

**PHILIPS**

*NeoPix Ultra 2<sup>TV</sup>*

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

#### Troubleshooting

This symbol indicates tips that will help you in using 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!**

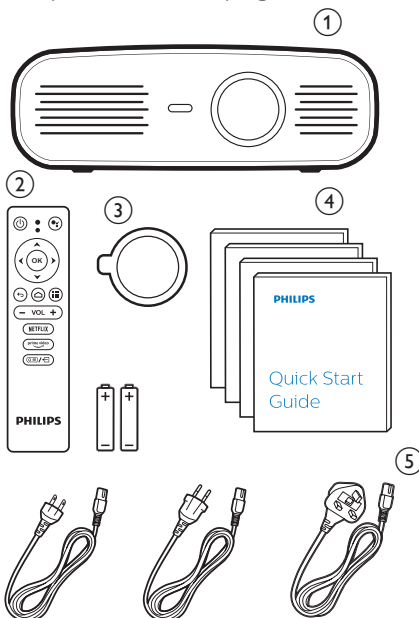


#### **Damage to the product or loss of data!**

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 Ultra 2<sup>TV</sup> projector (NPX643/INT)
- 2 Remote control with 2 AAA batteries
- 3 Lens cover
- 4 Quick Start Guide
- 5 AC power cable with plug x 3



## Customer service centre

You can find the support hotline in the warranty card or online:

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

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

**International Phone:** +41 215 391 665

Please ask your provider for international call costs!

Access the electronic user manual at <https://support.philipsprojection.com>

Access the community forum at <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 Technical data, page 21**).

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.



CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN!




## Power supply

Before connecting the power plug to the mains socket, 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 18**). 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!

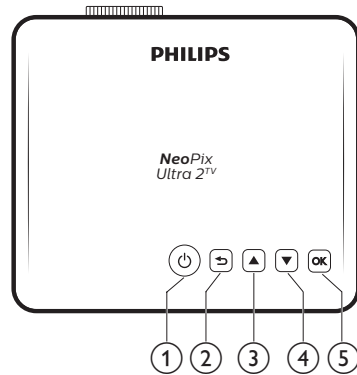


#### Risk of eye irritation!

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

- Switch the projector on or to standby.
- When the projector is switched on, the LED turns white. When the projector is in standby, the LED turns red.

#### ②

Return to a previous menu screen.

#### ③

- Navigate menu options.
- Increase volume.

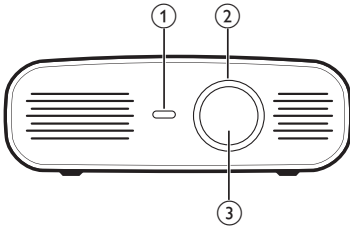
#### ④

- Navigate menu options.
- Decrease volume

#### ⑤ **OK**

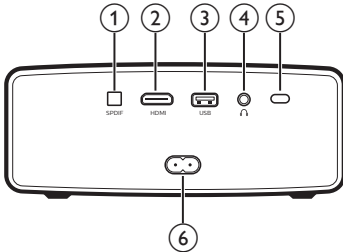
- Access projector settings options.
- Confirm a selection or entry.


## Front view



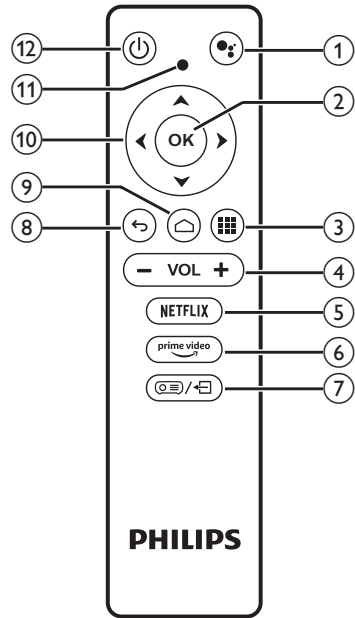
- ① Front IR sensor
- ② Focus adjustment knob  
Adjust image sharpness.
- ③ Projection lens






## Rear view



- ① **SPDIF**  
Connect to the digital SPDIF audio input on an HiFi audio system.
- ② **HDMI**  
Connect to the HDMI output on a playback device.
- ③ **USB port**
  - Connect to power USB devices like Amazon Fire TV stick®, Roku® streaming stick (it also works for mass storage if you install an app like VLC).
  - Connect to a wired keyboard or mouse.
- ④   
3.5 mm audio output; connect to external speakers or headphones.
- ⑤ **Rear IR sensor**
- ⑥ **Mains socket**  
Connect to the power supply.

