

NeoPix 450 Smart

Home Projector

# User Manual



Register your product and get support at www.philips.com/support

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## Introduction

## Dear customer

Thank you for purchasing this projector.

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

## About this user manual

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

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

## Symbols used

## Notice



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

### DANGER!

#### Danger of personal injury!

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

#### CAUTION!

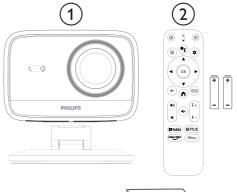


## Damage to the product or loss of data!

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

## What's in the box

- ① NeoPix 450 projector (NPX450/INT)
- (2) Remote control with 2 AAA batteries
- (3) Quick Start Guide with Warranty Card
- (4) AC power cables with plugs x 4
- (5) AC adapter







## **Customer service center**

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

#### Web: www.philips.com/support

#### Support Contacts:

International Phone: +41 215 391 665

Please ask your provider for international call costs!

Mail: support@philipsprojection.com

### Access our FAQ websites:

https://support.philipsprojection.com https://community.philipsprojection.com

# 1 General safety information

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

## Setting up the product

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

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

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

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

Protect the product from direct sunlight, heat, intense temperature fluctuations and moisture. Do not place the product in the vicinity of heaters or air conditioners. Observe the information on temperature listed in the technical data (see **Technical data, page 19**).

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 center.

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 center. Keep the product away from open flames (e.g. candles).



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.

Do not use or store the device in a dusty environment. Dust particles and other foreign objects can damage the device, which will void the product warranty.

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 center.

Please find the details of authorised service centers 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 19**). 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  $\bigcirc$  button to turn the projector off.

Turn off the product and unplug from the power outlet before cleaning the surface (see **Cleaning, page 16**). Use a soft, lintfree 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.

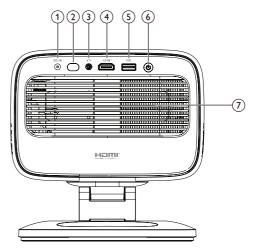
### DANGER!

#### **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

## **Rear view**



### 1 DC-IN

Connect to the supplied AC adapter.

2 Rear IR sensor

#### 3 **^**

3.5 mm audio output; connect to external speakers or headphones.

#### ④ HDMI<sup>™</sup>

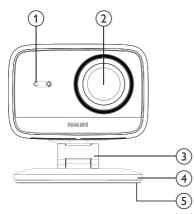
Connect to an HDMI<sup>™</sup> output port on a playback device.

5 USB

Connect to a USB input device, USB storage device or dongle.

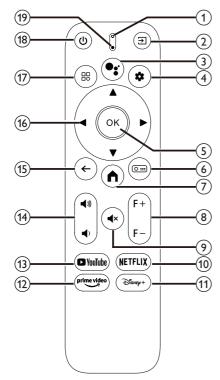
- 6 U
  - Turn the projector on or off.
  - When the projector is on, the LED lights up in white.
  - When the projector is in standby mode, the LED lights up in red.
- 7 Air vent

## **Front view**



- Auto keystone and autofocus sensor
- (2) Projection lens
- (3) Adjustable stand
- (4) Base
- (5) Foot pad

## **Remote control**



#### $\textcircled{1} \quad \text{LED indicator} \\$

Light up when you press a button on the remote control.

#### ② ⋺

Display all the input sources and allow you to switch to a different input source.

## ₃ •;

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

#### 4 🌣

Open or close the projector's settings menu.

5 OK

Confirm a selection.

- (6) Omm
   Open the projector's Projection Settings submenu.
- 7

Access Google TV's home screen.

- 8 F+/F-Adjust the image focus (sharpness) manually.
- ⑨ **◀**×

Mute or unmute the speakers.

METFLIXOpen the Netflix app.

- 1) Disney+
- Open the Disney+ app.

  prime video
- Open the Prime Video app. (13) **YouTube** 
  - Open the YouTube app.
- (14) ◀))/◀)

Increase or decrease the volume.

15 ←

Return to the previous screen.

