

PHILIPS

NeoPix Ultra 2

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!

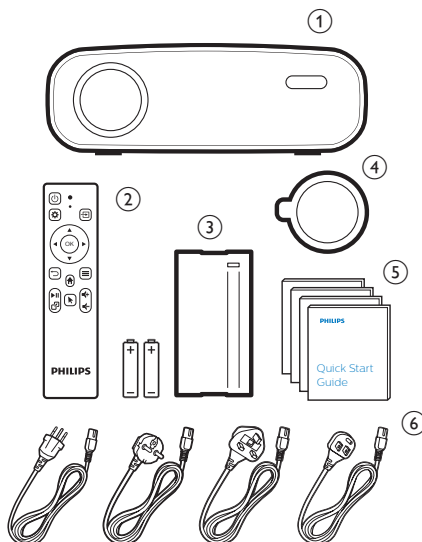


Damage to the product or loss of data!

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 projector (NPX642/INT)
- ② Remote control with 2 AAA batteries
- ③ A/C power adapter
- ④ Lens cover
- ⑤ Quick Start Guide
- ⑥ AC power cable with plug x 4



Customer service centre

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

Web: www.philips.com/support

Mail: 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.screeneo.com>

Access the community forum at <https://community.screeneo.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 23**).

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 23**). 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!

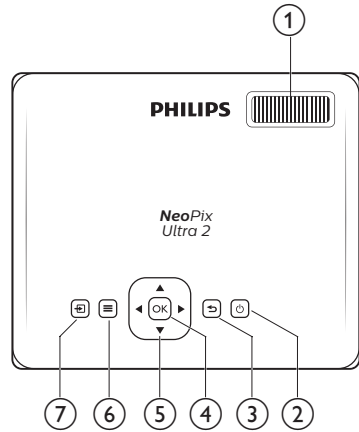








Risk of eye irritation!

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.

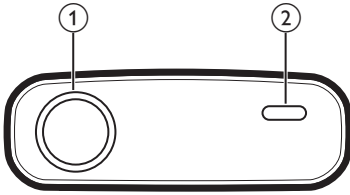
2 Overview

Top view



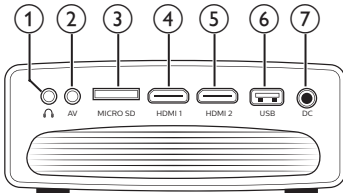
- ① **Focus adjustment knob**
Adjust image sharpness.
- ② 
 - Switch the projector on or to standby.
 - When the projector is switched on, the LED turns white. When the projector is in standby, the LED turns red.
- ③ 
Return to a previous menu screen.
- ④ **OK**
Confirm a selection or entry.
- ⑤ **Navigation buttons**
 - Navigate menu options.
 - On the home screen, press  once more to display shortcut options; press  once or more to exit shortcut options.
- ⑥ 
Quick access to settings options (e.g. picture and sound options).
- ⑦ 
 - Access and select an input source.
 - Quick access to settings options (e.g. picture and sound options).


Front view



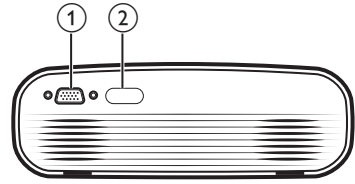
- ① Projection lens
- ② Front IR sensor

Side view



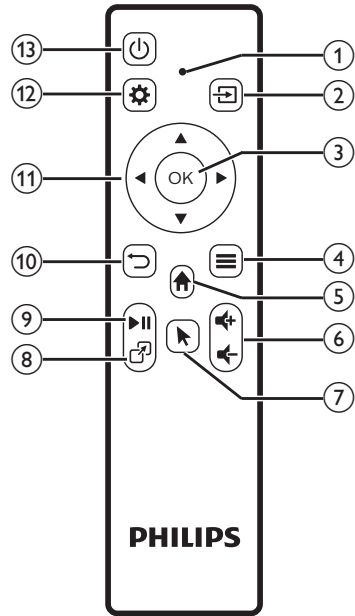
- ①  3.5 mm audio output; connect to external speakers or headphones.
- ② **AV**
3.5 mm audio/video input; connect to the analogue audio jacks and/or composite video jack on a playback device.
- ③ **Micro SD card slot**
Connect to a Micro SD card for media play.
- ④ **HDMI 1**
Connect to the HDMI output on a playback device.
- ⑤ **HDMI 2**
Connect to the HDMI output on a playback device.
- ⑥ **USB port**
Connect to a USB storage device for media play.
- ⑦ **DC**
Connect to the power supply.

Rear view













- ① **VGA port**
Connect to the VGA port on a computer.
- ② **Rear IR sensor**

Remote control



- ① **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 Bluetooth paired with the projector and the on-screen pointer can be enabled.
 - Red light indicates the remote control works with the projector via infrared signals only, and the on-screen pointer cannot be enabled.