## Remote control



- ①   
Access voice search function (Google Assistant).
- ② **OK**  
Confirm a selection or entry.
- ③   
Display installed apps and access the app store.
- ④ **VOL +/-**  
Increase or decrease volume.  
**Note:**  
When the projector is connected to an HDMI device and switched to HDMI input, volume adjustment is not possible through the remote control. Press  to access the settings options and go to *Volume* for volume adjustment.
- ⑤ **NETFLIX**  
Quick access to Netflix service.
- ⑥ **prime video**  
Quick access to Prime Video service.
- ⑦   
Access or exit projector system settings options.
- ⑧   
Return to a previous menu screen.



Access the Android TV home screen.

⑩ **Navigation buttons**

Navigate menu options.

⑪ **LED indicator**

- Each time you press a button on the remote control, the LED lights up briefly then off.
- Blue light indicates the remote control is in Android TV mode and navigation of Android TV interface is possible.
- Red light indicates the remote control is accessing the projector system settings and navigation of Android TV interface is not possible.



Switch the projector on or to standby.

## 3 Initial setup

### Notice



Make sure all devices are disconnected from the power outlet before establishing or changing any connections.

### Place the projector


Place the projector on a flat surface in front of the projection surface.

You can also install the projector in different configurations (see **Placement, page 10**).

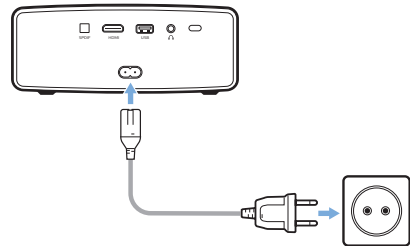
### Connect power supply

#### CAUTION!



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

- 1 Select a supplied power cable with an appropriate power plug.
- 2 Connect the power cable to the power socket on the back of the projector, and then to the wall outlet.
  - The LED on the projector turns 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.

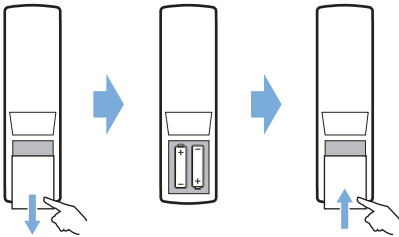
Avoid deforming, dismantling or charging the batteries.

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 the 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

- 1 Press  to turn on the projector. The LED on the projector turns from red to white.
- To turn off the projector, press  and then press it again when the power-off confirmation message pops up. The LED on the projector turns from white to red.
- The distance between the projector and the screen determines the actual size of the image.

# First time setup

When you turn on the projector for the first time or the projector is reset to the factory default settings, you are prompted to make the Android TV setup.

After setup, the projector will sign in to your Google account and connect to the same WiFi network as your phone.

## What you need

- A WiFi internet connection
- A Google account

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

In the remote control pairing interface, you are prompted to pair the remote control with the projector through Bluetooth. Pairing can enable the remote control to work in Android TV mode.

- 1 When prompted for pairing, hold down **OK** and **VOL -** on the remote control for about 10 seconds until the interface shows successful connection.

Make sure the projector is turned on and as close as possible to the remote control.

## Step 2: Select language

- 1 When prompted for language section, use the **navigation buttons** on the remote control to select an on-screen language.

## Step 3: Set up the projector with your Android phone

Set up the projector so that the projector will sign in to your Google account and connect to the same WiFi network as your phone.

