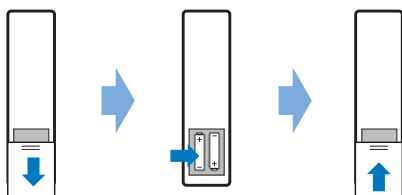
Avoid deforming, dismantling or charging the batteries.

Avoid exposure to open fire and water.

Replace empty batteries immediately.

Remove the batteries from the remote control if not in use for long periods of time.



- 1 Open the battery compartment.
- 2 Insert the supplied batteries (type AAA) with correct polarity (+/-) indicated.
- 3 Close the battery compartment.



- When using a remote control with infrared signals, point the remote control at the IR sensor on the projector, and make sure there is no obstacle between the remote control and the IR sensor.

# Power on and set up the projector

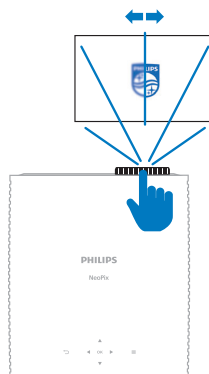
## Power on/off the projector

- To turn on the projector, press  on the projector/remote control. The power LED on the projector turns from red to white.
- To turn off the projector, press and hold  on the projector/remote control for 2 seconds or press this button twice. The projector enters standby mode and its power LED turns from white to red.
- To fully shut down the projector, disconnect the power cable from the electrical socket.

# Image focus adjustment

To adjust the image focus (sharpness), turn the focus adjustment knob attached to the projection lens.

**Tip:** If you change the projection distance later, you'll need to adjust the image focus again.





# Screen size adjustment

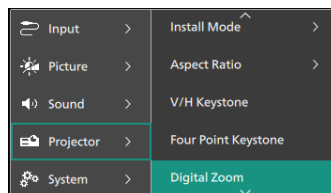
The projection screen size (or size of images) is determined by the distance between the lens of the projector and the projection surface.


This projector has a recommended projection distance of 306 cm (120"), and thus creates a maximum screen size of 100" (254 cm). The minimum distance from the projection surface is 120 cm (47.2").

## Digital zooming

You can use the digital zooming function to reduce the screen size.

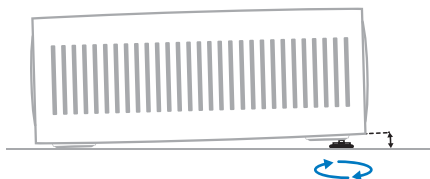
- 1 Access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > Digital Zoom*.



- 2 Press  to adjust the screen size. You can scale down the screen to up to 50% of its full size.

## Screen height adjustment

To adjust the screen height when placing the projector on a flat surface, turn the angle adjustment knob located at the bottom of the projector.





## Image shape adjustment

You can manually correct the keystone and make the image rectangular.



### V/H Keystone

You can manually make the image rectangular by adjusting the horizontal and vertical keystone angles.

- 1 Access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > V/H Keystone*.
- 2 Follow the on-screen instructions to adjust the image shape.

### Four Point Keystone

You can manually make the image rectangular by moving four corners of the image.

- 1 Access the projector's settings menu by pressing  on the remote control or  on the projector. Then select *Projector > Four Point Keystone*.
- 2 Follow the on-screen instructions to adjust the image shape.

## Set up Android TV

When you turn on the projector for the first time or after the built-in Android TV Dongle was reset to its factory default settings, Android TV will start and prompt you to set it up by making some basic settings.

After the setup, Android TV will sign in to your Google account and connect to a Wi-Fi network.


### What you need

- A Wi-Fi internet connection
- A Google account

## Step 1: Pair the remote control with the projector

Follow the on-screen instructions to pair the remote control with the projector.

After the pairing, the Welcome screen appears and you can use this remote control to navigate the on-screen user interface of Android TV and initiate voice commands or search queries.

**Tip:** Press  **Projector Menu** on the remote control to switch to Android TV mode if the buttons on the remote control are invalid for Android TV navigation.

## Step 2: Select the display language

To select the display language for Android TV, press the down or up navigation button on the remote control to select your preferred language and press the **OK** button to confirm.



**Note:** The default display language is **English (United States)** and not all languages are available.

## Step 3: Set up your Android TV

There are 2 options to set up your Android TV:

- Quick Start with an Android phone
- Set up with the remote control

### Set up with Quick Start

- 1 When your Android TV says, "Quickly set up your TV with your Android phone?", use the remote control to choose **Continue**.
- 2 Ensure your Android phone has the Google app  installed and is connected to a Wi-Fi network.
- 3 On your phone, open the Google app  and sign in if you haven't already.
- 4 Type or say "set up my device."
- 5 Follow the instructions on your phone until you get a code. Enter the code on your Android TV.
- 6 On your phone, tap the name of your Android TV when it shows up.
- 7 To finish setup, follow the instructions on your Android TV screen.

