



This user manual applies to the ProWise Touchscreen with the following model number:

- 55": PW.1.17055.X001
- 65": PW.1.17065.X001
- 75": PW.1.17075.X001
- 86": PW.1.17086.X001
- 98": PW.1.17098.X001

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2. Important safety instructions



WARNING! Please read this user manual and the safety instructions (separate document) carefully before using the Prowise touchscreen. Follow the warnings stated on the device, the user manual and the safety instructions. Always keep the safety instructions and the user manual within reach.

2.1. Safety

- Never open the housing of the touchscreen! You can get an electric shock or cause a short circuit.
- Do not use the touchscreen during thunderstorms and unplug the power cable to avoid damage due to a lightning strike.
- Make sure your touchscreen does not get wet! This could lead to a short circuit and electrocution hazard. Do not install the device close to water and do not place objects containing liquid on or next to it.
- A high volume level can cause permanent hearing damage. If the device is used at high sound volume for an extended period of time, it can cause hearing damage to the listener.
- Use only the components and accessories supplied by Prowise.
- Always turn off the touchscreen and unplug it from the electrical outlet when changing a module.
- Do not insert objects into the openings of the touchscreen that are not intended for this purpose. This can cause short-circuit or even fire.

2.2. Placement

- We recommend not to install the touchscreen yourself or by a third party. Let Prowise or a certified Prowise partner install or mount the touchscreen to avoid possible damage. Prowise can not be held responsible for any damage or injury caused by incorrect installation by third parties. Damage due to incorrect installation by third parties will not be covered by the warranty.
- Do not install or place the touchscreen onto an unstable wall or floor.
- Do not use the touchscreen in an industrial environment where it will frequently get exposed to vibrations and dust.
- Do not place the touchscreen close to equipment that generates heat.
- Make sure that all ventilation openings, located at the back of the touchscreen, stay uncovered, so hot air can escape.
- Only connect the touchscreen to an earthed electrical socket.

2.3 Repair

Never repair the touchscreen yourself!



WARNING! Warning for electrified parts! Never open the housing of the touchscreen! You can get an electric shock, cause a short circuit or even a fire. This can cause injuries or damage to yourself and/or the touchscreen.

Always contact Prowise or a certified partner in case of a defect, to avoid damage. Contact information can be found at: www.prowise.com/en/contact.

2.4. Environment

- Unplug the power cable if the screen will not be used for an extended period of time.
- The power consumption in standby mode is <0.5 watts.
- The Prowise Touchscreen Ten is ENERGY STAR-certified.
- When the touchscreen is no longer usable, it can be disposed of at a designated collection point.



PLEASE NOTE! When WOL (wake on LAN) and WOS (wake on source) are enabled, the energy consumption in standby mode increases!

2.5 Recycling and disposal

If you have questions about the correct disposal of your touchscreen, please contact Prowise or a certified partner.



Packaging

The device is packaged to prevent transport damage. Packaging is made of resources that can be reused or recycled.



Device

Do not dispose of the device together with the household waste at the end of its lifespan. Ask about the possibilities for an environmentally friendly and responsible method of disposal in accordance with the WEEE guidelines.



Batteries

Depleted or defective batteries do not belong in the household waste. Dispose of them at a collection point for empty batteries. The remote control uses 1.5V AAA batteries.

3. Installation

A Prowise certified mechanic will install the Prowise touchscreen on delivery and will ensure the screen is ready for use. We do not recommend it, but if you or someone else wants to install the screen, then please follow the steps below:

- Do not install the touchscreen alone.
- Use a certified Prowise wall bracket to install the Prowise touchscreen on a wall.
- Use a Prowise VESA bracket when assembling the screen on a Prowise lift system.
- Please ensure the wall is strong enough to carry the weight of the touchscreen.
- Connect the cables (which cables you require depend on the external devices you use or other external sources like a lift system).
- When using a PC module, make sure that the module is placed correctly and is locked. Install the PC module as described in the chapter 'Install OPS PC module'.
- Make sure to only connect the power cable when the above elements have been connected and only use the power cable supplied by Prowise.



CAUTION! Prowise can not be held responsible for any damage or injury caused by the incorrect installation of the touchscreen done by third parties. Damage to the touchscreen, caused by incorrect installation by third parties is not covered by the warranty. Always contact Prowise or a certified partner if you have any questions about the installation.

3.1. Place of installation

Please follow the instructions below, these will help guarantee reliable functioning and a long lifespan of your touchscreen.

Keep the touchscreen and all connected devices away from water and avoid dust and heat. Do not place the touchscreen near devices which produce heat or in the vicinity of water. Non-compliance with these instructions can lead to faults or damage to the touchscreen.

The Prowise touchscreen can be used at an ambient temperature from 0 °C to +38 °C (32 °F to 100,4 °F) and relative humidity from 10% to 90% (without condensation).

When switched off, the touchscreen can be stored at a temperature from -20 °C to 60 °C (-4 °F to 140 °F) and relative humidity from 10% to 90% (without condensation).

Install the touchscreen on a stable, vibration-free floor/wall to avoid damage to the touchscreen. Make sure that all of the ventilation openings, located at the back of the screen, stay uncovered, so hot air can escape.



Warning! Disconnect the power cable during a thunderstorm. For extra safety, we recommend using an overvoltage protection device, to prevent the touchscreen from sustaining damage as a result of power surges or lightning strikes.

3.2. Cabling

Only use the power cable supplied by Prowise to connect the Prowise touchscreen to the mains power supply. The touchscreen must be placed close to the electrical outlet and the electrical outlet should be easy to reach. Cables should not be laid in the walkway to avoid anyone stepping on them or tripping over them. To avoid damage to the cables, do not place any objects on the cables. Prevent electrical overloads when using a distributing plug, as this can lead to a short circuit.

