

User Manual

PicoPix Max^{TV}

Portable projector

PPX720/INT



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

Table of contents

Introduction	3
Dear customer	3
About this user manual	3
What's in the box	3
Customer service centre	3
1 General safety information	4
Setting up the product	4
Repairs	4
Power supply	5
2 Overview	5
Top view	5
Front view	6
Rear view	6
Remote control	6
3 Initial setup	7
Place the projector	7
Use a tripod (optional)	8
Connect power supply	
Prepare the remote control	9
Power on	9
Image setup	
First time setup	
4 Use home screen	12
Use Android TV	12
Settings of Android TV	12
Access online services	12
Customize Channels	
Use wired keyboard/mouse	
Use Bluetooth keyboard/mouse	13

5	Bluetooth streaming	13
Str	ream from Bluetooth device	13
Str	ream to Bluetooth speaker	14
6	Chromecast streaming	15
7	Connect to playback devices	15
Co	nnect to devices through HDMI	15
Co	nnect to devices through USB-C	16
Co	nnect to devices through SPDIF	16
8	Other features	17
Co	nnect to external speakers or headpho	ones 17
Us	e easy link	
9	Change settings	18
An	droid TV settings	18
Pro	ojector system settings	19
10	Service	21
Bu	ilt-in battery care	
Cle	eaning	
Up	odate software	
Tro	publeshooting	
11	Appendix	24
Te	chnical data	24
CE	statement	
FC	C statement	
Ca	nada Regulatory Compliance	
Ot	her notice	26

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

(\mathbf{i})

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!

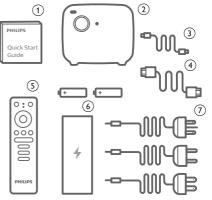
Da

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 Quick Start Guide
- PicoPix Max[™] projector (PPX720/INT)
- ③ USB-C to USB-C cable
- ④ HDMI to HDMI cable
- (5) Remote control with 2x AAA batteries
- 6 AC power adapter
- (7) 3x power cable with plug (EU, UK, US)



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.philipsprojection.com

Access the community forum at https://community.philipsprojection.com

1 General safety information

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

Setting up the product

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

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

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

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

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

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

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

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

If the product gets too hot or emits smoke, shut it down immediately and unplug the power cable. Have your product checked by an authorised service centre. Keep the product away from open flames (e.g. candles). The product has built-in battery. Do not dissemble and modify. The built-in battery should be replaced by qualified service staff only.

Do not try to replace the built-in battery yourself. Incorrect handling of the battery or using the wrong type of battery can cause damage to the product or cause injury.

DANGER!



Risk of explosion with incorrect type of batteries!

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

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

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

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

Proceed as follows to avoid any moisture buildup:

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

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

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

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

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

Repairs

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

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

product.

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

Power supply

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

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

The capacity of the built-in battery diminishes with time. If the product functions only with AC power supply, the built-in battery is defective. Contact an authorised service centre to replace the built-in battery.

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 21**). 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.

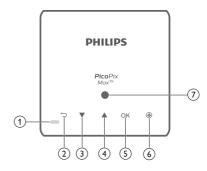
DANGER!

Risk of eve 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 LED indicator
 - When the projector is switched on, the LED turns white. When the projector is in standby, the LED turns red.
 - When charging the projector, the LED turns red regardless of the projector switching on or off.
 - Turn blue when the projector is in Bluetooth mode, used for streaming music from a Bluetooth device.

2 5

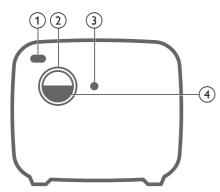
Return to a previous menu screen.

- 3
 - Navigate menu options.
 - Increase volume.
- ④ ▼
 - Navigate menu options.
 - Decrease volume.
- 5 OK
 - Access the settings menu.
 - Confirm a selection or entry.
- 6 Auto-focus

Press to activate auto-focus.