- ② 
 - Access and select an input source.
 - Quick access to settings options (e.g. picture and sound options).
- ③ **OK**
Confirm a selection or entry.
- ④ 
 - When browsing apps, access more options.
 - When playing media, access more options.
- ⑤ 
 - Access the home menu.
- ⑥ 
 - Increase or decrease volume.
- ⑦ 
 - Enable or disable the on-screen pointer.
- ⑧ 
 - Quick access to apps windows.
- ⑨ 
 - Start, pause or resume media play.
- ⑩ 
 - Return to a previous menu screen.
- ⑪ **Navigation buttons**
 - Navigate menu options.
 - On the home screen, press ▲ once more to display shortcut options; press ▼ once or more to exit shortcut options.
- ⑫ 
 - Quick access to settings options (e.g. picture and sound options).
- ⑬ 
 - Switch the projector on or to standby.

3 Initial operation

Placement

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

Notice



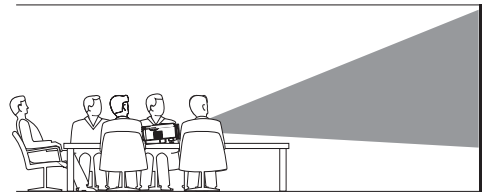
For overhead mounting on ceiling, purchase a projector mount recommended by an installation professional and follow the instructions that come with the mount.


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

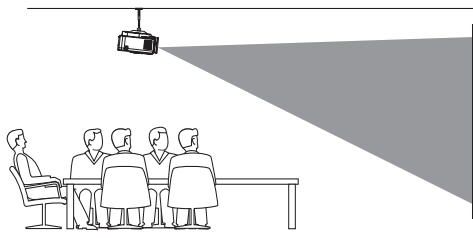
- 1 Place the projector on a table in front of the projection screen. This is the most common way to position the projector for quick setup and portability.



- 2 On the home screen, press ▲ once or more to display the shortcut options. Then select the  icon on the upper right of the home screen and press **OK**, then go to *Projection Image Setting - Projection Mode - Front-Desktop*.

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.

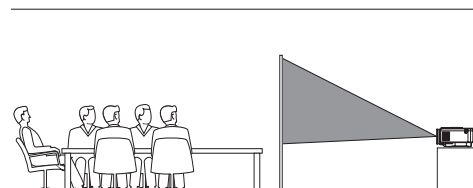


Adjust projection to the correct position.

On the home screen, press ▲ once or more to display the shortcut options. Then select the ⚙️ icon on the upper right of the home screen and press **OK**, then go to *Projection Image Setting - Projection Mode - Front-Ceiling*.

Rear table

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

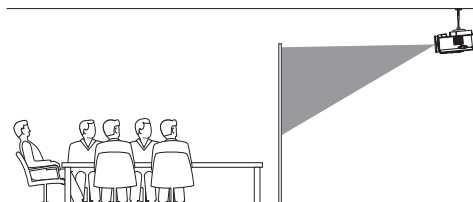


Adjust projection to the correct position.

On the home screen, press ▲ once or more to display the shortcut options. Then select the ⚙️ icon on the upper right of the home screen and press **OK**, then go to *Projection Image Setting - Projection Mode - Rear-Desktop*.

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.



Adjust projection to the correct position.

On the home screen, press ▲ once or more to display the shortcut options. Then select the ⚙️ icon on the upper right of the home screen and press **OK**, then go to *Projection Image Setting - Projection Mode - Rear-Ceiling*.

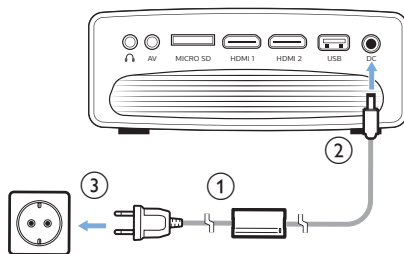
Connect power supply

CAUTION!



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

- 1 Select a supplied power cable with an appropriate power plug (EU, UK, US, CH).
- 2 Connect the power adapter with the power cable to the **DC** socket on 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.

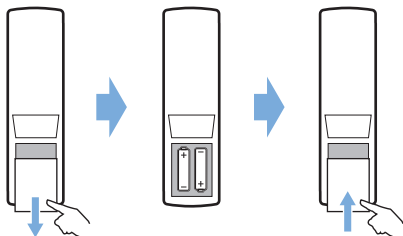
Avoid deforming, dismantling or charging the batteries.

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 and setup

- 1 Press to turn on the projector. The LED on the projector turns from red to white.
- To turn off the projector, press two times. 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.