- 1 When prompted for Android TV setup, select "Continue" to initialize setup.
- 2 On your Android phone, launch the pre-installed "Google" app. Follow on-screen instructions to complete setup. After successful setup, the projector signs in to your Google account and connects to the same WiFi network as your phone.



# 4 Operation

## Image setup

### 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 the projection distance from 80 cm to 200 cm, and thus creates projection image size from 20" to 100".

### Digital zooming

You can use the digital zoom to reduce the screen size.

- 1 Press / to access the settings options and go to *Digital Zoom*.

	Picture Preset	User
	Color Temperature	Standard
	Geometry Corrections	manual
	Projection Direction	Auto
	Digital Zoom	100

- 2 Press to adjust screen size.

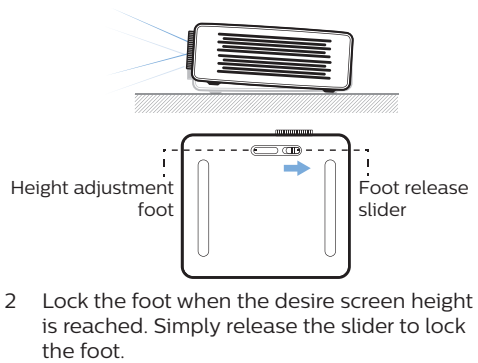
### Screen height adjustment

You can adjust the screen height when placing the projector on the table.

- 1 Find the height adjustment foot and the foot release slider on the bottom of the projector.

To unlock the height adjustment foot, push the foot release slider in the direction of the arrow shown below and hold the slider. Then the foot will extend outwards when the bottom of the projector points downwards.

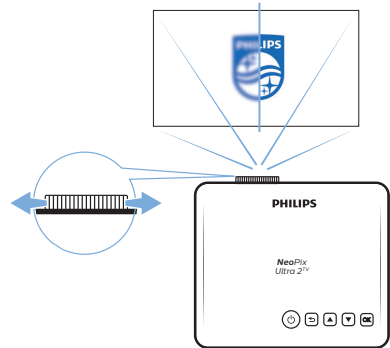
Adjust the length of the foot when the foot is unlocked and extends outwards.



- 2 Lock the foot when the desired screen height is reached. Simply release the slider to lock the foot.

### Image focus adjustment

To adjust image focus, turn the focus knob on the front of the projector.



### Image shape adjustment

#### Auto correction

Enable auto keystone correction to automatically correct the image to be rectangular.

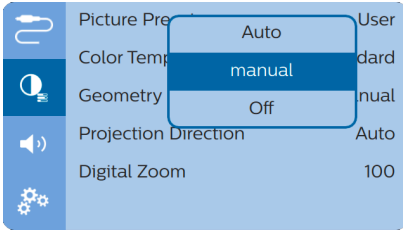
- 1 Press / to access the settings options and go to *Geometry Corrections - Auto*.

	Picture Preset	Auto	User
	Color Temp	manual	Standard
	Geometry Corrections	Off	Manual
	Projection Direction		Auto
	Digital Zoom		100

## Manual correction

You can manually correct keystone or distorted images to be rectangular.

- 1 Press / to access the settings options and go to *Geometry Corrections - Manual*.



- 2 In the image shape correction interface, press **OK** on the remote control to switch between horizontal and vertical correction, then press **▲/▼** on the remote control to adjust image shape.

## Placement

You can install the projector in four different configuration. Follow the guidelines below for different projector placement.

### Notice



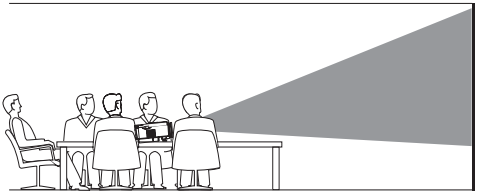
For overhead mounting on ceiling, purchase a projector mount recommended by an installation professional and follow the instructions that come with the mount.

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.