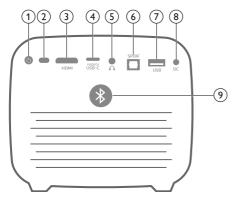
Light sensor

Front view



- 1 Front IR sensor
- 2 Projection lens
- 3 Auto-focus camera
- ④ Lens cap

Rear view



() ()

Press and hold for 3 seconds to switch the projector on.

Press twice to switch the projector off.

- 2 Rear IR sensor
- 3 HDMI

Connect to the HDMI output on a playback device.

④ USB-C (VIDEO) port

Connect to the USB-C video output on a playback device.

5 ∩

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

6 SPDIF

Connect to the digital SPDIF audio input on an HiFi audio system.

⑦ USB port

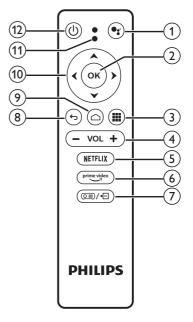
Connect to power USB devices like Amazon Fire TV stick[®], Roku[®] streaming stick (and for firmware upgrade).

8 DC socket

Connect to the power supply.

Bluetooth button Press to turn Bluetooth on or off.

Remote control



1

Access voice search function (Google Assistant).

2 OK

Confirm a selection or entry.

3

Display installed Apps and access the Google Play Store.

- (4) VOL +/-Increase or decrease volume.
- S NETFLIXQuick access to Netflix service.
- prime videoQuick access to Prime Video service.

- ⑦ ◙■/←
 - Access or exit system settings.
- **8 5**

Return to a previous menu screen.

- ۵ (۱
 - Press to access the Android TV home screen.
 - Press and hold for 2 seconds to activate auto-focus.
- Navigation buttons

Navigate menu options.

- (1) LED indicator
 - Each time you press a button on the remote control, the LED lights up briefly and then off.
 - The LED glows blue when the voice search function is activated.
- 12 ()

Press once to switch the projector on; press twice to switch the projector off.

3 Initial setup

Notice



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

Place the projector

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

Notice



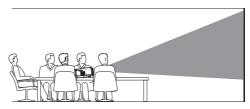
For overhead mounting on ceiling, purchase a projector mount recommended by an installation professional and follow the instructions that come with the mount.

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

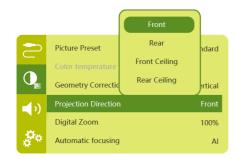
For ceiling installation, this product must be securely attached to the ceiling in accordance with the installation instructions. An improper ceiling installation may result in accident, injury or damage.

Front table

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.

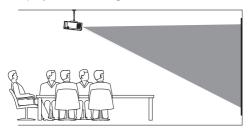


2 To adjust projection to the correct position, press (○=)/-(-) on the remote control to access the settings menu and navigate to Projection Direction – Front.



Front ceiling

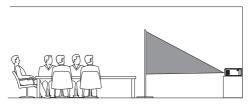
 Mount the projector on the ceiling with upside up in front of the projection screen. A projector mount is required to mount the projector on ceiling.



2 To adjust projection to the correct position, press (○=)/-(-) on the remote control to access the settings menu and navigate to Projection Direction - Front Ceiling.

Rear table

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



2 To adjust projection to the correct position, press (○=)/+□ on the remote control to access the settings menu and navigate to Projection Direction - Rear.

Rear ceiling

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



2 To adjust projection to the correct position, press (○=)/-(→) on the remote control to access the settings menu and navigate to Projection Direction – Rear Ceiling.

Use a tripod (optional)

You can use the projector with a tripod (optional) which allows more choices for placing the projector.

Locate the tripod socket on the bottom of the projector, then mount and secure the projector on the tripod.

Connect power supply

The projector can be operated by either external power or built-in battery.

CAUTION!

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

Operation by external power

- 1 Select a supplied power cable with an appropriate power plug. Insert the slotted end of the power cable into the slot of the supplied power adapter.
- 2 Connect the power adapter to the **DC** socket on the projector, and then to the wall outlet.
 - The LED on the projector turns red.



Operation by built-in battery

The projector can be also operated on built-in battery for portability.

Charge the projector

Charge the projector for 1.5 hours before first use.

Charge the projector when the low battery icon appears in the projection screen.