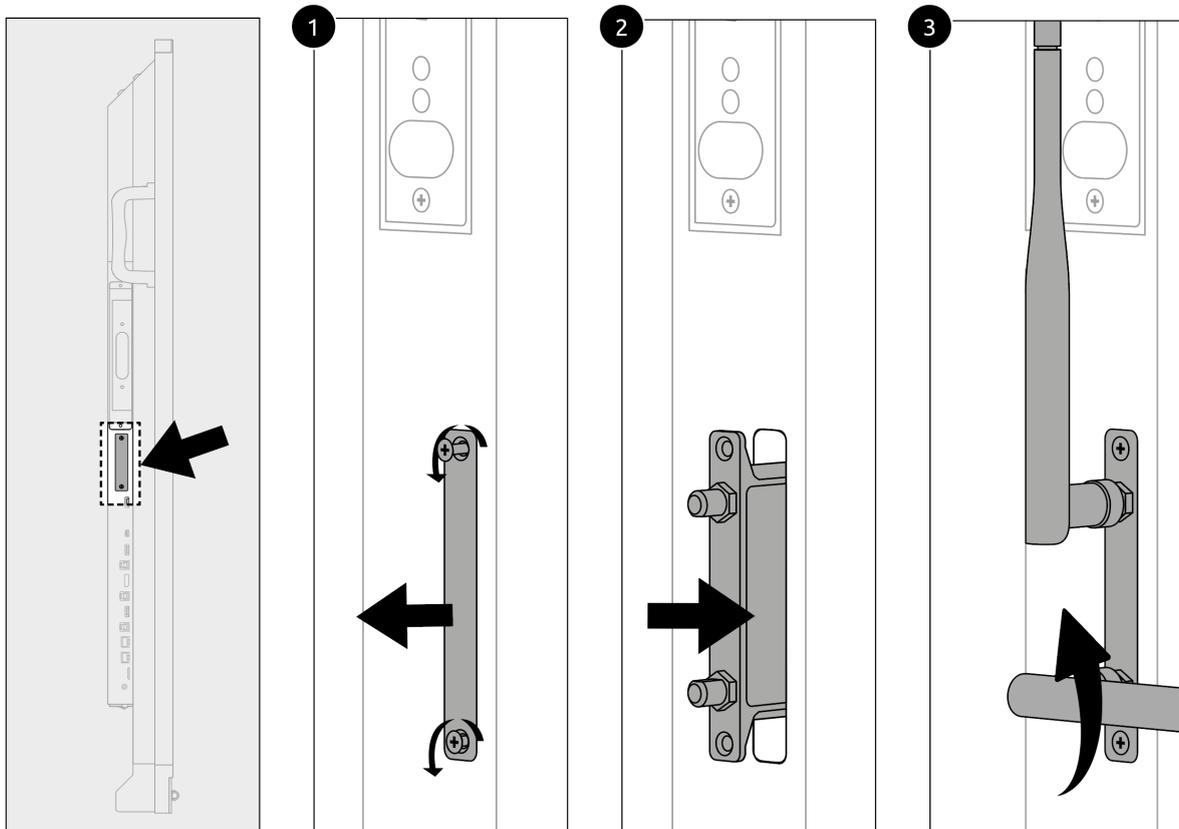
For extra safety, we recommend using a surge protector to prevent the touchscreen from sustaining damage as a result of power surges or lightning strikes.



CAUTION! Only plug the power cable into grounded electrical outlets with AC 100-240V ~50/60Hz. If you are not sure about the power supply at the installation location, consult your energy company.

3.3. Wi-Fi module

The Prowise touchscreen is equipped with a Wi-Fi module. Follow the steps below to successfully install the Wi-Fi module. Be sure to use the thumbscrews (included in the package) to install the Wi-Fi module.



HAZARD WARNING! Choking hazard. This product contains small parts that form a choking hazard for children. Keep this product out of reach for children when not installed into the touchscreen.



WARNING! Please make sure the power cable of the Prowise Touchscreen Ten is disconnected before installing the module.

3.4 Install the OPS PC module

Follow the steps below to install the OPS PC module:

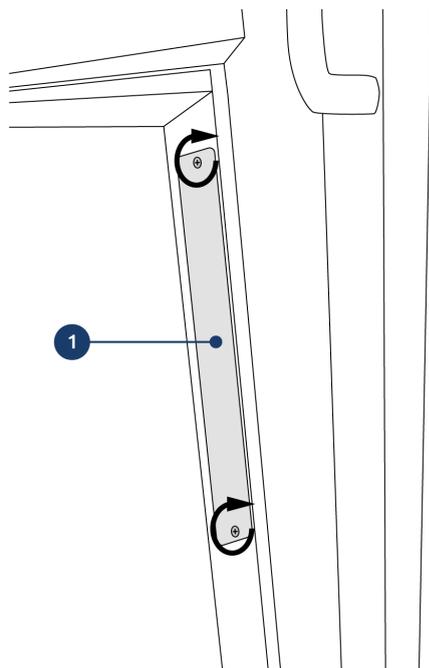
(Please note the OPS PC module is optional)



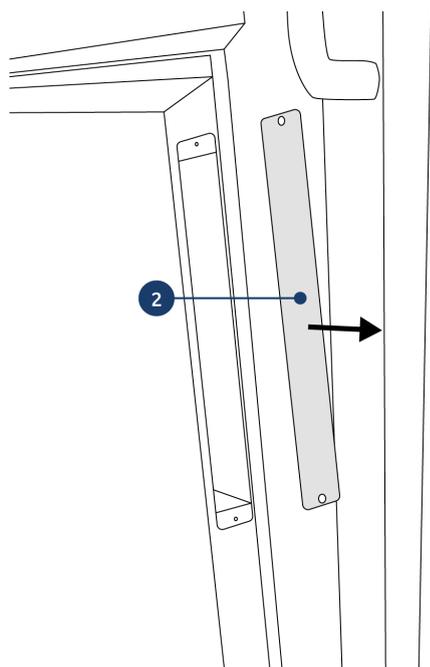
CAUTION! Please ensure the power cable is not connected to the main power supply while installing the OPS PC module.



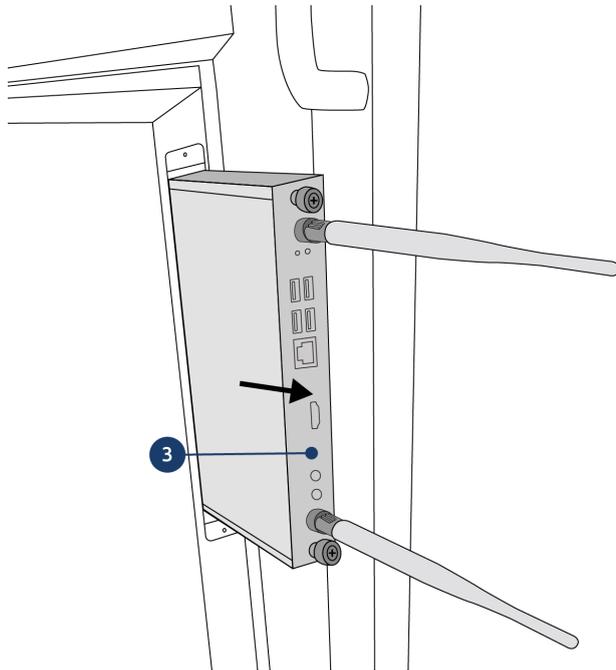
CAUTION! Using an OPS PC module will increase power consumption.



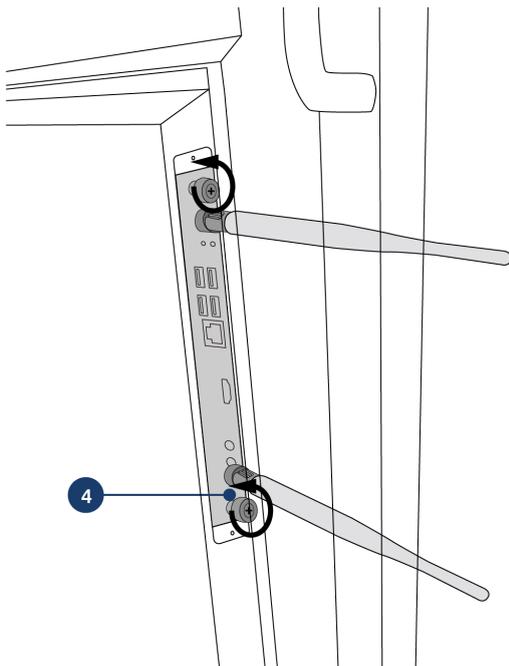
1. Unscrew the screws



2. Remove the cover plate



3. Insert the OPS PC module into the slot



4. Tighten the lock screw of the PC module

4. Becoming familiar with your product

We recommend not to install the touchscreen yourself or by a third party. Have Prowise or a certified partner install or mount your touchscreen to avoid possible damage.