- 16 Navigation buttons (Up, Down, Left, Right)
  - Navigate items on the screen.
  - Press ▲/▼ or ◀/▶ to change the value for the current setting.

17 🔡

Open or close the projector's settings menu.

18 也

- Turn on the projector when it is off.
- When the projector is on, allow you to choose to turn off the projector, restart the projector or turn off the screen.
- (19) Microphone

## 3 Initial setup

### Notice



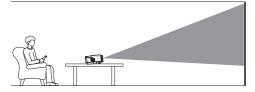
Make sure all devices are disconnected from their power supplies before establishing or changing any connections.

## Install the projector

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

## Front Table

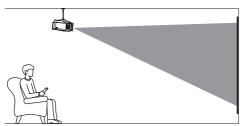
1 Place the projector on a flat surface such as a table in front of the projection surface. This is the most common way to position the projector for quick setup and portability.



2 If the projection direction is incorrect, open the projector's Projection Settings submenu by pressing O on the remote control. Then select Projector Projection > Front Table.

## **Front Ceiling**

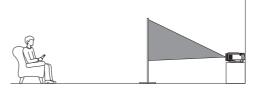
 Mount the projector on the ceiling with upside up in front of the projection screen. A projector mount is required to mount the projector on ceiling.



2 If the projection direction is incorrect, open the projector's Projection Settings submenu by pressing O III on the remote control. Then select Projector Projection > Front Ceiling.

## **Rear Table**

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

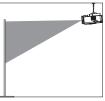


2 If the projection direction is incorrect, open the projector's Projection Settings submenu by pressing O III on the remote control. Then select Projector Projection > Rear Table.

## **Rear Ceiling**

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

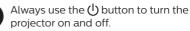




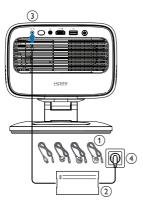
2 If the projection direction is incorrect, open the projector's Projection Settings submenu by pressing O == on the remote control. Then select Projector Projection > Rear Ceiling.

## Connect to power supply

### CAUTION!



- 1 Select a supplied power cable with the correct plug (AUS/EU/UK/US).
- 2 Connect the power cable to the AC adapter.
- 3 Connect the AC adapter to the DC power jack on the back of the projector.
- 4 Connect the power cable to an electrical socket.
  - The power LED on the projector lights



## Prepare the remote control

#### CAUTION!

The improper use of batteries can lead to overheating, explosion, risk of fire and injury. Leaking batteries can possibly damage the remote control. Never expose the remote control to

direct sunlight.

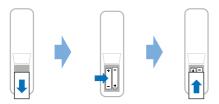
Avoid deforming, dismantling or charging the batteries.

Avoid exposure to open fire and water.

Replace empty batteries immediately.

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

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

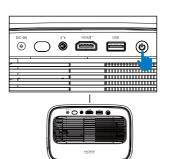


 When using a remote control with infrared signals, point the remote control at the IR sensor on the projector, and make sure there is no obstacle between the remote control and the IR sensor.

# Power on and set up the projector

## Power on/off the projector

 To turn on the projector, press () on the projector/remote control. The power LED on the projector turns from red to white.





- To turn off the projector, press () on the projector/remote control twice. The projector enters standby mode and its power LED turns from white to red. Tip: If you press () on the projector/remote control once, the projector will turn off in 10 seconds unless you cancel the operation.
- To turn off the screen and leave the projector on, press () on the projector/ remote control and then select Screen off.
- To fully shut down the projector, disconnect the power cable from the electrical socket.

## Image focus adjustment

The projector automatically adjusts the image focus (sharpness) every time it turns on or detects a change in its position or angle.

You can also manually adjust the focus by pressing **F+** or **F-** on the remote control.

## Screen size adjustment

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

This projector has a recommended projection distance of 221 cm (87"), and thus creates a screen size of 80" (203 cm). The minimum

distance from the projection surface is 1.1 m (40").