- To charge the projector, connect the projector to an external power supply as described in the section of "Operation by external power".
- When charging, the LED on the projector turns red regardless of the projector switching on or off.
- When powered on, the external power will be used first to run the projector and unused power will charge the battery.
- For faster charging, charge while the projector is powered off.

Notice

The capacity of the built-in battery diminishes with time. If the projector functions only with external power supply, the built-in battery is defective. Contact an authorised service centre to replace the built-in battery.

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 Press and hold the battery compartment cover, and simultaneously slide it open to access the battery compartment.
- 2 Insert the supplied batteries (type AAA) with correct polarity (+/-) indicated.
- 3 Close the battery compartment.



Notice



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

Power on

- 1 Press () to turn on the projector. The LED on the projector turns from red to white.
- To turn off the projector, press () and then press it again when the power-off confirmation message pops up.
 The LED on the projector turns from white to red.

Image setup

Screen size adjustment

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

 The projection distance needs to be 1.2 times the width of your desired screen size.

Digital zoom

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

1 Press 回》/一 on the remote control to access the settings menu and navigate to *Digital Zoom*.

2	Picture Preset	Standard
	Color temperature	
Q	Geometry Corrections	Auto vertical
()	Projection Direction	Front
	Digital Zoom	100%
2°*	Automatic focusing	AI

2 Press **√** → on the remote control to adjust the screen size from 80% to 100%.

Image focus adjustment

Auto focus adjustment

The projector can automatically adjust image focus or clearness when you reposition the projector or the projected image is detected not clear.

Boot Autofocus

The projector can perform auto focus adjustment each time the projector is switched on:

1 Press () on the remote control to access the settings menu and select Boot Autofocus - On.

		ON	
2	Geometry Correctic	OFF	ertical
O_	Projection Direction		Front 100%
()	Automatic focusing		Standard
	Boot Autofocus		ON
å°.	HDR		ON

Image shape correction

Auto correction (vertical keystone)

The projector can automatically correct the image to be rectangular when you tilt the projector upwards or downwards.

To enable auto vertical keystone correction:

1 Press () on the remote control to access the settings menu and select Geometry Corrections - Auto Vertical.

		Auto vertical	
-	Picture Preset	Manual	ndard
	Color temperature	off	
	Geometry Correctio	ons Auto	vertical
()	Projection Direction	ı	Front
	Distal Zasar		1000/
	Digital Zoom		100%

Manual correction (4-corner correction)

You can manually adjust the image shape by re-positioning the four corners of the projection screen.

- 1 Press (○三)/← on the remote control to access the settings menu and select Geometry Corrections Manual.
- 2 In the 4-corner correction interface, press **OK** to select an image corner, then press and hold **∢/** 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 Press to save and return to previous screen.

First time setup

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

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

What you need

- A Wi-Fi internet connection
- A Google account

Step 1: Pair the remote control with the projector

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

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

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

Step 2: Select a language

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

To change your on-screen language:

- Select the ☆ icon in the upper right corner of the screen, and press OK. Then go to Device Preferences - Language.
- 2 Select a language and press **OK**.

Step 3: Set up the Wi-Fi network

Set up the Wi-Fi network to access online applications.

What you need

- A wireless network router.
- For best wireless performance and coverage, use an 802.11n router and the 5GHz band.
- Select the ☆ icon in the upper right corner of the screen, and press OK. Then go to Network & Internet - Wi-Fi.
- 2 Select your Wi-Fi network from the list and press **OK**.
- 3 Input your Wi-Fi network password using the on-screen virtual keyboard. Then select the right arrow on the right side of the virtual keyboard and press **OK**.

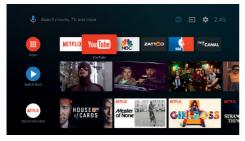
Step 4: Sign into your Google account

To access the abundant range of Android apps, you need to sign into your Google account.

1 Select the 🌣 icon in the upper right corner of the screen, and press **OK**. Then go to Accounts & Sign In – Sign In. Follow the onscreen prompts to sign into your account.