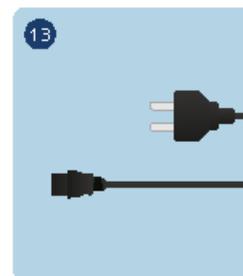
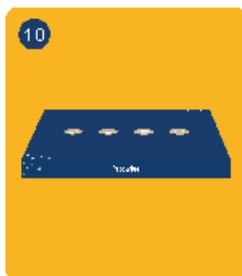
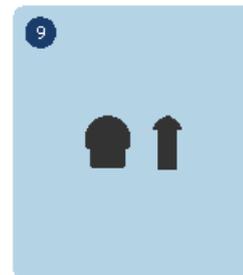
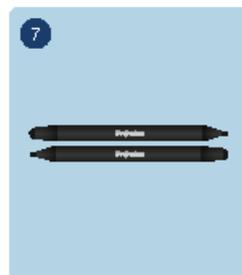
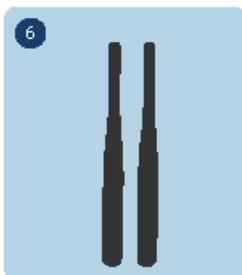
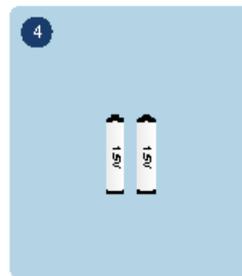
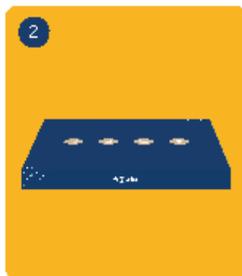
Always adjust the screen to the correct height before use. Avoid standing in a stooped or bent posture and ensure that the ends of the screen are located within arm's reach.

The screen is in an optimal position if you can touch both the top and the bottom without bending down or reaching up high. By putting the screen in the right position you can prevent physical complaints caused by an incorrect posture. Avoid physical complaints caused by a poor posture.



DANGER! Risk of injury. Do not stand on a chair, stool or other object to operate the touchscreen. This especially applies to children! This involves a risk of falling that could result in serious injury. Ensure that the screen is installed at the correct height or that the lift is set to the correct height when the screen is used.

4.1. In the box



1. Prowise Touchscreen

2. Accessory box:

3. Remote control
4. 1.5V AAA batteries (2x)
5. Wi-Fi module
6. Wi-Fi antenna (2x)
7. ProWrite® pen with double writing functionality (2x)
8. NFC card (2x)
9. Pen tips (4x)

10. Cable box:

11. Safety instructions Prowise touchscreen
12. User manual Wi-Fi module
13. Power cord
14. USB touch cable
15. HDMI cable
16. Screw for camera
17. Thumbscrews for Wi-Fi module

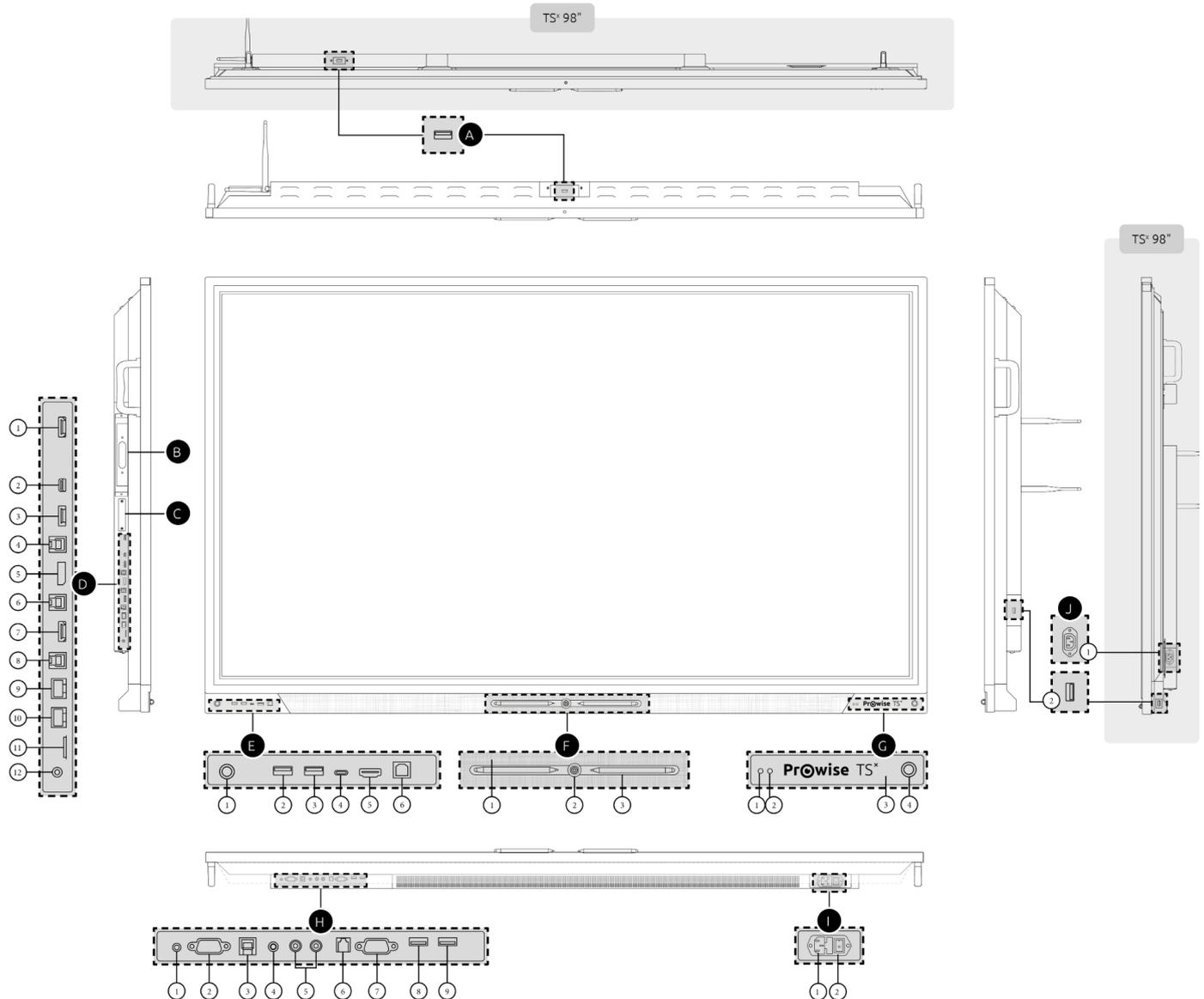


WARNING! *Keep the packaging material, such as plastic foil, away from children. Improper use of packaging materials can result in a choking hazard.*



PLEASE NOTE! *Check whether the supplied package is complete in case anything is missing, please contact our service desk within 5 days after delivery. Please provide the serial number and a copy of the invoice.*

4.2. Product overview



A. USB 3.0 Type A (Camera) (top)

B. OPS Slot (left side)

C. Wi-Fi Module Slot (left side)

D. Ports (left side)

1. HDMI Output 2.0
2. USB Type C (HDMI 2.0 + 60W power + USB 2.0 Touch) for transmission of image, sound, data and power
3. HDMI 2.0 Type A (HDCP2.2 CEC & ARC)
4. USB 3.0 Type B (Touch port)