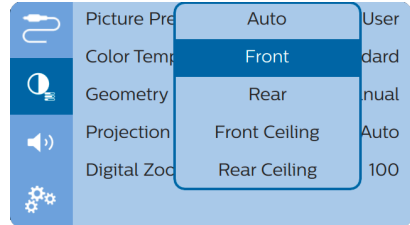
### Front table

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



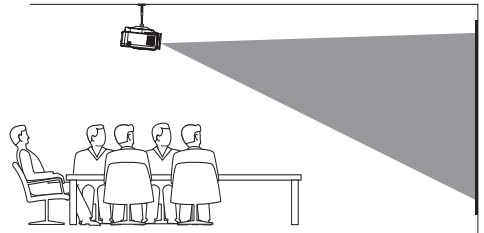
- 2 The projector automatically adjusts for the correct projection orientation.

If not in the correct projection orientation, press / to access the settings options and go to *Projection Direction - Front*.



### 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.

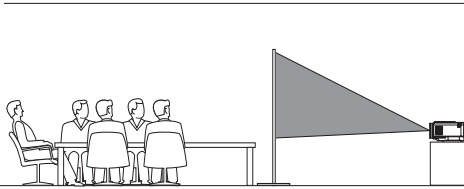


- 2 The projector automatically adjusts for the correct projection orientation.

If not in the correct projection orientation, press / to access the settings options and go to *Projection Direction - Front Ceiling*.

### Rear table

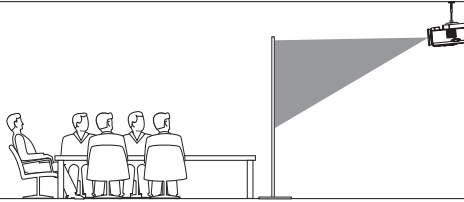
- 1 Place the projector on a table behind the projection screen. A special rear projection screen is required.



- 2 The projector automatically adjusts for the correct projection orientation.  
If not in the correct projection orientation, press / to access the settings options and go to *Projection Direction - Rear*.

### Rear ceiling

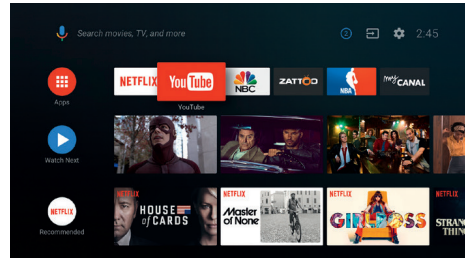
- 1 Mount the projector on ceiling with upside up behind the projection screen. To mount the projector on ceiling behind the screen, a projector mount and a special rear projection screen is required.



- 2 The projector automatically adjusts for the correct projection orientation.  
If not in the correct projection orientation, press / to access the settings options and go to *Projection Direction - Rear Ceiling*.

## 5 Use home screen

The home screen provides direct access to Android TV service and setup on the projector.



### Use of Android TV

The projector is integrated with Android TV. 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.
- Support voice input and search.

### Navigation of Android TV

You can use the supplied remote control to navigate Android TV.

- Press / 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 installed apps and access the app store.
- Press on the remote control to access voice search function.



### Settings of Android TV

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

## Use wired keyboard/mouse

- Simply connect the USB-A 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 buttons on the mouse for navigation and selection.

## Use Bluetooth Keyboard/mouse/gamepad

- 1 Pair your Bluetooth keyboard, mouse or gamepad with the projector as follows:
  - On the home screen (press ) navigate to select the  icon in the upper right corner of the screen to access the settings options. Use the **Navigation buttons** on the remote control to select *Remotes & Accessories* to access Bluetooth settings and enable Bluetooth.
  - In the *Bluetooth* settings interface of the projector, select your Bluetooth keyboard, mouse, or gamepad name from the Bluetooth device list.
- 2 After pairing, you can use the Bluetooth keyboard, mouse, or mouse with the projector.

# 6 Chromecast streaming

This projector has Chromecast built-in. This allows you to stream content (e.g. videos, photos and music) from a Chromecast-enabled app on your mobile device (Android or iOS device) to the projection screen.

### What you need

- Make sure the projector and your mobile device are connected to the same WiFi network.
  - The app to be cast must be Chromecast enabled and must be the latest version. Visit Google Play Store or Apple App Store for any app updates.
- 1 Launch the Chromecast-enabled app on your mobile device.
  - 2 On the app screen, tap the Chromecast icon.
  - 3 Tap the name of this projector from the pop-up on your mobile phone.
- After successful connection, the app content is streamed to the projection surface.