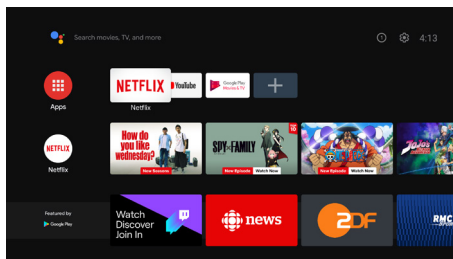
**Tip:** After the setup, your Android TV automatically signs in to your Google Account and connects to the same Wi-Fi network as your phone.

### Set up with the remote control

- 1 When your Android TV says, “Quickly set up your TV with your Android phone?”, use the remote control to choose **Skip**.
- 2 Connect your Android TV to a Wi-Fi network. **Note:** Your Android TV may need some time to update after it is connected to the internet.
- 3 Choose **Sign in**.
- 4 Sign in to your Google Account.
- 5 To finish setup, follow the on-screen instructions.

## 4 Use Android TV

You will see the Android TV home screen similar to the one below after completing the setup.







The Android TV home screen is the jumping-off point for starting all activities on your Android TV entertainment device. On this screen, you can browse for shows and movies to watch. You'll also find the shows and movies you've started, suggested videos, and personalized recommendations.

Android TV offers you various features, such as:



- Watch a wide range of movies and shows from across your favourite apps.
- Stream music from music apps.
- Get apps from Google Play.
- Play online games from Google Play Games.
- Voice input for commands and universal search across multiple services.

## Navigate Android TV

You can use the dedicated Android TV remote control to navigate the on-screen user interface of Android TV and initiate voice commands or search queries.

- Press  **Projector Menu** on the remote control to switch to Android TV mode if the buttons on the remote control are invalid for Android TV navigation.
- Press  on the remote control to access the Android TV home screen.
- Press  on the remote control to display the installed apps and access the app store.
- Press  on the remote control to access voice search function.

## Configure Android TV

On the home screen (press ) you can navigate to select  in the upper right corner of the screen and access various Android TV related settings, e.g. apps/privacy/security management, picture and sound settings (see **Change Android TV settings, page 15**).


## Use a wired keyboard/mouse

- Connect the USB plug of your wired mouse or keyboard to the **USB** port on the projector.
- Use the keys on the keyboard for screen navigation, selection and text input, just like the keyboard operation with a computer.
- Use the wheel and left button on the mouse for navigation and selection. Press the right button on the mouse to return to the previous screen.

## Use a Bluetooth device

You can pair a Bluetooth device (keyboard, mouse, gamepad, speaker, etc.) with the projector. After completing the pairing, you can use the Bluetooth device with your Android TV.

To pair a Bluetooth device, follow the steps below:



- 1 On your Android TV, go to the home screen.
- 2 Select  in the upper right corner of the screen.
- 3 Select **Remotes & Accessories** and then **Add accessory**. On your screen, you'll see a list of nearby Bluetooth devices.
- 4 Put your Bluetooth device in pairing mode. The device will be added to the on-screen list.
- 5 Select your Bluetooth device.
- 6 When your Android TV says, "Pair with this device?", choose **Pair**. The device will be paired within a few seconds.


## Cast content to Android TV

Your Android TV has Chromecast built-in. This allows you to cast content (e.g. videos, photos and music) from a mobile device (Android or iOS device) to your Android TV.

**Important:** You can only cast from the latest version of a Chromecast-enabled app or a Chrome browser on a device connected to the same Wi-Fi network as your Android TV.

To start casting, follow the steps below:

- 1 Connect your device to the same Wi-Fi network as your Android TV.
- 2 Open the app that has the content you want to cast.
- 3 In the app, find and select Cast .
- 4 On your device, select the name of your Android TV.
- 5 When Cast  changes color, you're successfully connected.

To stop casting, on your device, select Cast  and then **Disconnect**.

### Notice



For better casting performance, use a 5GHz Wi-Fi network.

Copyright-protected content from Netflix, Amazon Prime Video, Hulu, etc. cannot be cast.

**Tip:** For more tips about using Android TV, visit <https://support.google.com/androidtv>.

Google, Google Play, YouTube, Android TV and other marks are trademarks of Google LLC. Google Assistant is not available in certain languages and countries.

# 5 Connect to other devices

## Connect to a USB mouse, keyboard or gamepad

You can connect a USB mouse, keyboard or gamepad to the projector to quickly and easily navigate menus, enter your passwords, search for movies and shows, play games, and so on.

**Note:** Not all games and apps are compatible with a mouse and keyboard.

## Connect a USB mouse, keyboard or gamepad

To connect a USB mouse, keyboard, or gamepad, plug it into the **USB** port on the projector.

**Tip:** You can connect more than one device to a USB port using a USB hub. Connect the devices to the USB ports on the hub, then connect the hub to the projector.