5. Display port 1.2 (DP 1.2)
6. USB 3.0 Type B (Touch port)
7. HDMI 2.0 Type A (HDCP2.2 CEC)
8. USB 3.0 Type B (Touch port)
9. LAN-IN port (RJ45)
10. LAN-OUT port (RJ45)
11. Micro SD card reader
12. Audio port - Headphones

E. Ports (front)

1. Proximity sensor
2. USB 3.0 Type A
3. USB 3.0 Type A
4. USB Type C (HDMI 2.0 + 15W power + USB 2.0 Touch) for transmission of image, sound, data and power
5. HDMI 2.0 Type A (HDCP2.2 CEC)
6. USB 3.0 Type B (Touch port)

F. Pen Area (front)

1. Wide area microphones (6x)
2. On/off button
3. Magnetic pen holder

G. Sensors (front)

1. Light sensor
2. Remote control receiver
3. NFC reader
4. Proximity sensor

H. Ports (bottom)

1. AV video input (567i)
2. VGA input (1920x1080p @60Hz)
3. USB 3.0 Type B (Touch port)
4. PC Audio input
5. Analog Audio port RCA (L+R)
6. S/PDIF Optical Digital Audio port
7. RS232 Serial Port
8. USB 2.0 Type A
9. USB 3.0 Type A

I. AC-in and Main Power Switch (bottom)

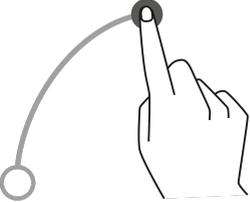
1. AC input
2. Main Power Switch

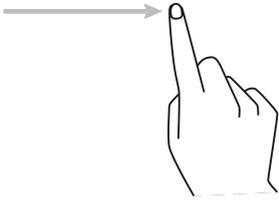
J. Ports (rights side)

1. AC output (98" only)
2. USB 3.0 Type A

4.3. Touchscreen control

The Prowise touchscreen is fitted with 32-points multi-touch. The screen recognises up to 32 simultaneous touch points. This allows you to use the touchscreen with multiple people at once.

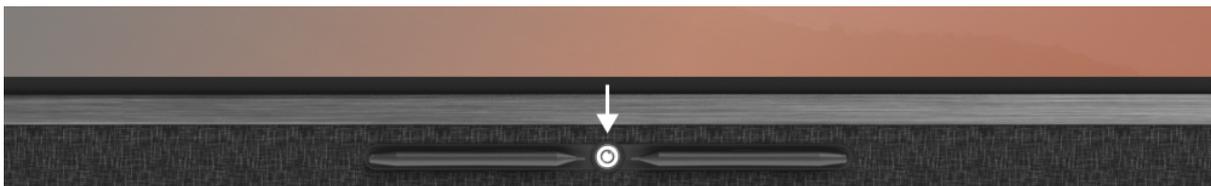
	<p>Click</p>	<p>To click on a part of the screen, gently tap with one finger on the touchscreen.</p>
	<p>Drag</p>	<p>Tap with one finger on the item that you want to move and drag it to the new location without releasing your finger from the screen.</p>
	<p>Open Prowise Central menu</p>	<p>Place five fingers of one hand on the screen for at least 2 seconds. The menu will appear.</p>
	<p>Right-click (context menu) (PC module)</p>	<p>Tap and hold one finger on the screen for a few seconds for the right click function.</p>

	<p>Scroll</p>	<p>Slide one finger across the screen in the desired direction.</p>
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The touchscreen can also be controlled by using a computer mouse or with the supplied remote control. Furthermore, you can use the control button, located in the centre of the speaker bar of the touchscreen, to turn the touchscreen ON or OFF or to open the Central menu.

4.4. The control button

The control button can be found in the middle of the speaker bar of the touchscreen.



Control button

- When the touchscreen is in standby mode, short-press this button to turn it back on again.
- When the touchscreen is turned on, long-press this button to turn the screen off, use the freeze function or blank screen function.
- When the touchscreen is turned on, short-press this button to open the Central menu.

The LED inside the control button indicates the touchscreen's status.

- The touchscreen is switched on: White
- Background lighting is disabled: White
- Sleep mode: Flashing red (every 2 seconds)
- Standby mode: Red



4.5. Microphone

The Prowise touchscreen has 6 high quality wide area microphones. Thanks to these 6 wide area microphones, the recording quality is excellent, making the Prowise touchscreen ideal for video conferencing in small to middle sized meeting rooms. Use the microphone in Prowise Central or if a PC module is installed.

- 6x integrated microphones
- Fully Integrated into Touchscreen
- OS Autoswitch: Windows OPS / Central
- For small to medium sized spaces

Thanks to the microphone and camera passthrough, it is possible to loop the microphone and camera input on the touchscreen through to your own device. This allows you to easily participate in video calls via Skype, Microsoft Teams, Zoom, Google Meet, etc. To use this feature you need to make sure that:

- Your device is connected with a USB Touch cable or with a USB-C port.
- The USB cable used is not too long.

4.6. NFC card reader, remote control receiver and sensors

The tab on the right-hand side of the speaker bar of the touchscreen has various functions:



- Hold the NFC card in front of the tab to log in using NFC technology.
- The remote control's IR sensor is located here.
- The light sensor that determines the brightness of the screen is located here (if enabled).
- Two motion sensors in the bottom-left and bottom-right corners.



PLEASE NOTE! To log in with an NFC card, the card must first be configured using the Prowise Central settings menu.

4.6.1 NFC sensor

Log into your own Windows environment using the user-friendly NFC technology. Your work is safely stored. Switching between different accounts has never been easier.

- Compatible with the Prowise OPS module (ProLine+, Prowise Touchscreen V1 & V2, Prowise Touchscreen Ten)

Technical information

- NFC card settings can be found in the Prowise Central menu
- NFC Mifare and Desfire protocol support
- Privacy and security: all data is encrypted

4.6.2 IR sensor of the remote control

Aim the remote control at the IR receiver of the touchscreen (bottom right of the touchscreen). The remote control has a range of approximately 8 meters.





CAUTION! *If there are obstacles between the remote control and the touchscreen receiver, the remote control may not operate correctly.*

4.6.3 Light sensor

The light sensor, on the front of the screen, measures the light intensity of the environment. Based on this light intensity, the brightness of the screen will be adjusted.

Note! for this function to work the Extra bright mode of the screen must be off.

4.6.4 Motion sensors

Save energy and unnecessary costs by having two motion sensors fully integrated into the screen. These environmental sensors reduce the environmental impact by not leaving the screen on unnecessarily.

Functional:

- The automatic switch-off function is activated when no movement is detected for a pre-set number of minutes.
- Automatic start from standby. If motion is detected in the room, the screen will automatically start up. This ensures a better user experience.

Please note that it takes several seconds before the screen will start automatically from standby.

Technical

- The motion sensors detect if there is someone in the room from a distance of 3 meters from the screen and can trigger an automatic start or shut down function.

4.7. ProWrite® technology

The Prowise Touchscreen Ten is equipped with two pens. These are conveniently located at the front of the screen and will automatically click into place when you hold a pen in front of the docking location.

With the use of ProWrite® Touch technology, we were able to achieve a natural writing experience on the touchscreen. ProWrite® Touch technology in combination with the Nanotextured glass plate guarantees a high accuracy when writing, with a smaller delay and smaller contact height, matching the writing experience of a pen on paper.