4 Use home screen

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



Use Android TV

The projector is integrated with Android TV. Android TV offers you various features, such as:

- Watch a wide range of movies and shows from across your favourite apps.
- Stream music from music apps.
- Get apps from Google Play.
- Play online games from Google Play Games.
- Support voice input and search.

Navigation of Android TV

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

- Press to access the Android TV home screen.
- Press **III** to display installed apps and access the Google Play Store.
- Press to access voice search function.

Settings of Android TV

On the home screen, you can navigate to select the 🌣 icon in the upper right corner of the screen to access various Android TV related setting options, e.g., apps/privacy/security management, picture and sound settings (**see Android TV settings, page 18**).

Access online services

Some pre-loaded online applications are available from the home screen.

- Before accessing the applications, make sure the projector is connected to Internet (see Step 3: Set up the Wi-Fi network, page 11).
- Use the **navigation buttons** and **OK** on the remote control to select and open an application.
- You may add or remove an application on the home screen by installing or uninstalling an application.
- To browse, search and install applications, access Google Play Store on the home screen.
- To uninstall applications:
 - Select 🌣 in the upper right corner of the screen, and press **OK**. Then go to Apps See all apps.
 - Select an app from the list and press **OK**.
 - In the app information interface, select *Uninstall OK* to uninstall it.

Notice

The Google Play Store apps come from 3rd party developers. Some apps may or may not work correctly. Only the preloaded apps have been tested by Philips.

Customize Channels

You can customize your home screen channels by hiding or displaying channels, including Netflix, Google Play Movies&TV, Featured and Top Selling Movies.

- 1 On the home screen, select the **Customize channels** button located at the bottom of the screen and press **OK**.
- 2 In the **Customize channels** interface, select a channel to add and press **OK** to turn on the button. To remove a channel from the home screen, just press **OK** to turn it off.

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

- 1 Pair your Bluetooth keyboard or mouse with the projector as follows:
 - Select the the icon in the upper right corner of the home screen, and press
 OK. Then select *Remotes & Accessories* Add accessory to search for new accessories.
 - Select your Bluetooth keyboard or mouse name from the Bluetooth device list.
- 2 After pairing, you can use the Bluetooth keyboard or mouse with the projector, just like the keyboard or mouse operation with a computer.

5 Bluetooth streaming

Through Bluetooth of the projector, you can listen to music in the following ways:

- Stream music from a Bluetooth device to the projector.
- Stream music from the projector to an external Bluetooth speaker.

Stream from Bluetooth device

Through Bluetooth, you can wirelessly stream music from a Bluetooth device (e.g. a smartphone or tablet) to the projector.

Before you use the projector with a Bluetooth device for the first time, pair it with the Bluetooth device.

Notice



The effective operation range between the projector and the Bluetooth device is approximately 10 meters (30 feet).

The music streaming may be interrupted by any obstacles between the Bluetooth device and the projector.

Bluetooth streaming is not available when the projector is switched on.

- 1 Turn on Bluetooth on your electronic device (e.g., PC, smartphones and tablets).
- 2 Make sure the projector is switched off, and the LED on the projector turns red. Press and hold the Bluetooth button on the projector until the LED indicator begins flashing blue.
- 3 On your electronic device, go to the Bluetooth settings interface and select "PicoPix Max TV" to pair with it.
 - When the Bluetooth pairing succeeds, the LED on the projector glows blue steadily.
- 4 Play audio on your Bluetooth device. The audio streams to the projector.



Bluetooth re-connection

The projector is automatically re-connected to the last connected device when Bluetooth is turned on.

Connection to a second device

You need to disable Bluetooth on the currently connected device, and then pair a second Bluetooth device with the projector.

Stream to Bluetooth speaker

Through Bluetooth, you can wirelessly stream music from the projector to a Bluetooth speaker.

Before you use the projector with a Bluetooth speaker for the first time, pair it with the Bluetooth speaker.

Notice



The effective operation range between the projector and the Bluetooth device is approximately 10 meters (30 feet).

The music streaming may be interrupted by any obstacles between the Bluetooth device and the projector.