**Note:** When using a wireless USB mouse or keyboard, the connection can be lost or slow, depending on the distance between the two devices and the signal status.

## Use a USB mouse, keyboard or gamepad

Once connected, your USB mouse, keyboard or gamepad will start to work without any additional configuration.

### Mouse

- Move your mouse and a pointer will appear on the screen.
- Move your mouse and left-click to navigation the projector's user interface like you do on a computer. The left button works like **OK** on the remote control.
- Right-click to return to the previous screen. The right button works like **↶** on the remote control.
- Rotate the wheel to scroll up or down.

### Keyboard

- Your keyboard is best for entering text in text fields, allowing you to type much faster and see more of the screen by removing the need for the on-screen keyboard. **Tip:**

You may need to press **Esc** to hide the on-screen keyboard.

- Use the arrow keys and **Enter** to navigation the projector's user interface. They work like the navigation buttons and **OK** on the remote control respectively.
- Press **Tab** or **Shift+Tab** to move to next or previous item. Press the menu key to bring up the control bar when a video is playing.
- Press **Windows+Backspace** to return to the previous screen. Press **Home** or **Alt+Esc** to return to the home screen.
- Many keyboard shortcuts work like they do on a computer, such as **Ctrl+X/C/V** for Cut/Copy/Paste.

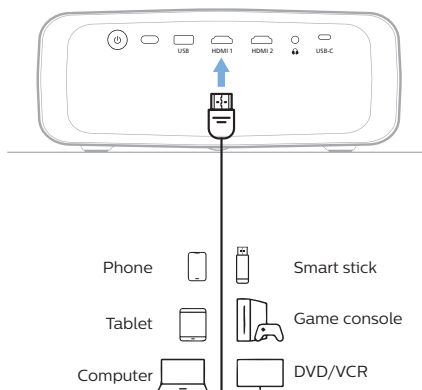
### Gamepad



- You can use your gamepad with games that support controllers.
- Your gamepad can also be used to navigate the projector's user interface and open apps.

## Connect to a playback device through HDMI™

You can connect a playback device (e.g. a Blu-ray player, gaming console, camcorder, digital camera or PC) to the projector through HDMI™ connection. With this connection, images are shown on the projection screen, and audio is played on the projector.

- 1 Using an HDMI™ cable, connect the **HDMI 1** or **HDMI 2** port on the projector to an HDMI™ output port on a playback device.





- 2 Access the projector's settings menu by pressing  **Projector Menu** on the remote control or  on the projector. Then select *Input > HDMI1* or *HDMI2*.

## Connect to a device through HDMI™ ARC

The **HDMI 1** port on the projector supports Audio Return Channel (ARC). You can connect a compatible audio system (e.g. a home cinema system, AV receiver or sound bar) to the projector through HDMI™ ARC connection. With this connection, audio is streamed to the connected audio system.

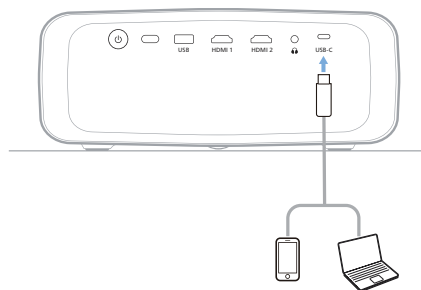
**Tip:** To get 5.1 surround sound, you typically need to connect the projector to a 5.1 home cinema system.

- 1 Make sure the current input source of the projector is *Android TV* or *HDMI2*.
- 2 Using an HDMI™ cable, connect the **HDMI 1** port on the projector to the HDMI™ ARC port on a compatible audio system.
  - The HDMI™ ARC port on your audio system might be labeled differently. See the documentation supplied with the device for more information.
- 3 To activate the HDMI™ ARC function on the projector, access the projector's settings menu by pressing  **Projector Menu** on the remote control or  on the projector, then select *Sound > Output > ARC*.

## Connect to devices through USB-C

You can connect a playback device (e.g. a mobile phone or PC) to the projector through USB-C connection. With this connection, images are shown on the projection screen, and audio is played on the projector.

- 1 Using a USB-C cable, connect the **USB-C** port on the projector to the USB-C port on a playback device.

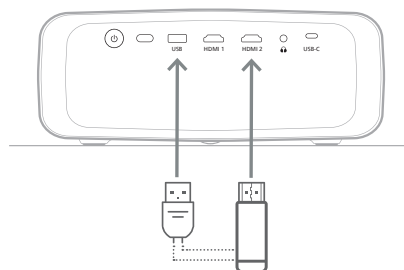




- 2 Access the projector's settings menu by pressing  **Projector Menu** on the remote control or  on the projector. Then select *Input > USB-C*.

## Connect to a dongle

You can connect a dongle (e.g. Amazon Fire Stick and Chromecast) to the projector to easily watch videos over the internet. With this connection, images are shown on the projection screen, and audio is played on the projector.