### Notice

 For better streaming performance, use a 5 GHz WiFi network.


Only content from the app on the mobile device can be streamed to the projector.

Copy-protected (DRM) content cannot be streamed.

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

# 7 Connect to playback devices

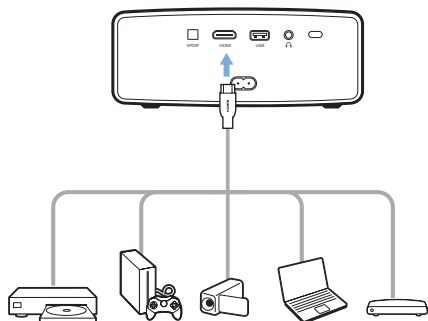
## Notice



-  Make sure all devices are disconnected from the power outlet before establishing or changing any connections.

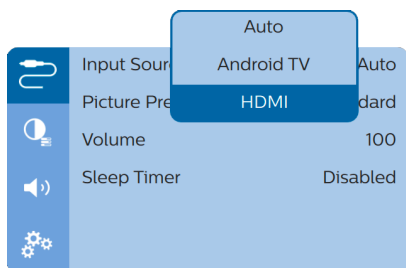
## Connect to devices through HDMI

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** connector on the projector to the HDMI output on the playback device.



- 2 The projector automatically switches to HDMI input when HDMI connection is made. The projection screen shows images. If the projection screen does not show images, select HDMI input manually. Press /  to access the settings options and go to *Input Source - HDMI*.



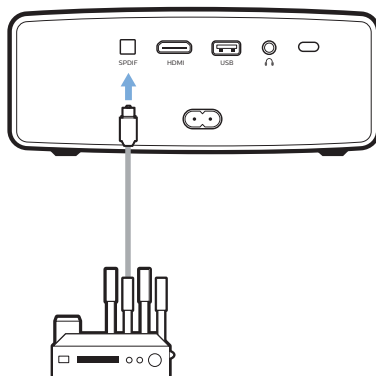
## Notice



-  When the projector is connected to an HDMI device and switched to HDMI input, volume adjustment is not possible through the remote control. Press /  to access the settings options and go to *Volume* for volume adjustment.

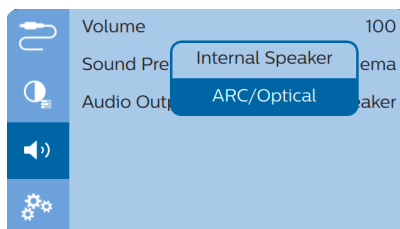
## Connect to devices through SPDIF

Connect a digital device (e.g. a home cinema system or sound bar) to the projector through S/PDIF connection. With this connection, audio is streamed to the connected digital device.

- 1 Using an SPDIF optical cable, connect the SPDIF connector on the projector to the SPDIF input on the digital device.
  - S/PDIF input on the digital device might be labeled **OPTICAL** or **OPTICAL IN**.



- 2 To output audio to the external device, make sure external speaker output is activated. Press /  to access the settings options and go to *Audio Output - ARC/Optical*.



# 8 Other features

## Listen through external speakers or headphones



Connect external speakers or headphones to the projector. With this connection, audio from the projector is played through the external speakers or headphones.

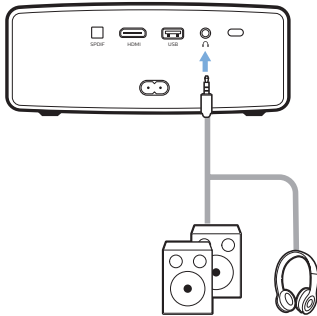
**⚠ DANGER!**

**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  connector on the projector to the analogue audio input (3.5 mm jack, or red and white jacks) on the external speakers. Or connect the  connector on the projector to headphones.
  - The speakers of the projector are deactivated automatically when the external speakers or headphones are connected to the projector.