Screen size adjustment

The projection screen size (or size of images) i-s 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 65".

Digital zooming

You can use the digital zoom to reduce the screen size up to 60%.

- 1 Press on the remote control to display the settings options. Then navigate to select *Geometry Corrections - Digital Zoom*. Another way to access digital zooming function as follows. On the home screen, press once or more to display the shortcut options. Then select the icon on the upper right of the home screen and press **OK**, then go to *Projection Image*

Setting - Digital Zoom.

- 2 Press to adjust screen size with 60-100% scaling range.

Screen height adjustment

To adjust the screen height when placing the projector on the table, turn the angle adjustment knob located on the bottom of the projector.

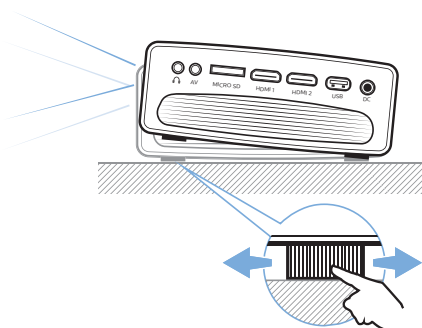


Image focus adjustment

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

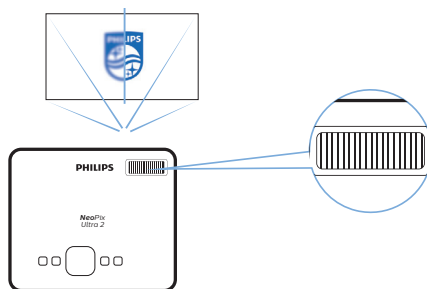


Image shape adjustment

Auto correction

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

- 1 On the home screen, press once or more to display the shortcut options. Then select the icon on the upper right of the home screen and press **OK** to access the system settings.

- First go to *Projection Image Setting - Gyro Horizon*. Perform calibration to achieve optimal horizontal projection.
- Then go to *Projection Image Setting - Auto Keystone - On*. Initialize automatic correction of the projection. Make sure to select *Projection Image Setting - Keystone Advanced - Front* to activate *Auto Keystone* option.



Manual correction

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

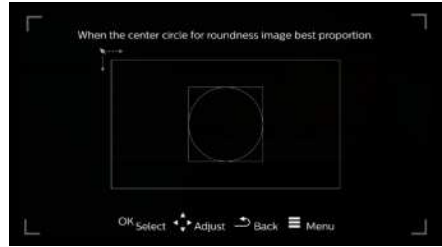
- 1 Press **⚙** on the remote control to display the settings options. Then navigate to select *Geometry Corrections - Manual*. Another way to access manual image correction as follows. On the home screen, press **▲** once or more to display the shortcut options. Then select the **⚙** icon on the upper right of the home screen and press **OK**, then go to *Projection Image Setting - Manual Keystone*. Make sure to select *Projection Image Setting - Keystone Advanced - Front* to activate *Manual Keystone* option.
- 2 Press **◀▶** to adjust the image shape.

Customized correction (4-corner correction)

You can manually adjust the image shape by re-positioning four corners of the projection image. This also lets you correct for left or right position of the projector.

- 1 Press **⚙** on the remote control to display the settings options. Then navigate to select *Geometry Corrections - 4-Corner*. Another way to access 4-corner correction as follows. On the home screen, press **▲** once or more to display the shortcut options. Then select the **⚙** icon on the upper right of the home screen and press **OK**, and go to *Projection Image Setting - Keystone Advanced - Side (not Front)*.

After that, select *Manual Keystone* under *Projection Image Setting* to activate 4-corner adjustment.



- 2 In the 4-corner correction interface, press **OK** to select an image corner, then press **◀▶** to adjust the horizontal positioning values, and **▲▼** to adjust the vertical positioning values. Repeat the same step to adjust positioning values of the other image corners if desired.
- 3 To exit correction mode, press **↶** or **⬆**.

Basic setup

Step 1: set up the language

- 1 On the home screen, press **▲** once or more to display the shortcut options. Then select the **⚙** icon on the upper right of the home screen and press **OK**, then go to *Language Setting*. Use the **Navigation buttons** and **OK** on the remote control to make changes.



- *Language*: Select your desired language for on-screen menus.
- *Input Method*: Select a keyboard input method.
- *Android Keyboard Settings*: Make settings for Android keyboard.

Step 2: activate on-screen pointer

Activate the on-screen pointer (mouse cursor) to replace the function of the **Navigation buttons** on the remote control. The on-screen pointer is useful when you input text through pop-up virtual keyboard, browse the Internet, or use some certain apps.

Before you can use the on-screen pointer, pair the remote control with the projector.