- 1 Connect the dongle to the projector's **HDMI 1** or **HDMI 2** port using an HDMI™ cable.
- 2 Connect the dongle to the projector's **USB** port using a USB cable. **Note:** The maximum current supplied by this port is 5V1.5A.



- 3 Access the projector's settings menu by pressing  **Projector Menu** on the remote control or  on the projector. Then select *Input > HDMI1* or *HDMI2*.

## Connect to wired speakers or headphones

You can connect wired speakers or headphones to the projector. With this connection, audio from the projector is played through the external speakers or headphones.

- The internal speakers of the projector are deactivated automatically when external speakers or headphones are connected to the projector.



### **DANGER!**

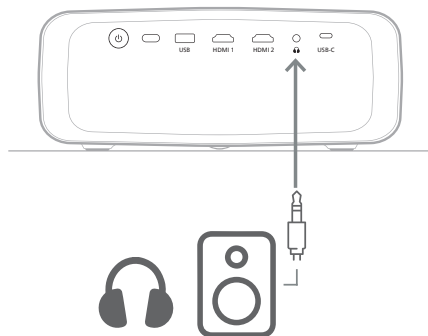


#### **Danger of hearing damage!**

Before connecting the headphones, turn down the volume on the projector.

Do not use the projector over a longer time at high volume – especially when using headphones. This could lead to hearing damage.

- 1 Using a 3.5 mm audio cable, connect the  jack on the projector to the analogue audio input (3.5 mm jack, or red and white jacks) on external speakers. Or connect the  jack on the projector to headphones.





- 2 After connecting the speakers or headphones, press the volume control buttons on the remote control to adjust the volume to the desired level.

## 6 Change settings

This section helps you change the settings of the following two systems:

- Android TV
- Projector

### Change Android TV settings

- 1 On the home screen (press ) , use the navigation buttons on the remote control to select  in the upper right corner and then press the **OK** button to access various setting options.
- 2 Use the navigation buttons and the **OK** button to select and change settings.

### Wi-Fi settings

Go to *Network & Internet* to connect the projector to a Wi-Fi network. Use the pop-up virtual keyboard or voice input to input letters and digits.

### Google account settings

Go to *Accounts & Sign In* to sign in to or add a Google account.

### Language settings

Go to *Device Preferences > Language* to select your preferred display language.

### Date and time settings

Go to *Device Preferences > Date & time* to make the following changes.

- Turn on *Automatic date & time* or turn it off to manually set the date and time.
- Set the time zone.
- Turn 24-hour format on or off.

### Keyboard settings

Go to *Device Preferences > Keyboard & Autofill* to access various settings for keyboard.

### Bluetooth settings

Go to *Remotes & Accessories* to pair the projector with the projector's remote control, or a Bluetooth keyboard/mouse/gamepad/speaker.

## Apps settings

Go to *Apps* to access the following settings.

- View all the installed and system apps, and the storage used by each app.
- Set various permissions for the installed apps, e.g. location, contacts, camera, microphone, phone and SMS.
- Set security and restrictions for app installation.
- Check an app's version, storage used, cache size, etc.
- Clear an app's cache, disable or uninstall an app, view an app's permissions, etc.

## Display settings

Go to *TV settings > Display* to access the following settings.

- *Screen resolution*: Select a screen resolution to best support your video.
- *Screen position*: Scale down the projection image.

## Sound options

### Internal speaker

Go to *Device Preferences > Sound* to access the following settings.

- *System Sound*: Turn the system sound on or off.
- *Surround Sound*: Enable or disable surround sound. You can let Android TV automatically select the formats supported by the projector or manually select the formats.

### Audio output

Go to *TV settings > Audio Output* to access the setting below.

- *Dolby DRC Mode*: Select a DRC (Dynamic Range Compression) mode for reducing dynamic range of sound output. You can therefore watch movies without having to constantly readjust the volume with the remote control.

## Display Netflix activation code

- Go to *TV settings > Netflix ESN* to display the Netflix activation code.

## Factory reset Android TV Dongle

- 1 Go to *Device Preferences > About > Factory reset* and select *Factory reset*.
- 2 Follow the on-screen instructions to start factory resetting the built-in Android TV Dongle.

### Notice











A factory reset erases all your personal information and downloaded apps and you can't reverse this action.

## Other system settings

Go to *Device Preferences* to access the following settings.

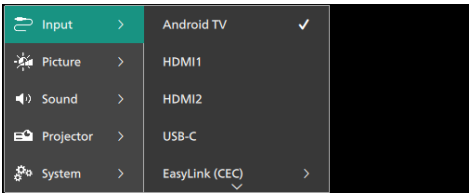
- *About*: View information about, update, or reset the built-in Android TV Dongle.
- *Storage*: Check the total, used and available space of the internal storage and removable storage.
- *Home screen*: Customize and organize the home screen.
- *Google Assistant*: Select the active Google account and customize Google Assistant's behaviour.
- *Chromecast built-in*: View information about Chromecast.
- *Screen saver*: Set the type of screen saver and how soon to activate the screen saver or put the built-in Android TV Dongle to sleep.
- *Location*: Check your location status and view the recent location requests.
- *Usage and Diagnostics*: Choose whether you want the built-in Android TV Dongle to automatically send diagnostic information to Google.
- *Accessibility*: Configure a variety of accessibility options, including captions and text to speech.
- *Reboot*: Restart the built-in Android TV Dongle.