- 2 When connecting to the headphones, use the volume control on the remote control to adjust the volume to a comfortable level.

## Charge a USB device

You can charge a USB device (e.g. smartphone, MP3 player or other mobile device).



- 1 Using a USB-A cable, connect your USB

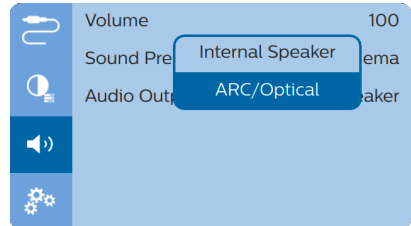
device to the **USB** port on the projector.

- 2 Turn on the projector. The USB device starts to charge automatically.

## Use HDMI ARC function

This projector supports HDMI with Audio Return Channel (ARC). With ARC feature, you can hear the audio from the projector on the connected HDMI ARC device.

- 1 Make sure the projector is connected to an HDMI device through HDMI ARC connection (see **Connect to devices through HDMI, page 13**).
- 2 To activate HDMI ARC function on the projector, press / to access the settings options and go to *Audio Output - ARC/Optical*.





# 9 Change settings

This section helps you change the following two system settings:

- Android TV system
- Projector system

## Android TV system settings

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

### WiFi settings

Go to *General Settings - Network & Internet* to connect the projector to the WiFi network. Use the pop-up virtual keyboard or voice input to input letters and digits.

### Google account settings

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

### Language settings

Go to *Device Preferences - Language* to select a language for on-screen menus.

### Date and time settings

Go to *Device Preferences - Date & time* to access the following settings.

- Automatically update date and time, or manually set date, time and time zone.

### Keyboard settings

Go to *Device Preferences - Keyboard* 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.

### Apps settings

Go to *Apps* to access the following settings.

- List downloaded/system/running apps, and memory used by each app
- Set various permissions for the installed apps, e.g. location, contacts, camera, microphone, phone and SMS, etc.
- Set security and restrictions for apps installation
- Check an app version, app size and cache size.
- Clear cache size or uninstall an app.

### Picture settings

#### Projection screen

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.

#### Projection image

Go to *TV settings - Picture* to access the following settings.

- *Picture Mode*: Select a predefined color brightness setting for picture and video display.
- *Custom Settings*: Customize color values in brightness, contrast, saturation and sharpness.
- *DNR*: Select high/medium/low level of DNR (Digital Noise Reduction) to remove image noise from a video signal to achieve image clearness.
- *Backlight*: Adjust the brightness of the backlight of the projector screen.

### 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 effect; automatically select a sound format the projector best supports or manually select a sound format.

#### Audio output

Select an audio output format when you connect the projector to an external digital device through SPDIF connection.

Go to *TV settings - Audio Output* to access the following settings.

- *Dolby sounds*: select a DRC (Dynamic Range Compression) mode for reducing dynamic range of sound output. For example, reduce the volume of the loud sounds when watching movie at night.
- *Audio Mixing*: Enable audio mixing function when the projector is connected to an external audio mixer.
- *Digital Audio Format*: Detect and select the best supported audio format automatically, or manually select an audio format for sound output.

## Display Netflix activation code

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

## Restore default settings

- 1 Go to *Device Preferences - Reset*.
- 2 Follow the on-screen instructions to start or cancel resetting.

### Notice



After resetting to the default settings, all the files and apps you installed are completely erased.

## Other system settings

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

- *Screen saver*: Select a timer to automatically turn the screen off when the projector is idle.
- *Storage*: Check the total and used space for internal storage.

## Projector system settings

- 1 Press / on the remote control to access the projector system settings options.
- 2 Use the **Navigation buttons** and **OK** to select and change settings.

	Input Source	Auto
	Picture Preset	Standard
	Volume	100
	Sleep Timer	Disabled

## Input source selection

Go to *Input Source* to access the following settings.

- *Auto*: Automatically switch to the correct input source.
- *HDMI*: Select it when an HDMI device is connected.
- *Android TV*: Select it when no HDMI device is connected.