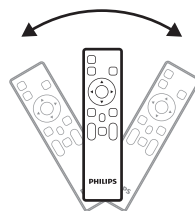
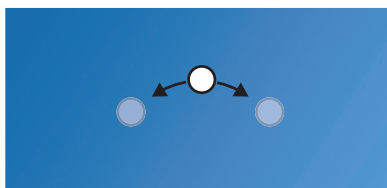
- 1 Go to the Bluetooth settings.
On the home screen, press ▲ once or more to display the shortcut options. Use the **Navigation button** on the remote control to select *Bluetooth* to access Bluetooth setting. Enable Bluetooth by selecting *Bluetooth ON/OFF* if not enabled.



- 2 Hold down ◀ and ▶ on the remote control for five seconds. The remote control is automatically paired with the projector. "Philips AirMote" is displayed under the paired devices list of the Bluetooth setting.
- When the remote control is paired with the projector, the LED on the remote control flashes blue briefly each you press a button on the remote control.

To use on-screen pointer

- 1 When the remote control is paired with the projector, press ▶ on the remote control to display or cancel the on-screen pointer.
- 2 When the pointer (a circular mark) is displayed on the projection screen, move the remote control in the air then the pointer moves across the screen correspondingly.
- 3 Press the **OK** button on the remote control to confirm selection.



Step 3: set up the WiFi network

Set up the WiFi network to access online applications and screen mirroring.

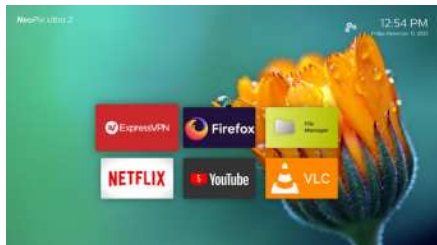
What you need

- A wireless network router.
- For best wireless performance and coverage, use an 802.11n router ("WiFi 4") and the 5 GHz band.

- 1 Go to the WiFi settings.
On the home screen, press ▲ once or more to display the shortcut options. Use the **Navigation button** on the remote control to select WiFi to access WiFi setting. Enable WiFi by selecting WiFi ON/OFF if not enabled.
- 2 Select your network name from the network list. Then the network password input bar and the virtual keyboard pop up.
 - To input your password, you can use the navigation buttons on the remote control, or use the on-screen pointer (**see Step 2: activate on-screen pointer, page 11**).
- 3 After you input the password for the network, select *Connect* on the screen to complete the WiFi setup.

4 Use home screen

The home screen provides easy access to a wide range of Internet applications, setup and other useful features on the projector.



Shortcut options

The projector has shortcut options which are located on the upper right of the home screen. Access the shortcut options via either of the following ways.

- On the home screen, press ▲ once or more on the remote control to display the shortcut options.
To exit the shortcut options, press ▼ once or more on the remote control.
- Enable the on-screen pointer and position it in the area above the app list on the home screen. The shortcut options appear.
To exit shortcut options, position the on-screen pointer in the area below the shortcut options.

Easy setup

Select the setup icon from the app list on the home screen to access the following settings:

- Select language and time zone
- Activate on-screen pointer
- Set up WiFi network

Refer to the "Basic setup" section for similar and detailed setup operation.


Access online services

Some pre-loaded Internet applications are available on the home screen.

- Before access to the applications, make sure the projector is connected to Internet.
On the home screen, press ▲ once or more to display the shortcut options then use the **Navigation buttons** to select *WiFi*.

- Use the **Navigation buttons** and **OK** on the remote control to select and open an application.
- To uninstall applications on the home screen, select an application, then press ≡ on the remote control to access the *Uninstall* option.

Notice

-  New applications (apps) will be automatically installed on the projector with firmware update (see **Update software, page 20**).

Customize home screen wallpaper

- 1 On the home screen, press ▲ once or more on the remote control to display the shortcut options.
- 2 Use the **Navigation button** on the remote control to select *Change Wallpaper*, then press ◀▶ to select a pre-saved picture as background on the home screen. Press **OK** to confirm.

Screen navigation and keyboard input

The projector provides several alternative methods for you to navigate across the projection screen and input text.

Use the AirMote control

Before you can use this feature, make sure that the remote control is paired with the projector for AirMote control (see **Step 2: activate on-screen pointer, page 11**).

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 **▲** once or more to display the shortcut options. Use the **Navigation button** on the remote control to select *Bluetooth* to access Bluetooth settings. Enable Bluetooth by selecting *Bluetooth ON/OFF* if not enabled. 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.