# Change projector settings

- 1 Press  on the remote control or  on the projector to access the projector's settings menu.
- 2 Use the navigation buttons and the **OK** button to select a menu item.
- 3 Press / or / to select a value for the menu item.
- 4 Press the **OK** button to make the change.  
**Note:** For some menu items such as Digital Zoom, the change takes effect once you select a different value.
- 5 Press  on the remote control or  on the projector to exit the projector's settings menu.

## Input source settings

You can view and change the following input source settings.

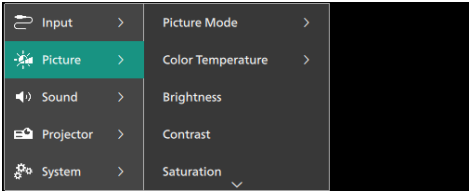


- **Android TV:** Select this to use the built-in Android TV Dongle as the input source. This is the default input source.
- **HDMI1:** Select this to use the device connected to the projector's **HDMI 1** port as the input source.
- **HDMI2:** Select this to use the device connected to the projector's **HDMI 2** port as the input source.
- **USB-C:** Select this to use the device connected to the projector's **USB-C** port as the input source.
- **EasyLink (CEC):** Choose to enable or disable HDMI™ CEC (Consumer Electronics Control). The default value is *Disabled*. **Tip:** Both the HDMI™ ports on the projector support HDMI™ CEC.
- **HDMI Mode:** Choose which HDMI™ mode to use.
  - **Normal (Video):** Use the normal video range (16-235) commonly used with most media devices.
  - **Extended (PC):** Use the extended video range (0-255) used with PC devices.

**Tip:** Choose "Normal" mode unless your external device requires "Extended" mode to display correctly. Refer to the user manual of the external device for more information.

## Picture settings

You can view and change the following picture settings.

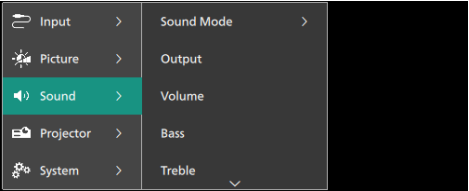


- **Picture Mode:** You can set the projector to use the following picture modes, depending on your viewing environment or preferences. After selecting a picture mode, you can modify its settings.
  - **Standard:** Display the picture with normal brightness, contrast, saturation, hue and sharpness levels.
  - **Vivid:** Sharpen the image by increasing the contrast, saturation and sharpness.
  - **Movie:** Optimize the settings for movies.
  - **User:** Define your own settings.
- **Color Temperature:** You can set the projector to use the following color temperature types. After selecting a color temperature type, you can modify its settings.
  - **Cool:** Make the picture more bluish.
  - **Standard:** Use a moderate color temperature.
  - **Warm:** Make the picture more reddish.
  - **User:** Define your own settings.
- **Brightness:** Adjust the screen's overall brightness.
- **Contrast:** Adjust the contrast of the bright and dark areas of the image.
- **Saturation:** Adjust the intensity of the colors.
- **Hue:** Adjust the hue of the colors.
- **Sharpness:** Adjust the sharpness of the image.
- **Red Gain:** Adjust the gain for red.
- **Green Gain:** Adjust the gain for green.
- **Blue Gain:** Adjust the gain for blue.
- **Noise Reduction:** Turn off noise reduction or set its level to *Low*, *Middle* or *High*.

- **Reset to Default:** Select Yes to reset all the picture settings above.

## Sound settings

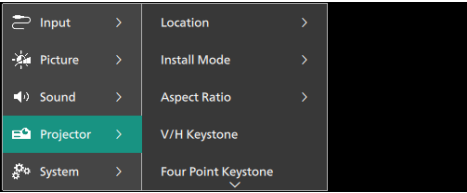
You can view and change the following sound settings.