	Input Source	Auto	Auto
	Picture Preset	HDMI	Standard
	Volume		100
	Sleep Timer		Disabled

## Image options

You can access the following image setting options.

	Picture Preset	User
	Color Temperature	Standard
	Geometry Corrections	manual
	Projection Direction	Auto
	Digital Zoom	100

- *Picture Preset*: Select a predefined color brightness setting for picture and video display, or select *User* to customize color

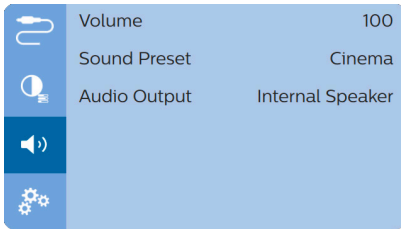


values on brightness, contrast, saturation and sharpness.

- **Color Temperature:** Set to *Warm* to enhance hotter colors such as red; set to *Cool* to make picture bluish; set to *User* to customize color values in RGB mode.
- **Geometry Corrections:** Select an option to correct keystone or distorted images to be rectangular or square.
  - *Auto:* Enable or disable auto correction of the image shape.
  - *Manual:* Manually correct keystone or distorted images in the horizontal and vertical orientation.
  - *Off:* Disable correction of the image shape.
- **Projection Direction:** Adjust the projection to the correct position based on different installation of the projector.
- **Digital Zoom:** Scale down the projection image.

## Sound options

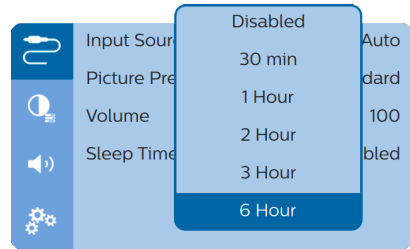
You can access the following sound setting options.



- **Volume:** Adjust volume of the projector.
- **Sound Preset:** Select a preset sound effect or select *User* to manually adjust bass and treble.
- **Audio Output:** Switch the audio output between *Internal Speaker* and *ARC/Optical*. Select *ARC/Optical* if you want to output audio through **HDMI** or **SPDIF** connection to a digital device (e.g. home cinema system or AV receiver).

## Scheduled shutdown

Go to *Sleep Timer* to select a time option which enables the projector to automatically turn off at a specified period of time.



## Other options

You can also access the following options.



- **Language:** Select a language for on-screen menus.
- **Software Version:** Check software version of this product.
- **Hardware Version:** Check hardware version of this product.
- **Firmware Upgrade:** Software update via a USB device (**see Update SW through USB, page 18**).
- **Factory Reset:** Restore default settings.

# 10 Service

## Cleaning

### DANGER!



#### Instructions for cleaning!

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 of 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.

Before you update the software of the projector, check the current software version:

- Press / to access the settings options and go to *Software Version*.

	Language	English
	Software Version	1.0.15
	Hardware Version	1.0
	Firmware Upgrade	
	Factory Reset	

## Update SW through USB

### CAUTION!



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

- 1 Check the latest software version on [www.philips.com/support](http://www.philips.com/support). Find your product (model number: NPX643/INT), and locate 'Software and drivers'.
- 2 Download the zipped software file, then unzip and save it in the root directory of the USB flash drive.
- 3 Connect the USB flash drive (FAT32 formatted) to the projector.
- 4 Press / to access the settings options and go to *Firmware Upgrade*.



	Language	English
	Software Version	1.0.15
	Hardware Version	1.0
	Firmware Upgrade	
	Factory Reset	






- 5 Follow the on-screen instructions to complete the update.

# Troubleshooting

## Power cycling

If a problem occurs that cannot be corrected with the instructions in this user manual, follow the steps given here.

- 1 Turn the projector off by pressing .
- 2 Wait at least ten seconds.
- 3 Turn the projector on by pressing  once.
- 4 If the problem persists, please contact our technical service centre or your dealer.