5 Connect to playback devices

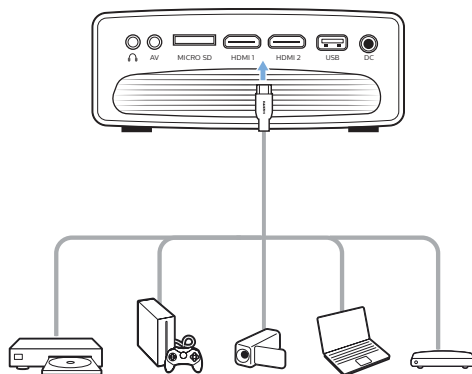
Notice

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

Connecting 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 1** or **HDMI 2** connector on the projector to the HDMI output on the playback device.



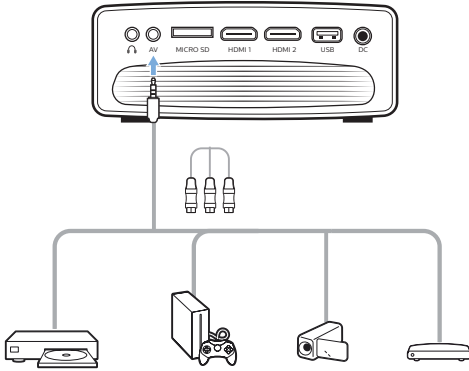
- 2 Press  to display the input source list, and then select *HDMI 1* or *HDMI 2*.

Connecting to devices through AV

Connect a playback device (e.g. a DVD player, gaming console, camcorder or digital camera) to the projector through AV connection. With this connection, images are shown on the projection screen, and audio is played on the projector.

- 1 Using a RCA cable with 3.5 mm plug, connect the **AV** connector (3.5 mm) on the

projector to the analogue audio output jacks (red and white) and/or composite video output jack on a playback device.



- 2 Press to display the input source list, and then select AV.

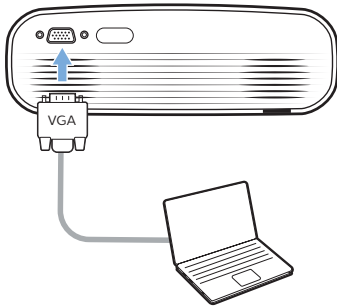
Connecting to a computer through VGA

Connect a computer (e.g. a desktop or laptop) to the projector. With this connection, images are shown on the projection screen.

Notice

Many laptops do not activate the external video output automatically when you connect a second display such as a projector. Check your laptop user manual to find out how to activate the external video output.

- 1 Using a VGA cable, connect the **VGA** connector on the projector to the VGA output on a computer.



- 2 On your computer, adjust the screen resolution of the computer to the correct setting and switch the VGA signal to an external monitor. The following resolutions are supported:

	Resolution	Image refresh rate
VGA	640 x 480	60 Hz
SVGA	800 x 600	60 Hz
XGA	1024 x 768	60 Hz
WXGA	1280 x 768	60 Hz
HD	1280 x 720	60 Hz
FULL HD	1920 x 1080	60 Hz

- 3 Press to display the input source list, and then select VGA.

Connecting to 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.

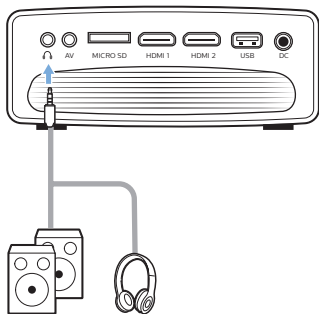
DANGER!



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.

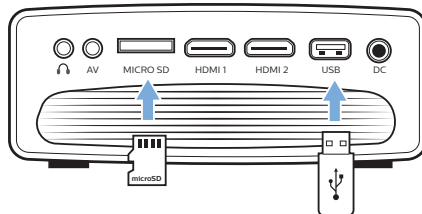


- 2 When connecting to the headphones, use the volume control on the remote control to adjust the volume to a comfortable level.

6 Browse storage devices

Through the projector, you can access and play the pictures, audio and video files stored on the local storage and the networked device.

- 1 Connect a USB storage device to the **USB** port on the projector.
 - Or connect a Micro SD card to the **MICRO SD** slot on the projector.



- 2 Select the File Manager icon on the home screen to access the files stored.
- 3 Select the local storage device or the networked device.
 - If the local storage device is selected, you are prompted to select the internal storage or the connected storage (e.g. a USB flash drive, HDD, camcorder or digital camera).
 - If the networked device is selected, make sure the WiFi network is connected and a shared network device is accessible.
- 4 The file browser is displayed. Use the **navigation buttons** and **OK** on the remote control to select and open files.

Play video from storage devices

- 1 From the file browser displayed, navigate to access the folders on the storage device.
- 2 To access video files, make sure the video icon on the left side of the file browser is selected. Select a video file, and press **OK** to start video playback.
- 3 During playback, the playback control bar appears at the bottom of the screen. You can press **≡** on the remote control to hide or display the control bar.
 - Use **◀▶** on the remote control to select a control playback icon then press **OK** to confirm. The control playback bar offers various functions, such as:

- Pause/resume play
- Select a previous/next playback file
- Fast forward/backward
- Skip to a specific part of the video by entering the time of the scene. Using ▲ /▼ on the remote control to input time.
- Repeat a video section.
- Select sound effect and picture effect.