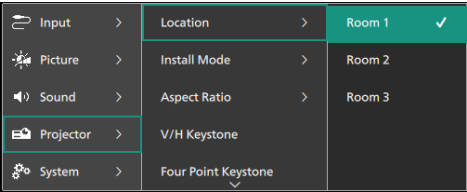
- **Sound Mode:** You can set the projector to use the following sound modes, depending on your environment, audio type or preferences.
  - **Music:** Optimize the bass and treble levels for music.
  - **Movie:** Optimize the bass and treble levels for movies.
  - **User:** Define your own bass and treble levels.
- **Output:** Select the projector's audio output type.
  - **Internal Speaker:** Use the projector's internal speaker to output audio.
  - **ARC:** Use an HDMI™ ARC compatible device to output audio. To learn how to connect such a device, see **Connect to a device through HDMI™ ARC, page 14**.
- **Volume:** Adjust the volume of the projector. **Tip:** To adjust the volume of Android TV, exit the projector's settings menu and press the volume control buttons on the remote control.
- **Bass:** Set the bass level. This menu item is enabled only when the sound mode is *User*.
- **Treble:** Set the treble level. This menu item is enabled only when the sound mode is *User*.
- **Stereo Balance:** Adjust the stereo balance to compensate for volume differences between the left and right speakers at the listening position.
- **Reset to Default:** Select Yes to reset all the sound settings above.

## Image settings

You can view and change the following image settings.



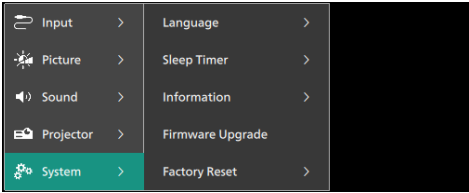
- **Location:** You can select a location and then modify the image settings. All the modified image settings will be associated with the selected (current) location. You can create up to 3 different sets of image settings this way and quickly switch between them by selecting a location. **Tip:** The projector always selects the last used location after being restarted.



- **Room 1:** Select this to use or modify the image settings for Room 1.
- **Room 2:** Select this to use or modify the image settings for Room 2.
- **Room 3:** Select this to use or modify the image settings for Room 3.
- **Install Mode:** Adjust the projection to the correct direction based on how the projector is installed.
- **Aspect Ratio:** Toggle between the available aspect ratios (16:9 and 4:3). Choose *Auto* to let the projector automatically use the recommended aspect ratio.
- **V/H Keystone:** Select this to manually make the image rectangular by adjusting the horizontal and vertical keystone angles.
- **Four Point Keystone:** Select this to manually make the image rectangular by moving four corners of the image.
- **Digital Zoom:** Scale down the screen to up to 50% of its full size. The default value is 100% (no scale-down).
- **Reset to Default:** Select Yes to reset all the image settings above for all the locations (Rooms 1, 2 & 3).

## Other settings

You can view and change the following additional settings.



- *Language*: Select your preferred language for the projector's settings menu.
- *Sleep Timer*: Select a period of time after which the projector turns off automatically. The default value is *Disabled*.
- *Information*: View the hardware version, software version and serial number of this product.
- *Firmware Upgrade*: Update the projector's software. For more details, see **Update software, page 20**.
- *Factory Reset*: Restore the projector's settings to the factory default settings. After the factory reset, the projector will restart and allow you to set it up as new. **Note**: This will not reset the built-in Android TV Dongle. To learn how to reset the dongle, see “**Factory reset Android TV Dongle**”.

# 7 Maintenance

## Cleaning

### DANGER!



**Follow the following instructions when cleaning the projector:**

Use a soft, lint-free cloth. Never use liquid or easily flammable cleansers (sprays, abrasives, polishes, alcohol, etc.). Do not allow any moisture to reach the interior of the projector. Do not spray the projector with any cleaning fluids.

Wipe over the surfaces gently. Be careful that you do not scratch the surfaces.

## Cleaning the lens

Use a soft brush or lens cleaning paper for cleaning the lens of the projector.

### DANGER!



**Do not use any liquid cleaning agents!**

Do not use any liquid cleaning agents for cleaning the lens, to avoid damaging the coating film on the lens.

## Update software



The latest software for the projector can be found on [www.philips.com/support](http://www.philips.com/support) for you to get the best features and support from the projector.

### CAUTION!



Do not turn off the projector or remove the USB flash drive during a software update.

## Update software through USB

- 1 Visit [www.philips.com/support](http://www.philips.com/support), find your product (model number: **NPX520/INT**), open its support page and locate "**Software & drivers**". Then check the latest software version there.
- 2 Press  on the remote control or  on the projector to access the projector's settings menu. Then select *System > Information* to check the current software version. Proceed to the next step if the latest software version is greater than the current software version.
- 3 From the support page you opened in step 1, download the software installation file to a USB flash drive. Unzip the downloaded file and save the resulting file in the root directory of the USB flash drive.
- 4 Connect the USB flash drive to the projector.
- 5 Select *System > Firmware Upgrade* from the settings menu.
- 6 Follow the on-screen instructions to complete the update.


# 8 Troubleshooting


## Power cycling

If a problem occurs and you cannot resolve it using the instructions in this user manual, try the following steps to resolve the problem.

- 1 Turn the projector off by pressing  $\odot$  twice.
- 2 Wait at least 10 seconds.
- 3 Turn the projector on by pressing  $\odot$ .
- 4 If the problem persists, contact one of our customer service centres or your dealer.