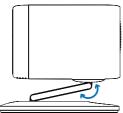
#### Digital zooming

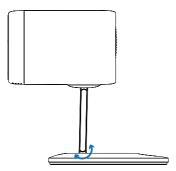
You can use the digital zooming function to reduce the screen size.

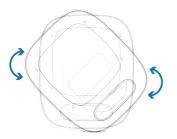
- 1 Open the projector's Projection Settings submenu by pressing 🖼 on the remote control. Then highlight Zoom.
- 2 Press **√** → to adjust the screen size. You can scale down the screen to up to 80% of its full size.

## Projection direction adjustment

- The adjustable stand is designed with two pivot points, so that you can easily adjust the projection direction and height of the main body.
- You can also rotate the main body and stand freely around the base.







## Image shape adjustment

#### Auto keystone correction

By default, auto keystone is enabled and the projector automatically makes the image rectangular every time it turns on or detects a change in its position or angle.

If auto keystone is disabled, follow these steps to enable it:

- 1 Open the projector's Projection Settings submenu by pressing O == on the remote control.
- 2 Highlight Auto Keystone, then press  $\triangleleft/\triangleright$ .
- 3 A dialogue box then appears.
- 4 Select Yes to enable auto keystone.

**Tip**: To disable auto keystone, do only steps 1 and 2 above.

## Vertical and horizontal keystone angle adjustment

When auto keystone is disabled, you can manually make the image rectangular by adjusting the vertical and horizontal keystone angles.

- 1 Open the projector's Projection Settings submenu by pressing Om on the remote control.
- 2 To adjust the vertical keystone angle, highlight V Keystone. To adjust the horizontal keystone angle, highlight H Keystone.
- 3 Press  $\triangleleft$  b. to adjust the image shape.

#### Four corner keystone correction

When auto keystone is disabled and four corner keystone correction is enabled, you can manually make the image rectangular by moving four corners of the image.

To enable four corner keystone correction, follow these steps:

- 1 Open the projector's Projection Settings submenu by pressing O an the remote control.
- 2 Highlight *4 Corner*, then press **∢**/**▶**.
- 3 A dialogue box then appears.
- 4 Select Yes to enable four corner keystone correction.

**Tip**: To disable four corner keystone correction, do only steps 1 and 2 above.

To make the image rectangular by moving four corners of the image, follow these steps:

- 1 Open the projector's Projection Settings submenu by pressing O the remote control.
- 2 Highlight 4 Corner Adjustment and press the **OK** button.
- 3 Follow the on-screen instructions to adjust the image shape.

## Set up Google TV

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

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

#### What you need

- A Wi-Fi internet connection
- A Google account

# Step 1: Pair the remote control with the projector

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

After the pairing, the Welcome screen appears and you can use this remote control to navigate the on-screen user interface of Google TV.

# Step 2: Select the display language

Press the down or up navigation button on the remote control to highlight your preferred display language for Google TV, then press the **OK** button to confirm and proceed to the next step.

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

# Step 3: Select your region or country

Press the down or up navigation button on the remote control to highlight your region or country, then press the **OK** button to confirm and proceed to the next step.

## Step 4: Connect to a Wi-Fi network

- Highlight a network from the list of displayed Wi-Fi networks and press the OK button. You are prompted to enter the password for connecting to the network using the on-screen keyboard.
- 2 Enter the password by pressing the navigation buttons and **OK** buttons. **Tips**: Press and hold a navigation button to move to the key you want more quickly.
- 3 Highlight the check mark on the keyboard and press the **OK** button.
- 4 Wait a while for the connection to be established.

#### Notes:

- If you connect to an open (unsecured) Wi-Fi network, you won't be prompted to enter the password and the connection will be automatically established.
- The next time you turn on the projector, it will automatically try to reconnect to the last connected Wi-Fi network, unless you manually disconnect/forget the network or factory reset the built-in Google TV Dongle.

# Step 5: Sign in to your Google account and finish setup

- 1 Follow the on-screen instructions to sign in to your Google Account.
- 2 To finish setup, follow the on-screen instructions.