Play music from storage devices

- 1 From the file browser displayed, navigate to access the folders on the storage device.
- 2 To access music files, make sure the music icon on the left side of the file browser is selected. Select a music file, and press **OK** to start music playback.
- 3 During playback, the playback control bar appears at the bottom of the screen. You can press ≡ on the remote control to hide or display the control bar.
 - Use ◀▶ on the remote control to select a control playback icon then press **OK** to confirm. The control playback bar offers various functions, such as:
 - Pause/resume play
 - Select a previous/next playback file
 - Repeat and shuffle play
 - Select sound effect.

View photo from storage devices

- 1 From the file browser displayed, navigate to access the folders on the storage device.
- 2 To access picture files, make sure the picture icon on the left side of the file browser is selected. Select a picture file, and press **OK** to display the picture.
- 3 When the picture is displayed, the playback control bar appears at the bottom of the screen. You can press ≡ on the remote control to hide or display the control bar.
 - Use ◀▶ on the remote control to select a control playback icon then press **OK** to confirm. The control playback bar offers various functions, such as:
 - Select a previous/next picture file
 - Zoom in or out the picture
 - Rotate the photo clockwise or anticlockwise.
 - Select picture effect

7 Wireless projection

This projector allows you to wirelessly mirror the following devices to the projection screen.

- iOS devices
- Mac
- Android devices
- Windows PC

Screen mirroring for iOS devices and Mac

You can share the screen contents of your iOS device or Mac on the projection screen.

What you need

- Enable WiFi both on the projector and your iPhone/Mac, and the two are in the same WiFi network.

- 1 Make sure AirPlay is enabled on the projector.

On the home screen, press ▲ once or more to display the shortcut options. Use the **Navigation button** on the remote control to access AirPlay™ to check whether AirPlay is enabled. Once enabled, you do not need to enable it again later.

- 2 On your iPhone, access 'Control Center' by sliding the screen up, and select the 'Screen Mirroring' option. Then select the projector name under 'Screen Mirroring' to connect your iPhone to the projector.

Or on your Mac, access the screen mirroring option located on the top of the computer screen, then select the projector name to connect your Mac to the projector.

- 3 After successful connection, the screen contents of your iPhone/Mac are casted to the projection surface.

Cast video for iOS devices

You can cast videos from your iOS device on the full projection screen.

What you need


- Enable WiFi both on the projector and iPhone/Mac, and the two are in the same WiFi network.

- 1 Make sure AirPlay is enabled on the projector.

On the home screen, press ▲ once or more to display the shortcut options. Use the **Navigation button** on the remote control to access AirPlay™ to check whether AirPlay is enabled. Once enabled, you do not need to enable it again later.

- 2 View online video on your iPhone, and tap the TV icon on the video picture to access Apple TV mode. The video is now cast and played on the full projection screen.

Notice

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

Copy-protected (DRM) content cannot be streamed.

Trademark notice

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Google, Android and the Android logo are trademarks or registered trademarks of Google, Inc. in the US and other countries.

Screen mirroring for Android devices/Windows PC

You can share the screen contents of your Android device or Windows PC on the projection screen.

What you need

- An Android device which supports Miracast (or Screen Mirroring). The feature name can be also known as Screencast, Screen Sharing, WiFi Direct, and Wireless Display, etc. Not all Android devices have this feature. Refer to your device user manual for details.

- Enable WiFi both on the projector and your Android device (or Windows PC).

- 1 Enable Miracast function on the projector. On the home screen, press ▲ once or more to display the shortcut options. Use the **Navigation button** on the remote control to select *Miracast™* to enable Miracast.

- A message window is displayed to prompt you to activate wireless display function (screen mirroring) on your Android device (e.g. a mobile phone, **or**

tablet).

- 2 On your Android device (or Windows PC), access the screen mirroring function. Then select the projector name under the screen mirroring device list to connect your Android device to the projector.
 - 3 After successful connection, the screen contents of your Android device (or Windows PC) are casted to the projection surface.
- Several minutes may be needed for the picture to appear after the streaming starts.

Notice



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

Copy-protected (DRM) content cannot be streamed.


Google Pixel Phones are not compatible with this Screen Mirroring system.

8 Change settings

This section helps you change the following two system settings:

- Operating system
- Projector system

Operating system settings

- 1 On the home screen, press **▲** once or more to display the shortcut options. Then select the  icon on the upper right of the home screen and press **OK** to access various setting options.
- 2 Use the **Navigation buttons** and **OK** to select and change settings.