Problem	Solution
The projector cannot be turned on.	<ul style="list-style-type: none"><li>• Disconnect and reconnect the power cable, and try to turn the projector on again.</li></ul>
The projector cannot be turned off.	<ul style="list-style-type: none"><li>• Press and hold <math>\odot</math> longer than ten seconds. If this does not work, disconnect the power cable.</li></ul>
No image from the external HDMI™ device.	<ol style="list-style-type: none"><li>1. Check if you have switched the input source to <i>HDMI1</i> or <i>HDMI2</i>.</li><li>2. Disconnect the HDMI™ cable or switch off the HDMI™ device.</li><li>3. Wait <b>three</b> seconds.</li><li>4. Reconnect the HDMI™ cable or switch on the HDMI™ device again.</li></ol>
No sound from the external connected device.	<ul style="list-style-type: none"><li>• Check the cables to the external device.</li><li>• Check that the sound is activated on the external device.</li><li>• Only the original cables from the device manufacturer may function.</li></ul>
No sound from external HDMI™ output device.	<ul style="list-style-type: none"><li>• On the HDMI™ output device, set the audio setting to Multichannel (Raw data) &amp; Stereo (PCM).</li></ul>
No sound when you connect your computer using an HDMI™ cable.	<ul style="list-style-type: none"><li>• Check that the sound is activated on the computer.</li></ul>
Only the home menu appears and not the image from the external device.	<ul style="list-style-type: none"><li>• Check if the cables are connected to the correct sockets.</li><li>• Check that the external device is turned on.</li><li>• Check if the video output of the external device is turned on.</li></ul>
Only the home menu appears and not the image from the connected computer.	<ul style="list-style-type: none"><li>• Check that the HDMI™ output of the computer is turned on.</li><li>• Check if the resolution of the computer is set to 1920*1080.</li></ul>
The projector turns itself off.	<ul style="list-style-type: none"><li>• When the projector is running for a long period of time, the surface becomes hot.</li><li>• Check that the power cable is connected correctly.</li></ul>
The projector cannot read the USB storage device.	<ul style="list-style-type: none"><li>• The projector does not support the exFAT file system.</li><li>• Format the USB storage device in FAT32 or NTFS format, then use it.</li></ul>

Problem	Solution
The projector does not react to remote control commands.	<ul style="list-style-type: none"> <li>Check the batteries of the remote control.</li> <li>Press  <b>Projector Menu</b> on the remote control to switch to Android TV mode if the buttons on the remote control are invalid for Android TV navigation.</li> </ul>
The temperature of the projector's surface is warm.	<ul style="list-style-type: none"> <li>For this projector it is normal to generate moderate heat during operation.</li> </ul>
The projector does not work after I connect it to a laptop.	<ul style="list-style-type: none"> <li>Check that the HDMI™ or USB-C cable is plugged in correctly.</li> <li>Make sure that the laptop has been switched to projector display.</li> </ul>
I cannot pair the projector with a Bluetooth device.	<ul style="list-style-type: none"> <li>Turn on the Bluetooth device and make sure it is in pairing mode.</li> <li>Position the Bluetooth device so that it is less than 10 m (33 ft) from the projector.</li> <li>Follow the instructions in <b>Use a Bluetooth device, page 12</b>.</li> <li>If another Bluetooth device is already connected to the projector, disconnect it.</li> <li>Move the projector farther away from other devices (microwave oven, wireless router, etc.) that are emitting radio frequency signals.</li> </ul>
After a Bluetooth device is connected, there is no sound from the projector or the Bluetooth device.	<ul style="list-style-type: none"> <li>Check if the Bluetooth device's volume is at the minimum.</li> <li>Check if projector's volume is at the minimum.</li> <li>Check if Android TV's volume is at the minimum.</li> <li>Check if the playback has started.</li> <li>Try playing another video/audio.</li> <li>Try reconnecting the two devices.</li> </ul>
Black / White Pixels	<p>An LCD display may contain a small number of pixels that do not function normally (also known as “dead pixels” or “black pixels”). Your display has been inspected and is in compliance with the manufacturer's specifications, meaning that any pixel defects do not affect the operation or use of your display. Without prejudice to generality of the foregoing, dead pixels or black pixels not exceeding 5 dots meet the factory specifications and are not considered a defect under this warranty.</p> <p>Concerning dust:</p> <p>Dust may appear during the use of a projector. Without prejudice to generality of the foregoing, dust spots not exceeding 3 dots meet the factory specifications and are not considered a defect under this warranty. Please clean the lens with a gentle specific glass tissue. You can also push dry air into the product by the side holes in order to clean the optical engine inside.</p>

Problem	Solution
After one hour of inactivity, the screen turns off by itself.	<p>The projector automatically turns off the screen to save power. Use one of the following methods to turn the screen back on:</p> <ul style="list-style-type: none"><li>• Press the <b>NETFLIX</b> or <b>prime video</b> button.</li><li>• Press .</li><li>• Restart the projector.</li></ul>