Problems	Solutions
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  longer than ten seconds. If this does not work, disconnect the power cable.</li></ul>
The remote control does not work.	<ul style="list-style-type: none"><li>• The remote control is not paired with the projector. Pair the remote control with the projector (<b>see First time setup, page 8</b>).</li><li>• The remote control is not in Android TV mode for Android TV menu navigation. Press / on the remote control to switch the remote control to Android TV mode (if the remote control is paired with the projector). When the remote control is in Android TV mode, the LED on the remote control flashes blue once each time you press a button on the remote control.</li><li>• Check the batteries of the remote control.</li></ul>
No sound output to the connected digital device.	<ul style="list-style-type: none"><li>• Check the cables to the external device.</li><li>• Check that the sound output is activated on the projector. Press / on the remote control to access the settings options and go to <i>Audio Output - ARC/Optical</i>.</li></ul>
No image from the external HDMI device.	<ul style="list-style-type: none"><li>• Check if the correct HDMI input is selected.</li><li>• Disconnect the HDMI cable or switch off the HDMI device.</li><li>• Wait <b>three</b> seconds.</li><li>• Reconnect the HDMI cable or switch on the HDMI device again.</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 via HDMI cable.	<ul style="list-style-type: none"><li>• Check that the sound is activated on the computer.</li></ul>
Cannot stream video from an app on my mobile phone.	<ul style="list-style-type: none"><li>• Make sure the correct setup is made and the app is Chromecast-enable (<b>see Chromecast streaming, page 12</b>).</li></ul>

Problems	Solutions
When I view videos, the sound or the picture is sometimes distorted or the sound is not synchronized to the picture.	<ul style="list-style-type: none"> <li>• The available WiFi bandwidth is insufficient for sending the video flawlessly from the smartphone to the projector. This can happen if one or more WiFi networks operate in the same frequency range nearby. Certain IoT devices (e.g. ZigBee enabled devices) also operate in this frequency range.</li> <li>• Your smartphone is not fast enough to compress the data and send it simultaneously over WiFi.</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 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>
What to do if the projector does not work when connecting to a notebook PC?	<ul style="list-style-type: none"> <li>• Check that the HDMI cable is plugged in correctly.</li> <li>• Make sure that the notebook PC has been switched to projector display.</li> </ul>

# 11 Appendix

## Technical data

### Technology/optical

Display technology	LCD
Light source	LED
Color space	100% REC 709
Resolution	1920 × 1080 pixel
LED lifetime	over 30,000 hours
Contrast ratio	3000:1
Aspect ratio	16:9
Throw ratio	1.4:1
Screen size (diagonal)	20" to 100"
Screen distance	80 cm - 200 cm / 24" - 60"
Keystone correction	automatic (vertical) or manual (vertical and horizontal)
Projection modes	front, rear, front, ceiling
Focus adjustment	manual
Digital zoom	yes (60-100%)
Auto rotate	yes
Internal memory	8 GB

### Sound

Built-in speakers	2 x 15W
Surround sound	yes
Built-in powerful DSP	yes

### Connection

Wi-Fi	802.11a/b/g/n/ac, 2.4+5GHz, Chromecast built in
Bluetooth	connection for remote control, keyboard, mouse or gamepad
USB	charging, DC 5V, 1.2A
HDMI	x1
Audio output	SPDIF (optical out) 3.5 mm headphone out (analog)

### Power source

Power consumption	operating: 100 W standby: 0.3 W
Power supply	100-240V~, 50/60Hz

### Apps

Pre loaded apps	Android TV™ / full category of apps
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### Product details

Dimensions (W × D × H)	277 x 310 x 111 mm
Weight	2.7 kg
Operating temperature	5 °C - 35 °C
Storage temperature	< 60 °C

### Package content

NeoPix Ultra 2TV projector, remote control with 2 AAA batteries, power cables (EU, UK, US), lens cover, Quick Start Guide

## 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, Screeeno 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 range (MHz)	Limits dB (µV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

## 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-NPX643/INT

## 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.



**Packaging:** The presence of the logo (green dot) means that a contribution is paid to an approved national organisation to improve package recovery and recycling infrastructures. Please respect the sorting rules set up locally for this kind of waste.

**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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**NeoPix Ultra 2TV**

**EN**