- 1 Turn on your Bluetooth speaker.
- 2 Pair the projector with your Bluetooth speaker.
 - Select the the icon in the upper right corner of the home screen, and press OK. Then select Remotes & Accessories - Add accessory to search for new accessories.

Select your Bluetooth speaker name from the Bluetooth device list, and press **OK**.

3 The projector is connected to your Bluetooth speaker. Audio from the projector streams to your Bluetooth speaker.



Bluetooth re-connection

The projector is re-connected to the last connected speaker automatically when the connected speaker is turned on.

Connection to a second Bluetooth speaker

To connect a second Bluetooth speaker, follow the same steps above.

6 Chromecast streaming

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

What you need

- Make sure the projector and your mobile device are connected to the same WiFi network.
- The app to be cast must be Chromecast enabled and must be the latest version.
 Visit Google Play Store or Apple App Store for any app updates.
- 1 Launch the Chromecast-enabled app on your mobile device.
- 2 On the app screen, tap the cast icon $\overline{\mathbf{n}}$.
- 3 Tap the name of this projector from the pop-up on your mobile device.

After successful connection, the app content is streamed to the projection screen.

Notice



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

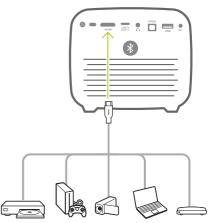
Google, Google Play, YouTube, Android TV and other marks are trademarks of Google LLC. Google Assistant is not available in certain languages and countries.

7 Connect to playback devices

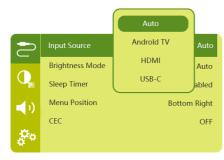
Connect to devices through HDMI

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

1 Using an HDMI cable, connect the **HDMI** connector on the projector to the HDMI output on the playback device.



2 The projector automatically switches to HDMI input when HDMI connection is made. The projection screen shows images.



Connect to devices through USB-C

Connect a USB-C device (e.g. a mobile phone, tablet or laptop) to the projector through USB-C connection. With this connection, images are shown on the projection screen, and audio is played on the projector.

 Using a USB-C cable, connect the USB-C (VIDEO) connector on the projector to the USB-C port on the playback device.



- 2 The projector automatically switches to USB-C input when USB-C connection is made.
- To select USB-C input manually, press
 (OE)/+ to access the settings menu and select Input Source USB-C.

Notice

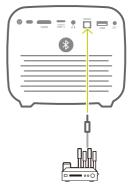
The projector supports stereo audio format only. If no audio from the playback device is heard on the projector, check that the audio output format is set to stereo on the playback device.

The **USB-C (VIDEO)** port only accepts video signal. To connect other USB device (e.g. a thumb drive and keyboard), use the USB-A port.

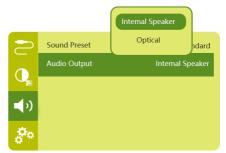
Connect to devices through SPDIF

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

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



2 To output audio to the external device, make sure external speaker output is activated. Press (○三)/+□ to access the settings menu and select Audio Output -Optical.



8 Other features

Connect 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!

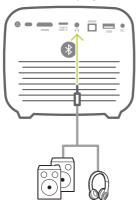


Danger of hearing damage!

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.

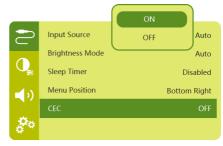


2 When connecting to the headphones, use the volume control on the remote control to adjust the volume to a comfortable level.

Use easy link

This projector supports easy link which uses the HDMI CEC (Consumer Electronics Control) protocol. You can use a single remote control to turn on or off the easy link compliant devices that are connected through HDMI. The manufacturer does not guarantee 100% interoperability with all HDMI CEC devices.

- Make sure the projector is connected to an HDMI device which supports HDMI CEC function (see Connect to devices through HDMI, page 15).
- 2 To activate easy link function on this projector, press (○三)/- to access the settings menu and select CEC On.



9 Change settings

This section helps you change the following two system settings:

- Android TV settings
- Projector system settings

Android TV settings

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

WiFi settings

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

Google account settings

Go to Accounts & Sign In to sign into your Google account.