What makes the ProWrite® technology and pen combination unique in the market is that the pen has 2 different tip sizes available to use when writing on the screen. The advantages of this are:

- Write small and switch to large without any software interaction
- Switch between colours by turning around the pen
- Write simultaneously in 2 different colours and sizes

Next to the uniquely designed pens we enhanced the technology to give you a better experience. The highlights of this are:

- Fast writing response
- Writing tip as small as 2mm
- Full support for Windows Ink
- 40-points touch support
- 20-points writing support

With this technology the Prowise touchscreen is an ideal touchscreen for collaboration and writing.

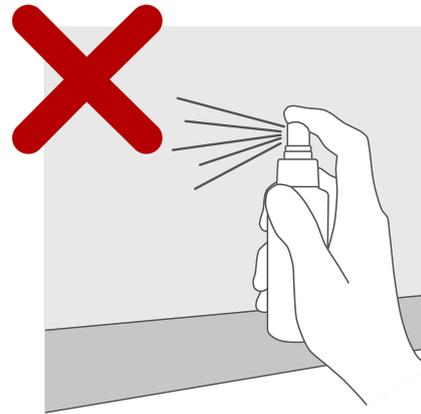
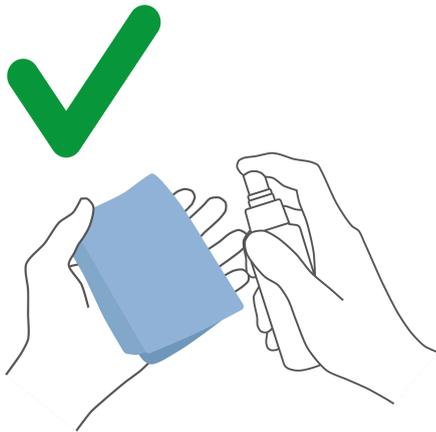


4.8. Cleaning

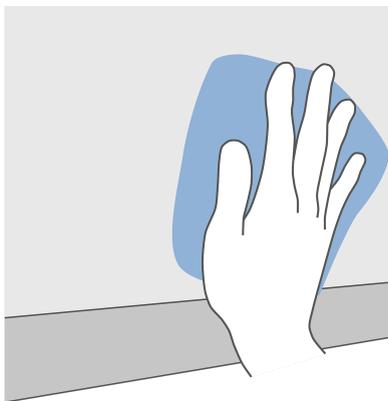
Clean the screen with a dry, lint-free, microfibre cloth. Ensure this cloth is free of impurities.

If you wish to use a cleaning agent, always use one recommended by Prowise. Do not use any aggressive cleansers as these can cause damage to the screen. Make sure the cleaning agent has an alkaline PH value between 7 and 9, otherwise the glass plate or screen may be damaged. Never use a cleaning agent with a PH value higher than 9.

Never spray a cleanser directly onto the screen, apply it to a cloth first. The cloth may be slightly damp, but not wet, as this can cause damage to the screen.



Gently wipe down the screen with the cloth. Clean the screen with gentle, circular movements without pressure to gain the best result. Never use an abrasive cleanser.





Warning! In the unlikely event that the touchscreen gets wet, do not turn the power on and do not insert the power cable into the electrical outlet. This can result in an electric shock. Should the touchscreen get wet when it's turned on, immediately turn off the power supply and disconnect the power cable of the touchscreen from the electrical outlet to avoid a short circuit.



CAUTION! Unplug the power cord before cleaning the screen.

5. Getting started

5.1. Turn the touchscreen on and off

Enable

1. Ensure the touchscreen is connected to the mains power supply.
2. Turn ON the power switch on the bottom left-hand side of the touchscreen.

There are a few different options to turn on the touchscreen once activated:

- Press the control button located in the middle of the speaker bar of the touchscreen
- Press the power button on the supplied remote control

Disable

Using the on/off button of the control panel



1. Press the control button in the middle of the speaker bar.
2. The notification 'The system will shut down in 10 seconds' will appear.
3. Select 'Shut down' if you want to shut down the touchscreen immediately, or wait 10 seconds. Press 'Cancel' to cancel the shut-down process.
4. Turn off the main power supply by using the power switch on the left hand side of the touchscreen (see picture).

Shut down automatically

When no active input source has been detected in a specific input channel, a notification will appear after 3 minutes to shut down the touchscreen. This notification will be automatically accepted after 10 seconds by the system and the touchscreen will be shut down.

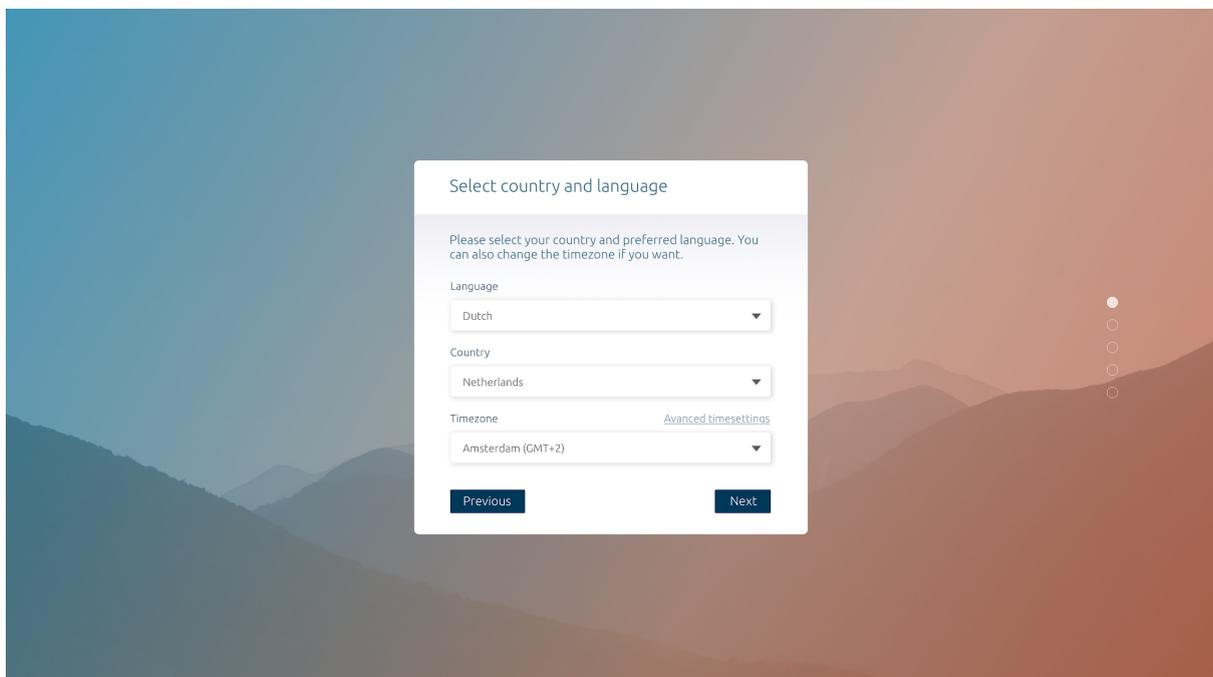


PLEASE NOTE! Turn the touchscreen off completely when moving the screen by turning off the power switch and removing the power cable from the screen.