## 4 Use Google TV

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



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

Google TV offers you various features, such as:

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

## Navigate Google TV

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

- Press 🍙 on the remote control to access the Google TV home screen.
- Press on the remote control to access voice search function.

## Configure Google TV

You can select 🏟 at the top of the home screen to open the settings panel and access various Google TV related settings, e.g. apps/ privacy/security management, Wi-Fi settings and sound settings.

## Use a wired keyboard/ mouse

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

## Use a Bluetooth device

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

To pair a Bluetooth device, follow the steps below:

- 1 Select 🏟 at the top of the home screen to open the settings panel.
- 2 Select **Bluetooth** on the settings panel.
- 3 Select **Pair accessory**. On your screen, you'll see a list of nearby Bluetooth devices.
- 4 Put your Bluetooth device into pairing mode. The device will be added to the on-screen list.
- 5 Select your Bluetooth device.
- 6 When your Google TV says, "Pair with this device?", choose **Pair**. The device will be paired within a few seconds.

## Cast content to Google TV

You can cast content from phones, tablets, or laptops to your Google TV.

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

To start casting, follow the steps below:

- 1 Connect your device to the same Wi-Fi network as your Google TV.
- 2 Open the app that has the content you want to cast.
- 3 In the app, find and select Cast  $\overline{n}$ .
- 4 On your device, select the name of your Google TV.

5 When Cast 🔊 changes color, you're successfully connected.

**Tip:** To stop casting, on your device, select Cast  $\overline{m}$  and then **Disconnect**.

#### Notice



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

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

## Factory reset the Google TV Dongle

- 1 Select 🗱 at the top of the home screen to open the settings panel.
- 2 Go to All settings > System > About > Reset and select Factory reset.
- 3 Follow the on-screen instructions to start factory resetting the built-in Google TV Dongle.

#### Notice



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

**Tip**: For more tips about using Google TV, visit <u>https://support.google.com/googletv</u>.

Google TV is the name of this device's software experience.

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

# 5 Connect to other devices

## Connect to a USB mouse, keyboard or gamepad

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

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

# Connect a USB mouse, keyboard or gamepad

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

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

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

## Use a USB mouse, keyboard or gamepad

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

#### Mouse

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

### Keyboard

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

- Use the arrow keys and **Enter** to navigation the projector's user interface. They work like the navigation buttons and **OK** on the remote control respectively.
- Press Tab or Shift+Tab to move to next or previous item. Press the menu key to access more options when an app is selected or a video is playing.
- Press Windows+Backspace to return to the previous screen. Press Home or Alt+Esc to return to the Home screen.
- Many keyboard shortcuts work like they do on a computer, including Alt+Tab for switching between recent apps and Ctrl+X/ C/V for Cut/Copy/Paste.

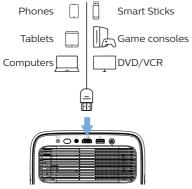
#### Gamepad

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

# Connect to a playback device through HDMI™

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

1 Using an HDMI<sup>™</sup> cable, connect the **HDMI<sup>™</sup>** port on the projector to an HDMI<sup>™</sup> output port on a playback device.



2 Press  $\rightarrow$  on the remote control and select *HDMI*.

## Connect to a dongle

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

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



3 Press ∋ on the remote control and select *HDMI*.

# Connect a USB storage device

The projector has a file manager pre-installed, allowing you to play or view the following types of files stored on a USB storage device.

- Most video, audio, and image files
- Text files, PDF files and Microsoft Office documents

### Notice



The projector supports a USB storage device that is formatted for FAT16 or FAT32 file system.

- 1 Connect your USB storage device to the **USB** port on the projector.
- 2 To open the File Manager, press → on the remote control and select USB.
- 3 Use the navigation buttons and **OK** button to select and open files.

# Connect to wired speakers or headphones

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

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

#### DANGER!

#### Danger of hearing damage!

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

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

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



2 After connecting the speakers or headphones, press ◀ 𝔅/◀) on the remote control to adjust the volume to the desired level.