# 9 Appendixes

## Technical data

### Technology/optical

Display technology .....	LCD
Light source .....	single LED W
Lumens.....	350
Resolution.....	1920 x 1080 pixels
LED lifetime .....	over 30,000 hours
Contrast ratio .....	3000:1
Aspect ratio .....	16:9/4:3
Throw ratio.....	1.43:1
Screen size (diagonal).....	up to 100"
Screen distance...306 cm / 120" for 100" screen	
Projection modes.....	4
Focus adjustment.....	manual
Keystone correction .....	digital
4 corner correction.....	yes
Digital zoom .....	yes (50–100%)
Sleep timer.....	yes

### Operating system

Android TV 11 with pre-loaded apps:  
Netflix, Amazon Prime Video, Google Play, etc.  
(Apps may vary depending on availability)

### Sound

Built-in speakers.....	2 x 7 W
Speaker type .....	2.1 stereo
Equalization.....	yes

### Connection

HDMI™ in.....	x2
USB-C (video in) .....	x1
USB-A (5 V/1.5 A out + external drive) .....	x1
3.5 mm audio out .....	x1
Wi-Fi.....	802.11a/b/g/n/ac, 2.4 + 5 GHz
Chromecast .....	yes
Bluetooth.....	To connect gamepad, speaker, mouse, keyboard, etc.

### Power source

Power consumption .....	operating: 82 W
.....	standby: 0.3 W
Input: AC 100–240 V, 50/60 Hz	

### Dimensions and weight

Unpacked (W x D x H).....	274 x 294 x 107 mm
Packed (W x D x H) .....	342 x 310 x 157 mm
Net weight .....	3.21 kg / 7 lb
Gross weight.....	4.45 kg / 9.81 lb

### Temperature requirements

Operating temperature.....	5 °C – 35 °C
Storage temperature .....	< 60 °C

### Package contents

1. NeoPix 520 projector
2. Remote control
3. Power cables (EU, UK, US)
4. AAA batteries for remote control
5. Quick Start Guide with Warranty Card

### Model

NPX520/INT  
EAN: 7640186961615  
UPC: 793565993664

# CE statement

- The product shall only be connected to a USB interface of version USB 2.0 or higher.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The operating temperature of the EUT can't exceed 35°C and shouldn't be lower than 5°C.
- The plug is considered as disconnect device of adapter.
- The UNII Band 5150-5250 MHz is for indoor use only.
- The device complies with RF specifications when the device is used at 20 cm from your body.

Hereby, Screeneo Innovation SA declares that this product is in compliance with essential requirements and other relevant provisions of Directive 2014/53/EU.



The Declaration of Compliance can be consulted on the site [www.philips.com](http://www.philips.com).

Frequency bands	Maximum output power
BT EDR (EIRP)	9.09 dBm
BT BLE (EIRP)	4.85 dBm
Wi-Fi 2.4GHz (EIRP)	17.88 dBm
Wi-Fi 5GHZ (EIRP)	17.89 dBm

# FCC statement

## 15.19 Labeling requirements.

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.

## 15.21 Information to the user.

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

## 15.105 Information to user.

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 instructions, 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 the 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.

During operation, the separation distance between the user and the antenna shall be at least 20 cm. This separation distance will ensure that there is sufficient distance from a properly installed externally-mounted antenna to satisfy the RF exposure requirements.

FCC ID: 2ASRT-NPX520

# Canada regulatory compliance

This device complies with Industry Canada CAN ICES-3 (B)/NMB-3(B)

**RSS-Gen & RSS-247 statement:** This device complies with Industry Canada 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.

**RF Radiation Exposure statement:** The device meets the exemption from the routine evaluation limits in section 2.5 of RSS102 and

users can obtain Canadian information on RF exposure and compliance.

This device should be installed and operated with a minimum distance of 7.8 inches (20 centimetres) between the device and your body.

## Other notice

Preservation of the environment as part of a sustainable development plan is an essential concern of Screeneo Innovation SA. The desire of Screeneo Innovation SA is to operate systems respecting the environment and consequently it has decided to integrate environmental performances in the life cycle of these products, from manufacturing to commissioning use and elimination.

**Batteries:** If your product contains batteries, they must be disposed of at an appropriate collection point.



**Product:** The crossed-out waste bin symbol on the product means that the product belongs to the family of electrical and electronic equipment. In this respect, the European regulations ask you to dispose of it selectively:

- At sales points in the event of the purchase of similar equipment.
- At the collection points made available to you locally (drop-off centre, selective collection, etc.).

In this way you can participate in the reuse and upgrading of Electrical and Electronic Equipment Waste, which can have an effect on the environment and human health.

The paper and cardboard packaging used can be disposed of as recyclable paper. Have the plastic wrapping recycled or dispose of it in the non-recyclable waste, depending on the requirements in your country.

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