5.2. Starting your device for the first time

The first time you start your touchscreen, a set-up guide opens to help you configure the most important settings. Follow the steps below to complete the set-up:

1. Ensure the touchscreen is connected to the mains power supply.
2. Turn on the main power switch.
3. Press the power button (control button or remote control)
4. The touchscreen will turn on and the set-up guide will appear.
5. Follow the steps on the touchscreen to complete the set-up.
6. Once you are connected to the internet the touchscreen will automatically check for updates.
 - a. It is important that the latest updates are installed on the screen for the best user experience.
 - b. Therefore, always connect the touchscreen to the internet during the installation process. This can be done either through a Wi-Fi connection or through a wired LAN connection.
7. The welcome screen will appear and the Prowise Central environment will open right after that.
8. You can now get started with your Prowise Touchscreen.

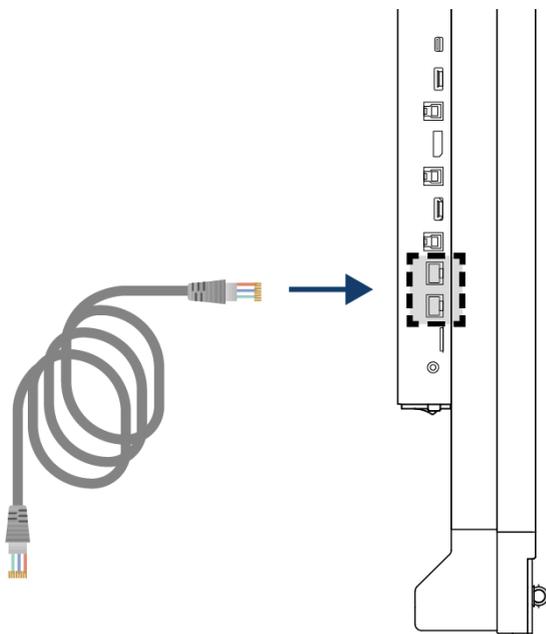


5.3. Connecting to a network

Connect your touchscreen to a wireless Wi-Fi network or via a network cable.

Ethernet

Connect the network cable to the LAN IN port of your touchscreen. The touchscreen will automatically detect the network and connect to it as soon as 'Ethernet' has been activated in the settings menu.



Follow the steps below to view the specifications of the network:

1. Open the Central menu by clicking on the hamburger menu icon in the quick menu.
2. Open the sidebar to access the settings menu
3. Select the sub-menu 'Connectivity'
4. Select 'Ethernet' by activating the toggle
5. The network specifications will be displayed

You can easily loop the LAN connection by using the LAN out port of the display. Please note that the LAN connection can only be looped through when the screen itself is connected with a LAN cable and turned on. When a device is connected to the LAN out port, it will have its own IP and MAC address.

Wi-Fi connection

Follow the steps below to set up a connection to a Wi-Fi network:

1. Make sure the Wi-Fi module is installed correctly
2. Open the Central menu by clicking on the hamburger menu icon in the quick menu.
3. Open the sidebar to access the settings menu
4. Select the sub-menu 'Connectivity'
5. Select 'Wi-Fi'. The touchscreen will scan for available networks
6. Select the preferred network. Click on 'Advanced' if you want to connect with an advanced network
7. Enter the network password. Click on the eye icon to reveal the password.
8. Press the 'Connect' button to connect to the wireless network
9. Under the 'Advanced' button in the Connectivity menu, you can access the advanced network settings.

5.4. Adjusting the volume

The volume of the touchscreen can be adjusted in different ways:

- With the remote control:
 - Use the volume buttons to adjust the volume.
- With the Central menu: Adjust the volume with this feature of the Prowise Central menu. Drag the dot to the right to increase the volume and to the left to decrease the volume. Click on the mute button to turn off all sound at once.

Note! If a PC module is installed, the volume can also be adjusted here.

6. Prowise Central



PLEASE NOTE! In the future, extra features will be added to Prowise Central. The updates for Central will be installed on the touchscreen via OTA updates. More information about OTA updates can be found in "OTA (Over-The-Air) updates".

6.1. Prowise Central home

Prowise Central is the smart operating system of your Prowise touchscreen. Software that is specially developed to be compatible with our hardware and to make life as easy as possible for you as the user. Fully and easily optimise all the features you use on a daily basis in an utmost secure environment.



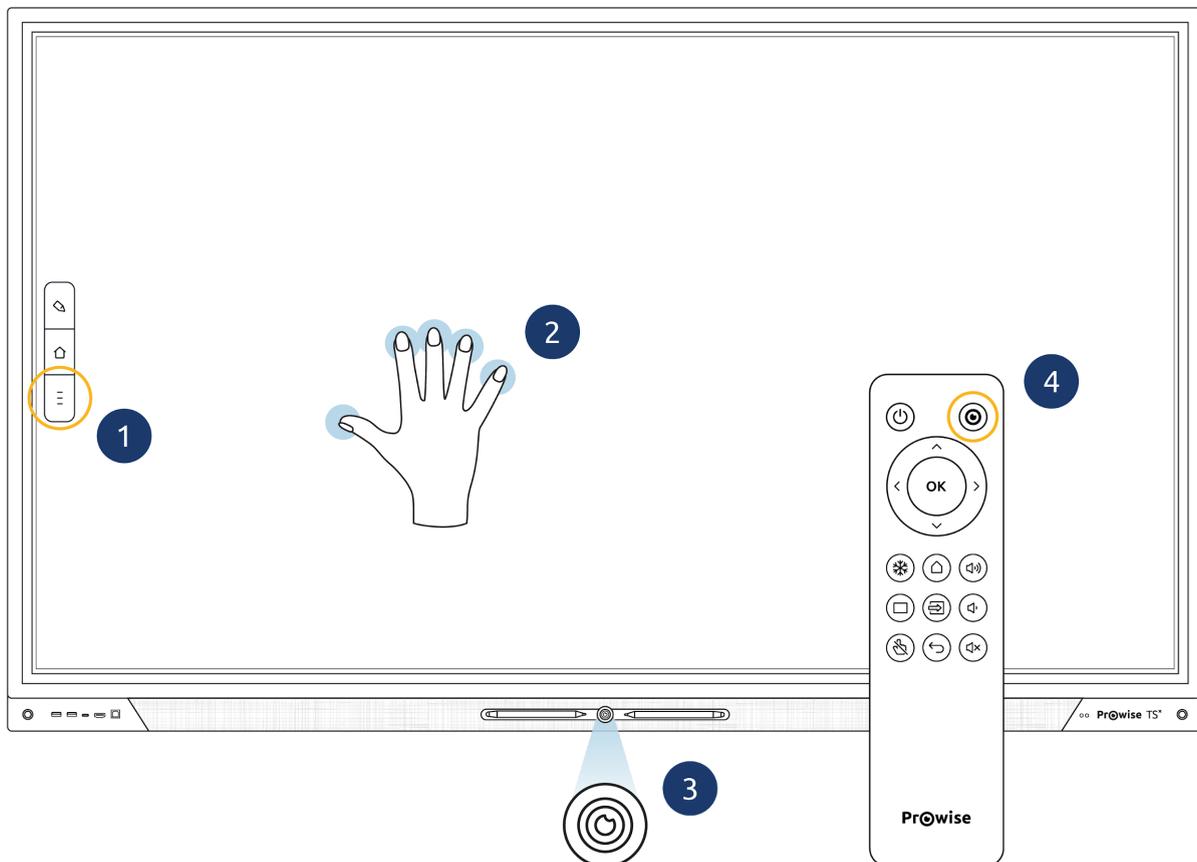
6.2. The Prowise Central menu

Three icons are always visible on the left-hand side of the Prowise touchscreen.