Language settings

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

Date and time settings

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

- Automatically update date and time, or manually set date, time and time zone.
- Choose to use 24-hour format.

Keyboard settings

Go to *Device Preferences – Keyboard* to access various settings for keyboard.

Bluetooth settings

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

Apps settings

Go to Apps to access the following settings.

• List downloaded/system apps, and each app's memory usage.

- Set permissions for the installed apps, e.g., location, contacts, camera, microphone, phone, SMS and etc.
- Check an app version, app size and cache size.
- Clear cache or uninstall an app.

Picture settings

Display

Go to TV settings - Display to access the following settings.

- Screen resolution: Select a screen resolution to best support your video.
- Screen position: Scale the projection image within the range from 80% to 100%. Select Zoom in screen / Zoom out screen and then press OK to scale up/down.

Picture

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

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

Sound options

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

- System Sound: Turn the system sound on or off.
- Surround Sound: Enable or disable surround sound effect; automatically select a sound format the projector best supports or manually select a sound format.

Audio output

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

- Dolby sounds: Select a DRC (Dynamic Range Compression) mode for reducing dynamic range of sound output.
- Audio Mixing: Enable audio mixing function when the projector is connected to an external audio mixer.

- Digital Audio Format: Automatically detect and select the best supported audio format, or manually select an audio format for sound output.
- dts sounds: Choose a dts DRC scale from 0-100%.

Netflix activation code

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

HDMI CEC

Go to *TV settings – HDMI CEC* to turn the CEC switch and more functions on or off.

Restore default settings

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

Notice



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

Other system settings

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

- About: View information about, update, or restart the device.
- Storage: Check the total and used space for internal storage.
- Home screen: Customize and organize the home screen.
- Google assistant: Select the active Google account and customize Google Assistant behaviour.
- Chromecast built-in: View information
 about Chromecast.
- Screen saver: Select a timer to automatically turn the screen off when the projector is idle.
- Location: Check your location status and view all recent location requests.
- Usage and diagnostics: Choose if you wish for the device to automatically send diagnostic information to Google.
- Security and restrictions: Modify your security settings or create a restricted profile.
- Accessibility: Configure a variety of accessibility options, including captions and text-to-speech.

Projector system settings

- 1 Press (O≡)/← on the remote control to access the projector system settings.
- 2 Use the **Navigation buttons** and **OK** to select and change settings.
- 3 Press 🗲 to return to the previous screen.

2	Input Source	Auto
	Brightness Mode	Auto
Q	Sleep Timer	Disabled
	Menu Position	Bottom Right
	CEC	OFF
å°°		

Input source selection

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

- *Auto*: Automatically switch to the correct input source.
- HDMI: Select it when an HDMI device is connected.
- Android TV: Select it when using Android TV.
- USB-C: Select it when a USB-C device is connected.

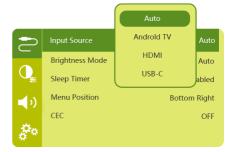


Image options

You can access the following image setting options.



- Picture Preset: Select a predefined color brightness setting for picture and video display, or select User to customize color values on brightness, contrast, saturation, tone and sharpness.
- Color Temperature: Set to Warm to enhance hotter colors such as red; set to Cold to make picture bluish; set to User to customize color values in RGB mode.
- Geometry Corrections: Select an option to correct keystone or distorted images to be rectangular.
 - Auto vertical: Enable or disable auto correction of the image shape.
 - Manual: Manually correct keystone or distorted images by re-positioning the four corners of the projection screen.
 - Off: Disable correction of the image shape.
- *Projection Direction*: Adjust the projection to the correct position based on different installation of the projector.
- *Digital Zoom*: Scale down the projection image among 80%-100%.
- Automatic focusing: Choose standard or Al-powered auto focus.
- Autofocus mode:
 - Standard mode is slower but works in all environments.
 - Al powered is faster, but takes a few attempts to learn a new environment (e.g. when you change rooms).
- Brightness:
 - Auto mode will dynamically change the projector's brightness based on the ambient light in your room.
 - For the longest battery life, select "Super Eco".