# 6 Change projector settings

This section helps you change the projector settings using the settings menu.

- 1 Press 🏟 on the remote control to open the projector's settings menu.
- 2 Use the navigation buttons and the **OK** button to select a menu item.
- 3 Press **∢**/**▶** or **▲**/**▼** to select a value for the menu item. **Note**: For some menu items such as Horizontal Calibration, follow the on-screen instructions to make changes.
- 4 For most menu items, the change will take effect once you select a different value. If the change doesn't take effect, press the **OK** button to make the change.
- 5 Press 🏟 once or press 🔶 one or more times to close the projector's settings menu.

## Image settings

You can view and change the following image settings.

- Color Mode: You can set the projector to use the following color modes, depending on your viewing environment or preferences.
   After selecting a color mode, you can modify its settings.
  - *standard*: Display the image with the standard color settings.
  - TV: Optimize the color settings for TV.
  - *Movie*: Optimize the color settings for movies.
  - User: Define your own settings.
- Brightness: Adjust the screen's overall brightness.
- Contrast: Adjust the contrast of the bright and dark areas of the image.
- Color Temp: You can set the projector to use the following color temperature types.
   If you select User, you can define your own settings by changing Red Gain, Green Gain, Blue Gain, Red Offset, Green Offset, and Blue Offset.
  - 6500K: Make the picture more reddish.
  - 7500K: Use a moderate color temperature.
  - 9300K: Make the picture more bluish.
  - User: Define your own settings.
- Tint: Adjust the tint of the projected image.

- Saturation: Adjust the intensity of the colors.
- Sharpness: Adjust the clarity of detail in the projected image.
- Reset Current Color Settings: Select Yes to reset all the settings for the currently selected color mode.

### Audio settings

You can view and change the following audio settings.

- Audio Mode: You can set the projector to use the following audio modes, depending on your environment, audio type or preferences. If you select User, you can adjust the setting using the on-screen audio equalizer.
  - Standard: Optimize the settings for general audio.
  - Music: Optimize the settings for music.
  - Movie: Optimize the settings for movies.
  - · User: Define your own settings.

#### **Projection settings**

You can view and change the following projection settings.

- Projector Projection: Adjust the projection to the correct direction based on how the projector is installed.
- Horizontal Calibration: Adjust the projector's horizontal alignment to correct image skew for a straight, rectangular display.
- Auto Keystone: Select Enable to enable auto keystone or Disable to disable it. The default value is Enable.
- V Keystone: Manually make the image rectangular by adjusting the vertical keystone angles. Note: This menu item is visible only when auto keystone is disabled.
- H Keystone: Manually make the image rectangular by adjusting the horizontal keystone angles. Note: This menu item is visible only when auto keystone is disabled.
- *4* Corner: Select *Enable* to enable 4 Corner Adjustment or *Disable* to disable it. The default value is *Disable*.
- 4 Corner Adjustment: Select this to manually make the image rectangular by moving four corners of the image.
- Zoom: Scale down the screen to up to 80% of its full size. The default value is 1.0 (no scale-down). Note: This menu item is visible

only when 4 Corner Adjustment is disabled.

- Manual Focus: After selecting this menu item, press 
   A/▼ to manually adjust the focus.
- Auto Focus: Select Enable to enable autofocus or Disable to disable it. The default value is Enable.

#### Other settings

You can view and change the following additional settings.

- Auto Power Off: Select a period of time so that the projector turns off automatically after the selected period of inactivity. The default value is 20 min.
- *Sleep Timer*: Select a period of time after which the projector turns off automatically. The default value is *Disable*.
- Dynamic energy saving: Select Enable to enable dynamic energy saving or Disable to disable it. The default value is Enable.
- *Reset Settings*: Restore all projector settings (except language) changed by you to the factory default settings.
- Reset To Factory Default: Restore the product to its factory default settings. After the factory reset, the projector will restart.
   Note: This will not reset the built-in Google TV Dongle. To learn how to reset the dongle, see Factory reset the Google TV Dongle, page 12.
- Language: Select your preferred display language.
- Information: View the light source hours, system version, memory information, serial number, source, and resolution of this product.