WiFi settings

Go to *WiFi Setting* to access the following settings.

- *WiFi Setting*: Turn WiFi on or off on the projector. Connect the projector to the WiFi network. Use the pop-up virtual keyboard to input letters and digits.
- *Proxy*: Set the proxy host and proxy port to access the Internet. Use the pop-up virtual keyboard to input letters and digits.

Bluetooth settings

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

Notice



The projector cannot be used for streaming music through Bluetooth.

Picture settings

Go to *Projection Image Setting* to access the following settings.

- *Gyro Horizon*: Automatically calibrate the horizontal projection to the optimal. Perform calibration before you enable auto keystone correction (*Auto Keystone*) of the

projection.

Place the projector on a level surface before calibration.

- **Projection Mode:** Adjust the projection to the correct position based on different installation of the projector.
- **Keystone Advanced:** Enable or disable 4-corner image correction. Select *Side* to enable 4-corner image correction.
- **Auto Keystone:** Enable or disable auto correction of the projection. Perform calibration (*Gyro Horizon*) before you enable auto keystone correction of the projection.
- **Manual Keystone:** Manually correct the image shape. Or access 4-corner image correction if the function is enabled by selecting *Keystone Advanced - Side*.
- **Digital Zoom:** Scale the projection image within the range from 60% to 100%.

Notice



If *Side* is selected under *Keystone Advanced*, *Auto Keystone* option is invisible and *Manual Keystone* option is enabled for 4-corner image correction.

Language and keyboard settings

Go to *Language and input method Setting* to access the following settings.

- **Language:** Select a language for on-screen menus.
- **Input Method:** Select a keyboard input method.
- **Android Keyboard Settings:** Access various settings for Android keyboard (e.g. intelligent word correction and suggestion).

Date and time settings

Go to *Date Setting* to access the following settings.

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

Apps management

Go to *Application Setting* to access the following settings.

- Check an app version, app size and cache size.
- Clear cache size or uninstall an app.

Restore default settings

- 1 Go to *System Update* then select *Restore Factory*.
- 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. Back up your files if you need to reset the projector.

Other system settings

Go to *Other Setting* to access the following settings.

- **Boot Source Option:** Select or deselect an input source to start up the projector.
- **Mouse speed:** Change the speed at which the on-screen point moves.

System information checking

Go to *System Info* to check the following system information: product name, system version, free and total internal memory, free and total ROM, and MAC address.

Projector system settings

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



Input source selection

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

- Select and activate an input source (HDMI1, HDMI2, VGA, AV) corresponding to an external device which is connected to the projector.
- Select *Philips OS* when a USB storage device is connected or no other external device is connected.

Image options

You can access the image setting options, such as:

- **Picture Adjustments:** Set the values for brightness, contrast, saturation and

sharpness.

- **White Balance:** Select a white balance option to best reproduce colours under different lighting conditions. Or configure your own color balance between red, green and blue.
- **Picture Preset:** Select a predefined color brightness setting for picture and video display.

Sound options

You can access the following sound setting options.

- **Surround Sound:** Enable or disable surround sound effect.
- **Sound Preset:** Select a preset sound effect.

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.

- Check software version, hardware version, serial number of this product.
- Restore default settings.
- Software update via a USB device (see **Update SW through USB, page 21**).

9 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 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:


- On the home screen, press **▲** once or more to display the shortcut options. Then select the  icon on the upper right of the home screen and press **OK**, then go to **About - System Version**.

CAUTION!



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

Update SW through Internet


- 1 Connect the projector to the Internet.
- 2 On the home screen, press **▲** once or more to display the shortcut options. Then select the  icon on the upper right of the home

screen and press **OK**, then go to *System Update - Online Update*.

- If an upgrade media is detected, you are prompted to start or cancel the update.
- 3 Follow the on-screen instructions to complete the update.

Update SW through USB



- 1 Check the latest software version on www.philips.com/support. Find your product (model number: NPX642/INT), and locate 'Software and drivers'.
- 2 Download the software into the USB flash drive. Unzip the downloaded software file and save it in the root directory of the USB flash drive.
 - After unzipping, make sure "KJ-3S027.bin" file is included.
- 3 Connect the USB flash drive to the projector.