Scheduled shutdown

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

Sound options

You can access the following sound setting options.

2	Sound Preset	Standard
	Audio Output	Intemal Speaker
• (•)		
0 0		

- · Sound Preset: Select a preset sound effect.
- Audio Output: Switch the audio output between Internal Speaker and Optical.
 Select Optical if you want to output audio through HDMI or SPDIF connection to a digital device (e.g. home cinema system or AV receiver).

Other settings

You can also access the following options.

2	Language	English
	Software Version	1.0.26
Q	Hardware Version	1.0.0
()	Serial Number	1234567890
	Firmware Upgrade	
**	Factory Reset	

- Language: Select a language for system settings menu.
- Software Version: Check software version of this product.
- Hardware Version: Check hardware version of this product.
- Serial number: Check serial number of this product.
- Firmware Upgrade: Software update via a USB device (see Update SW through USB, page 21).
- Factory Reset: Restore factory default settings.

10 Service

Built-in battery care

The capacity of the built-in battery diminishes with time. You can prolong the life of the battery if you observe the following points:

- Without a power supply, the projector operates on the built-in battery. When the battery does not have sufficient power, the projector turns off. In this case connect the projector to the power supply.
- Charge the battery regularly. Don't store the projector with a completely discharged battery.
- If the projector is not used for several weeks, discharge the battery a little by using the projector before storing it.
- Keep the projector and the battery away from sources of heat.
- If the projector cannot be charged after connecting to the power supply, use a small pin to press the reset key (a small hole) located near the USB port of the projector.

Note about deep discharge of battery

When the built-in battery is in deep discharge, it may take longer for the actual charging process to start. In this case, charge the projector for at least five hours before using it.

DANGER!

Risk of explosion with incorrect type of batteries!

Do not try to replace the built-in battery yourself.

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:

Press () to access the settings menu and go to Software Version.

\ge	Language	English
	Software Version	1.0.26
Q	Hardware Version	1.0.0
()	Serial Number	1234567890
	Firmware Upgrade	
* *	Factory Reset	

Update SW through USB

CAUTION!

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

- 1 Check the latest software version on www. philips.com/support. Find your product (model number: PPX720/INT), and locate 'Software and drivers'.
- 2 Download the update package and unzip it if necessary. The update file is named PPX720INT_firmware.zip. Copy this file to the root directory of the USB drive without unzipping it further.
- 3 Connect the USB flash drive (FAT32 formatted) to the projector.
- 4 Press (<u>o</u>=)/+ to access the settings options and go to *Firmware Upgrade*.
- 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 and holding the power button on the projector for 10 seconds.
- 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.	Disconnect and reconnect the power cable, and try to turn the projector on again.
The projector cannot be turned off.	- Press and hold \oplus longer than ten seconds. If this does not work, disconnect the power cable.
The remote control does not work.	 The remote control is not paired with the projector. Pair the remote control with the projector (see First time setup, page 11).
	 The remote control is not in Android TV mode for Android TV menu navigation. Press () on the remote control to switch the remote control to Android TV mode (if the remote control is paired with the projector).
	When the remote control is in Android TV mode, the LED on the remote control flashes blue once each time you press a button on the remote control.
	Check the batteries of the remote control.
No sound output to the connected digital	Check the cables to the external device.
device.	Check that the sound output is activated on the projector. Press (○三)/← on the remote control to access the settings options and go to Audio Output - Optical.
No image from the external HDMI device.	 Check if the correct HDMI input is selected. Disconnect the HDMI cable or switch off the HDMI device. Wait three seconds. Reconnect the HDMI cable or switch on the HDMI device again.

Problems	Solutions
No sound from external HDMI output device.	 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.	 Check that the sound is activated on the computer.
Cannot stream video from an app on my mobile phone.	 Make sure the correct setup is made and the app is Chromecast-enabled (see Chromecast streaming, page 15).
When I view videos, the sound or the picture is sometimes distorted or the sound is not synchronized to the picture.	 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 data and send it simultaneously over WiFi.
The temperature of the projector's surface is warm.	 For this projector it is normal to generate moderate heat during operation.
The projector turns itself off.	 When the projector is running for a long period of time, the surface becomes hot.
	Check that the power cable is connected correctly.
What to do if the projector does not work when connecting to a notebook PC?	 Check that the HDMI cable is plugged in correctly. Make sure that the notebook PC has been switched to projector display.