## 7 Maintenance

## Cleaning

#### DANGER!

Follow the following instructions when cleaning the projector:

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

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

## **Cleaning the lens**

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

#### DANGER!

Do not use any liquid cleaning agents!

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

## Update software

The latest software for the projector can be found on <u>www.philips.com/support</u> for you to get the best features and support from the projector.

#### CAUTION!

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

## Update software through USB

- Visit <u>www.philips.com/support</u>, find your product (model number: NPX450/INT), open its support page and locate "Software & drivers". Then check the latest software version there.
- 2 Press 🔹 on the remote control to open the projector's settings menu. Then select *Information* to check the current software version. Proceed to the next step if the latest software version is greater than the current software version.
- 3 From the support page you opened in step 1, download the software installation file to a USB flash drive. Unzip the downloaded file and save the resulting file in the root directory of the USB flash drive.
- 4 Connect the USB flash drive to the projector.
- 5 The projector displays a dialog box on the screen asking you whether to update the software.
- 6 Select YES and follow the on-screen instructions to complete the update.

## 8 Troubleshooting

## Power cycling

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

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

Problem	Solution
The projector cannot be turned on.	<ul> <li>Disconnect and reconnect the power cable, and try to turn the projector on again.</li> </ul>
The projector cannot be turned off.	- Press and hold $\oplus$ longer than ten seconds. If this does not work, disconnect the power cable.
No image from the external HDMI <sup>™</sup> device.	1. Check if you have switched the input source to <i>HDMI</i> .
	<ol> <li>Disconnect the HDMI<sup>™</sup> cable or switch off the HDMI<sup>™</sup> device.</li> </ol>
	3. Wait <b>three</b> seconds.
	<ol> <li>Reconnect the HDMI<sup>™</sup> cable or switch on the HDMI<sup>™</sup> device again.</li> </ol>
No sound from the external connected	<ul> <li>Check the cables to the external device.</li> </ul>
device.	<ul> <li>Check that the sound is activated on the external device.</li> </ul>
	<ul> <li>Only the original cables from the device manufacturer may function.</li> </ul>
No sound from external HDMI™ output device.	<ul> <li>On the HDMI<sup>™</sup> output device, set the audio setting to Multichannel (Raw data) &amp; Stereo (PCM).</li> </ul>
No sound when you connect your computer using an HDMI™ cable.	<ul> <li>Check that the sound is activated on the computer.</li> </ul>
Only the home menu appears and not the image from the external device.	<ul> <li>Check if the cables are connected to the correct sockets.</li> </ul>
	Check that the external device is turned on.
	<ul> <li>Check if the video output of the external device is turned on.</li> </ul>
Only the home menu appears and not the image from the connected computer.	<ul> <li>Check that the HDMI<sup>™</sup> output of the computer is turned on.</li> </ul>
	<ul> <li>Check if the resolution of the computer is set to 1920*1080.</li> </ul>
The projector turns itself off.	<ul> <li>When the projector is running for a long period of time, the surface becomes hot.</li> </ul>
	• Check that the power cable is connected correctly.
The projector cannot read the USB storage device.	The projector does not support the exFAT file system.
	<ul> <li>Format the USB storage device in FAT32 or NTFS format, then use it.</li> </ul>