- ProNote icon: open ProNote, the integrated whiteboard software
- Home icon: go to Prowise Central home
- Three dots: open the Prowise Central menu

The Prowise Central menu unfolds on the left-hand side of the Prowise touchscreen. You can open the Prowise Central menu in three ways.



1. Press the three stripes on the left-hand side of the screen
2. Press and hold down five fingers on the screen for a minimum of two seconds
3. Shortly press the home button
4. Press the Prowise Central home button on the remote control

The Prowise Central menu consists of the following items:

- Active apps
- Screencasting
- Input sources
- Volume
- Lift control (if a lift is connected this icon will automatically be visible)
- Settings
- Power button

7. Changing the settings

The settings menu is located in the Central menu. Here you can adjust multiple settings of your Prowise touchscreen, such as: display and audio settings, connectivity, NFC and other settings.

For more information about adjusting the settings in Prowise Central, please read the Prowise Central manual.

8. OTA updates (over-the-air updates)

OTA updates (over-the-air updates) ensure that you always have the latest software version installed on the touchscreen. The only thing you need for the OTA updates is an internet connection with Prowise Central. This can either be a Wi-Fi or an Ethernet connection.

Power settings:

Turning off the "Extra bright" setting will help the screen use less power, this is better for the environment and your wallet.

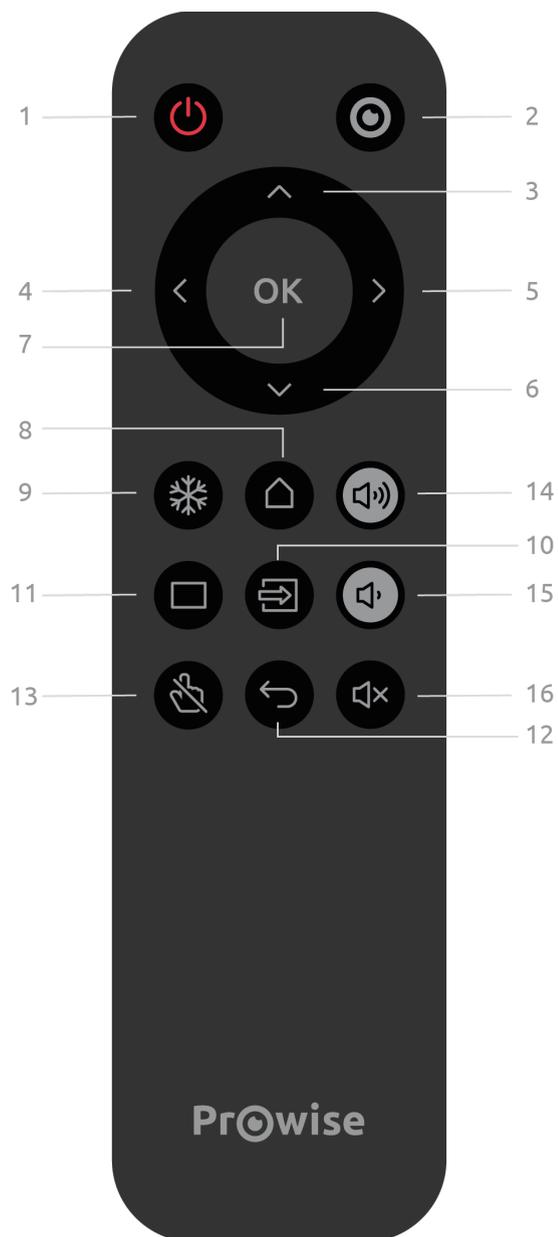
OTA updates are activated by default. Updates are installed once the touchscreen is switched off. This can be switched off in the 'General settings' menu. However, Prowise recommends always having OTA updates activated.



PLEASE NOTE! OTA updates require a Wi-Fi or an ethernet (wired network) connection to Prowise Central.

9. Remote control

9.1. Schematic overview and explanation of the buttons



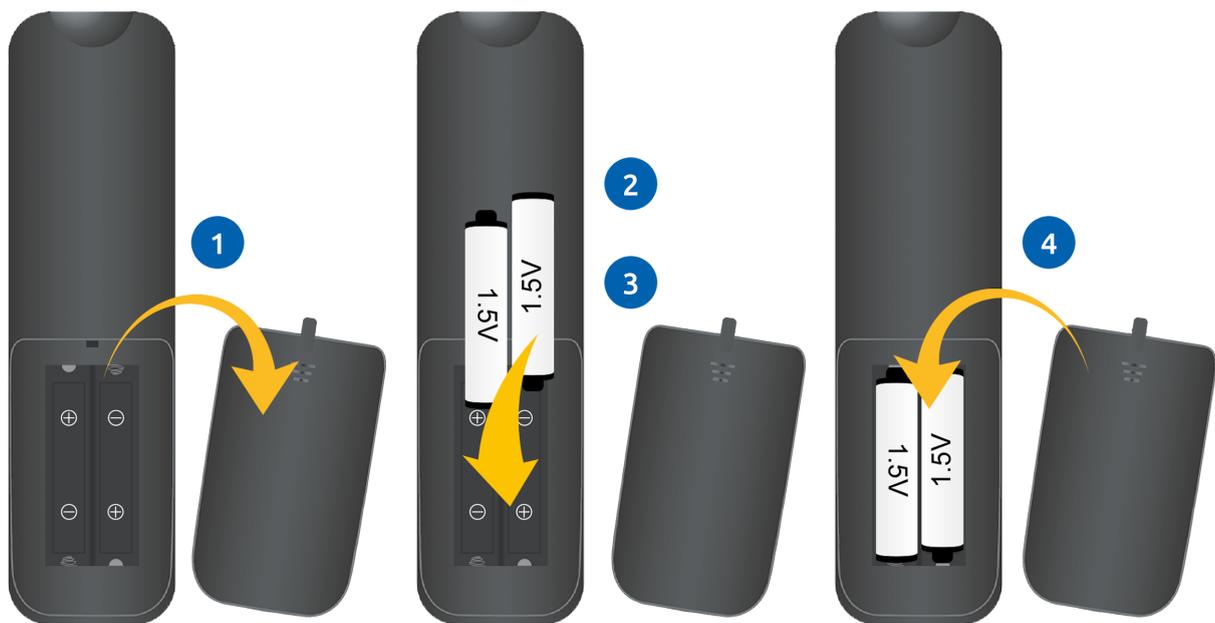
1		Press this button to turn the touchscreen on or off. Then press the Enter button to confirm the off command.
2		Opens the Prowise Central menu.
3		Navigation button – up
4		Navigation button – Left
5		Navigation button – Right
6		Navigation button – Down
7	Ok	Confirm selection.
8		If an input other than Prowise Central home is active, this button can be used to return to Prowise Central home.
9		Freeze display.
10		Open input source selection from Prowise Central. Turns off the display temporarily. This is displayed in the form of a black screen. Programs remain active in the background.
11		Temporarily disables the screen. This is depicted in the form of a black screen.
12		Go back one step. If Central menu is active then this closes the menu
13		Enable or disable the touch functionality.
14		Increase the volume level
15		Lower the volume level

16		Enable or disable the internal speakers of the touchscreen.
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9.3. Replacing the batteries of the remote control

Before using the remote control for the first time, you must insert the two (1.5V AAA) batteries, supplied with the remote control. Once the batteries are running out and the remote control is no longer working properly, you must change the batteries. You can do this as follows:

1. Carefully remove the cover plate on the reverse side of the remote control.
2. Insert the two batteries (1.5V, AAA) into the remote control.
3. Place them with the positive and negative poles as indicated by the (+) and (-) signs in the battery compartment.
4. Close the battery compartment again by carefully replacing the cover plate.