11 Appendix

Technical data

Technology/optical

0,, 1	
Display technology	TI DLP
Light source	. LED RGGB 4 channels
Color space	100% REC 709
Resolution	1920 × 1080 pixel
LED lifetime	over 30,000 hours
Contrast ratio	
Aspect ratio	
Throw ratio	
Screen size (diagonal)	
Screen distance78 d	cm - 320 cm / 31" - 126"
Projection modes fron	t, rear, front/rear ceiling
Focus adjustment	auto
Keystone correction	auto (vertical)
4 corner correction	yes
Digital zoom	yes
Light sensorautomatio	brightness adjustment
Auto rotate	yes

Sound

Built-in speakers2 x 12 W with active and passive

Connection

Wi-Fi 802.11a/b/g/n/ac Dual 2.4 and 5GHz Chromecast built-in
BluetoothBluetooth 5.0 to pair remote control, gamepad, and more; Bluetooth speaker when projector is off
HDMIx1
USB 2.0x1
USB type C (video)x1
Digital audio output (SPDIF)x1
Analog audio outputx1

Power source

Power consumption	1 operating: 90 W
	standby: 0.3 W
Power supply	100-240 V~, 50/60 Hz
Battery	21,000 mAh, lasts up to 4h

Apps

Pre-loaded Apps	Android TV [™] /
	full catalog of Apps

Product details

Dimensions (W × D × H)	
Weight	1.96 kg
Operating temperature	5 °C - 35 °C
Storage temperature	< 60 °C

Package content

PicoPix Max^{TV} projector, remote control with 2 AAA batteries, AC power adapter, power cables (EU, UK, US), HDMI to HDMI cable, USB-C to USB-C cable, 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, 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
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.

FCC RF Radiation Exposure Statement

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-PPX720

Canada Regulatory Compliance

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

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

Operation is subject to the following two conditions:

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

RF Radiation Exposure statement

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

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

Other notice

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



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

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



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

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

In this way you can participate in the reuse and upgrading of Electrical and Electronic Equipment Waste, which can have an effect on the environment and human health. The paper and cardboard packaging used can be disposed of as recyclable paper. Have the plastic wrapping recycled or dispose of it in the non-recyclable waste, depending on the requirements in your country.

Trademarks: The mentioned references in this manual are trademarks of the respective companies. The lack of the trademarks [®] and [™] does not justify the assumption that these dedicated terminologies are free trademarks. Other product names used herein are for identification purposes only and may be trademarks of their respective owners. Screeneo Innovation SA disclaims any and all rights in those marks.

Neither Screeneo Innovation SA nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expense s incurred by the purchaser or third parties as a result of accident, misuse, or abuse of this product or unauthorised modifications, repairs, or alterations to this product, or failure to strictly comply with Screeneo Innovation SA operating and maintenance instructions.

Screeneo Innovation SA shall not be liable for any damages or problems arising from the use of any options or any consumable materials other than those designated as original Screeneo Innovation SA/PHILIPS products or Screeneo Innovation SA/PHILIPS approved products.

Screeneo Innovation SA shall not be held liable for any damage resulting from electromagnetic interference that occurs from the use of any interface cables other than those designated as Screeneo Innovation SA/PHILIPS products.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Screeneo Innovation SA. The information contained herein is designed only for use with this product. Screeneo Innovation SA. is not responsible for any use of this information as applied to other devices.

This user manual is a document that does not represent a contract.

Errors, printing errors and changes are reserved. Copyright © 2021 Screeneo Innovation SA.



Screeneo Innovation SA Route de Lully 5C, 1131 Tolochenaz

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. used under license. Screeneo Innovation SA is the warrantor in relation to the product with which this booklet was packaged.

PicoPix Max[™] EN

 $2021\,\odot$ Screeneo Innovation SA. All rights reserved.