- 4 On the home screen, press **▲** once or more to display the shortcut options. Then select the  icon on the upper right of the home screen and press **OK**, then go to *System Update - Local Update*.
- 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  two times
- 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"> • Disconnect and reconnect the power cable, and try to turn the projector on again.
The projector cannot be turned off.	<ul style="list-style-type: none"> • Press and hold  longer than ten seconds. If this does not work, disconnect the power cable.
No image from the external HDMI device.	<ul style="list-style-type: none"> • Check if the correct HDMI input is selected (HDMI 1 or HDMI 2). • Disconnect the HDMI cable or switch off the HDMI device. • Wait three seconds. • Reconnect the HDMI cable or switch on the HDMI device again.
No sound from the external connected device.	<ul style="list-style-type: none"> • Check the cables to the external device. • Check that the sound is activated on the external device. • Only the original cables from the device manufacturer may function.
No sound from external HDMI output device.	<ul style="list-style-type: none"> • On the HDMI output device, set the audio setting to Multichannel (Raw data) & Stereo (PCM).
No sound when you connect your computer via HDMI cable.	<ul style="list-style-type: none"> • Check that the sound is activated on the computer.
Only the home menu appears and not the image from the external device.	<ul style="list-style-type: none"> • Check if the cables are connected to the correct sockets. • Check that the external device is turned on. • Check if the video output of the external device is turned on.

Problems	Solutions
Only the home menu appears and not the image from the connected computer.	<ul style="list-style-type: none"> • Check that the VGA output of the computer is turned on. • Check if the resolution of the computer is set to 1920*1080 (for VGA connection) or 1080P (for HDMI connection).
The projector turns itself off.	<ul style="list-style-type: none"> • When the projector is running for a long period of time, the surface becomes hot. • Check that the power cable is connected correctly.
The projector cannot read the USB storage device.	<ul style="list-style-type: none"> • The projector does not support the exFAT file system. • Format the USB storage device in FAT32 or NTFS format, then use it.
The projector does not react to remote control commands.	<ul style="list-style-type: none"> • Check the batteries of the remote control.
Measures to take if Screen Mirroring does not work anymore after a firmware update of an Android or iOS device?	<ul style="list-style-type: none"> • We recommend checking regularly for new firmware of your projector (see Update software, page 20).
Screen mirroring does not work with the available Android device.	<ul style="list-style-type: none"> • In order to allow screen mirroring, your device must support Miracast. Not all Android devices support this function. The function name can be also known as Screencast, Screen Sharing, WiFi Direct, Wireless Display, etc.. • Please refer to the user manual of your Android device to check if this function is supported and how it can be enabled.
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"> • 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. • Your smartphone is not fast enough to compress the screen data and send it simultaneously over WiFi. • Your smartphone may maintain parallel connections to your home network and the projector. This will reduce the available bandwidth. Disabling temporarily the connection to your home network may help.
The temperature of the projector's surface is warm.	<ul style="list-style-type: none"> • For this projector it is normal to generate moderate heat during operation.
What to do if the projector does not work when connecting to a notebook PC?	<ul style="list-style-type: none"> • Check that the HDMI cable is plugged in correctly. • Make sure that the notebook PC has been switched to projector display.

10 Appendix

Technical data

Technology/optical

Display technology	LCD
Light source	LED
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 65"
Screen distance	80 cm - 200 cm / 24" - 60"
Keystone correction	automatic or manual
Projection modes	front, rear, front, ceiling
Focus adjustment	manual
Digital zoom	yes (60-100%)
4-corner correction	yes (45°)
Boost source	HDMI or Apps
Integrated media player	yes
Internal memory	16 GB

Sound

Built-in speakers	2 x 5W
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Connection

Wi-Fi	802.11a/b/g/n/ac, 2.4+5GHz, Airplay, Miracast
Bluetooth	connection for Airmote, keyboard, mouse or gamepad
Connectivity	2 x HDMI, VGA, AV in (3.5 mm), Micro SD card slot, USB (2.0), headphone out (3.5 mm)

Power source

Power consumption	operating: 100 W Standby: 0.3 W
Power supply	power adapter
Input	100-240V~, 50/60Hz, 1.4A (max)
Output	DC 24.0V, 3.0A, 72.0W

Supported devices

Android	Miracast support required
iOS	7/8/9/10/11

Apps

Pre loaded apps	Smart Philips OS Netflix, YouTube, Firefox, Express VPN, VLC...(continuously expanding and thus may differ when shipping)
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Product details

Dimensions (W × D × H)	220 x 170 x 90 mm
Weight	1.2 kg
Operating temperature	5 °C - 35 °C
Storage temperature	< 60 °C

Package content

NeoPix Ultra 2 projector, remote control with 2 AAA batteries, AC adapter, power cables (EU, UK, US, CH), 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.

Frequency bands	Maximum output power
BT EDR (EIRP)	9.09 dBm
BT BLE (EIRP)	4.85 dBm
WiFi 2.4GHz (EIRP)	17.88 dBm
WiFi 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-NPX642/INT

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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Headquarters:

Screeeno Innovation SA.

Route de Lully 5C

1131 - Tolochenaz – Switzerland

www.philips.com/welcome

NeoPix Ultra 2

EN