Problem	Solution
The projector does not react to remote control commands.	Check the batteries of the remote control.
The temperature of the projector's surface is warm.	<ul> <li>For this projector it is normal to generate moderate heat during operation.</li> </ul>
The projector does not work after I connect it to a laptop.	<ul> <li>Check that the HDMI<sup>™</sup> cable is plugged in correctly.</li> <li>Make sure that the laptop has been switched to projector display.</li> </ul>
I cannot pair the projector with a Bluetooth device.	<ul> <li>Turn on the Bluetooth device and make sure it is in pairing mode.</li> <li>Position the Bluetooth device so that it is less than 10 m (33 ft) from the projector.</li> <li>To connect a Bluetooth device to the projector, follow the instructions in Use a Bluetooth device, page 11.</li> <li>If another Bluetooth device is already connected to the projector, disconnect it.</li> <li>Move the projector farther away from other devices (microwave oven, wireless router, etc.) that are emitting radio frequency signals.</li> </ul>
After a Bluetooth device is connected, there is no sound from the projector or the Bluetooth device.	<ul> <li>Check if the Bluetooth device's volume is at the minimum.</li> <li>Check if projector's volume is at the minimum.</li> <li>Check if the playback has started.</li> <li>Try playing another video/audio file.</li> <li>Try reconnecting the two devices.</li> </ul>
Black / White Pixels	An LCD display may contain a small number of pixels that do not function normally (also known as "dead pixels" or "black pixels"). Your display has been inspected and is in compliance with the manufacturer's specifications, meaning that any pixel defects do not affect the operation or use of your display. Without prejudice to generality of the foregoing, dead pixels or black pixels not exceeding 5 dots meet the factory specifications and are not considered a defect under this warranty.
	Dust Deposit – Warranty Exclusion:
	Dust may accumulate inside the projector over time. This can affect the image quality and even disrupt the functioning of the device. However, this phenomenon is <b>not considered a defect</b> under this warranty.
	We recommend regularly cleaning the lens with a soft cloth suitable for glass cleaning. You can also push dry air through the air vents to remove dust from the optical engine inside the device.

## 9 Appendixes

## **Technical data**

#### Technology/optical

Display technology	LCD
Light source	LED
Brightness	500 ANSI Lumens
Resolution	1920 x 1080 pixels
LED lifetime	over 30,000 hours
Contrast ratio	
Aspect ratio	
Throw ratio	
Screen size (diagonal)	up to 100"
Screen distance 221 cm	n / 87" for 80" screen
Stand Ergonomic, h	eight-adjustable and rotating
Projection modes	4
Focus adjustment	
Keystone correction	Auto H/V Keystone

4 corner correction	Yes
Digital zoom	Yes (80-100%)
Sleep timer	Yes

#### **Operating system**

Google TV with pre-loaded apps:

Netflix, Amazon Prime Video, YouTube, Disney+, etc. (Apps may vary depending on availability)

#### Sound

Built-in speakers	.2 x 5 W
Speaker type	stereo

#### Connection

Includes Google TV streaming device to access apps
HDMI™ inx1
USB-A (5 V/1.5 A out + external drive)x1 3.5 mm audio outx1
Wi-Fi

#### Power source

Power consumptionoperating: 94.34 W
standby: 0.226 W
Input: AC 100-240 V, 50/60 Hz, 2.5 A (Max)

#### Dimensions and weight

Unpacked (W x D x H)	195 x 219 x 194 mm
Packed (W x D x H)	. 260 x 248 x 206 mm
Net weight	2.48 kg / 5.47 lb
Gross weight	4.35 kg / 8.8 lb

#### **Temperature requirements**

Operating temperature	- 35 °C
Storage temperature	60 °C

#### Package contents

- 1. NeoPix 450 projector
- 2. Remote control
- 3. AC adapter
- 4. Power cables (AUS, EU, UK, US)
- 5. AAA batteries for remote control
- 6. Quick Start Guide with Warranty Card

#### Model

NPX450/INT EAN: 7640186962759 UPC: 667619993149

## **CE statement**

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

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

# CE

The Declaration of Compliance can be consulted on the site www.philips.com.

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

## FCC statement

### 15.19 Labeling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### 15.21 Information to the user.

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

### 15.105 Information to user.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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

FCC ID: 2ASRT-NPX450

# Canada regulatory compliance

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

**RSS-Gen & RSS-247 statement**: This device complies with Industry Canada RSS standard(s).

Operation is subject to the following two conditions:

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

#### RF Radiation Exposure statement: The

device meets the exemption from the routine evaluation limits in section 2.5 of RSS102 and users can obtain Canadian information on RF exposure and compliance.

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

## Other notice

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

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



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

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