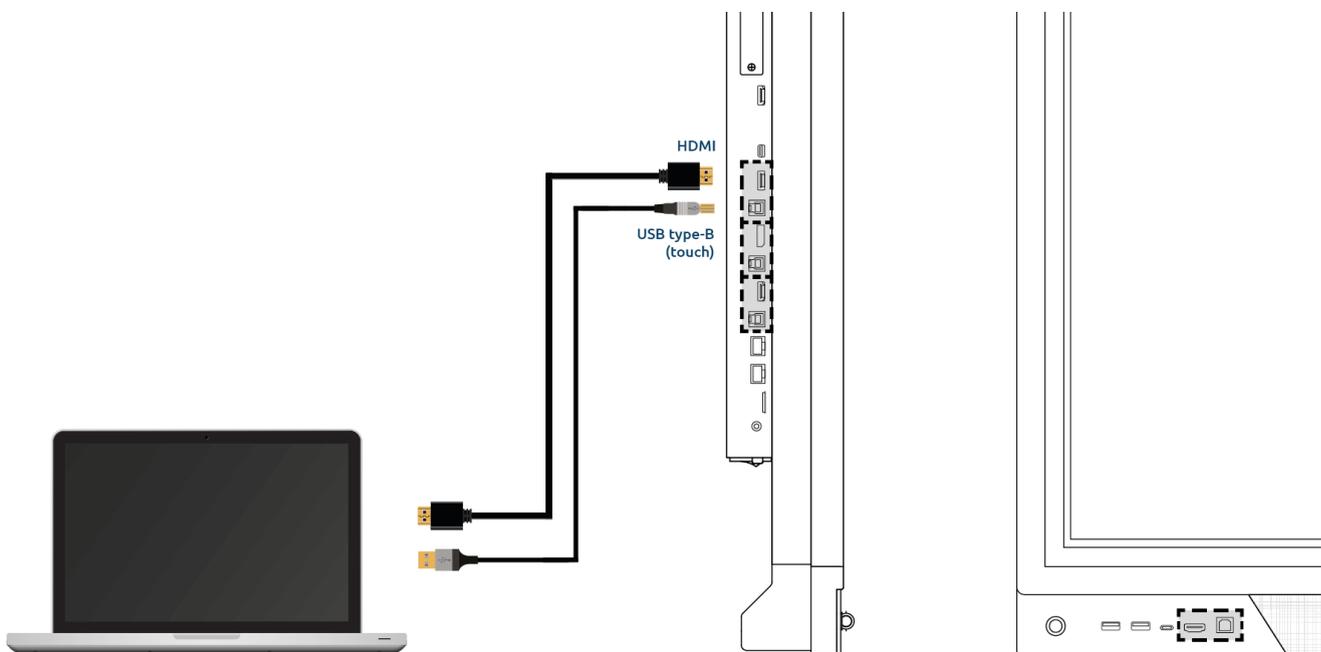
Warning! Remove any leaking batteries as quickly as possible from the remote control. Thoroughly wash your hands afterwards. The leaking chemicals are toxic and must never come into contact with the mouth, skin or eyes.



PLEASE NOTE! Only use 1.5 V AAA batteries. Insert them as shown by the instructions on the remote control.

10. Connecting auxiliary equipment

10.1. HDMI



In order for your device, such as a laptop or desktop PC, to be controlled by touch on the touchscreen, it is necessary to connect a USB Touch cable in addition to a wired connection for audio and video. This has the advantage that you do not have to walk to your device to control it and can teach from the touchscreen. The USB-touch ports are situated directly next to the corresponding HDMI port. Please make sure the right USB-touch port is used when connecting a device.

1. Connect an HDMI cable to the HDMI port of the external PC and to the HDMI input port of the touchscreen.
2. Connect the USB touch cable to the touch USB port of the touchscreen and to a USB port on the external PC.

3. Once all cables have been connected, switch on the touchscreen and the external PC.
4. Once the touchscreen and the external PC have booted up, navigate in the Central menu to 'Input' and select the correct HDMI source.



PLEASE NOTE! We recommend using a cable that is as short as possible for the best connection quality and is no longer than 3 metres.

10.2. DP

You can also connect an external device to the Prowise Touchscreen via a DP port

1. Connect a cable to the DP port of the external PC and to the DP input of the touchscreen.
2. Once the cables have been connected, switch on the touchscreen and the external PC.
3. As soon as the touchscreen and the external PC have booted up, navigate to 'Input' in the Central menu and select the source.

10.3. USB-C

The fully functional USB-C port at the front of the screen has multiple functionalities. This port can be used for visuals, sounds, touch, data and transferring a 15W electric current. The USB-C port at the side of the screen can support a 60W electric current, enough to charge your laptop. Connect your device to this port with a USB-C cable to get started straight away with only one cable.

Note! make sure the USB-C cable is of good quality and not too long to establish a good connection.

10.4. VGA

You can also connect an external device with the Prowise Touchscreen via VGA cable. Please note: this only enables a video connection. Add an audio signal by plugging in a 3.5mm jack (stereo) in the PC Audio in port.

1. Connect a VGA cable to the VGA port of the external PC and the VGA port of the touchscreen.
2. Then connect a 3.5mm jack plug to the PC Audio In port.
3. Once all cables are connected, switch on the touchscreen and the external device.
4. As soon as the touchscreen and the external PC have booted up, navigate to 'Input' in the Central menu and select the VGA source.

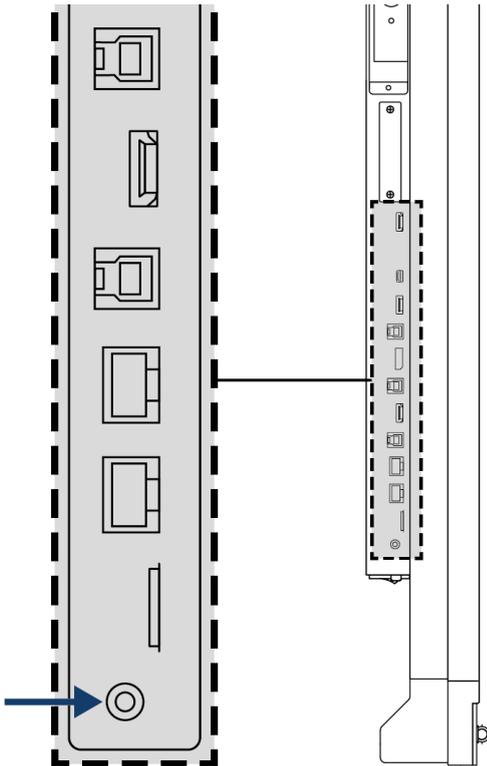
10.5. AV

The composite video signal is a signal that emits transmits both video and audio. You can connect the composite video with the Prowise Touchscreen with a 3.5mm Jack plug (Male with 3 rings) in the AV in port (Audio L, Audio R and Video)

10.6. Connecting the Prowise touchscreen to audio equipment

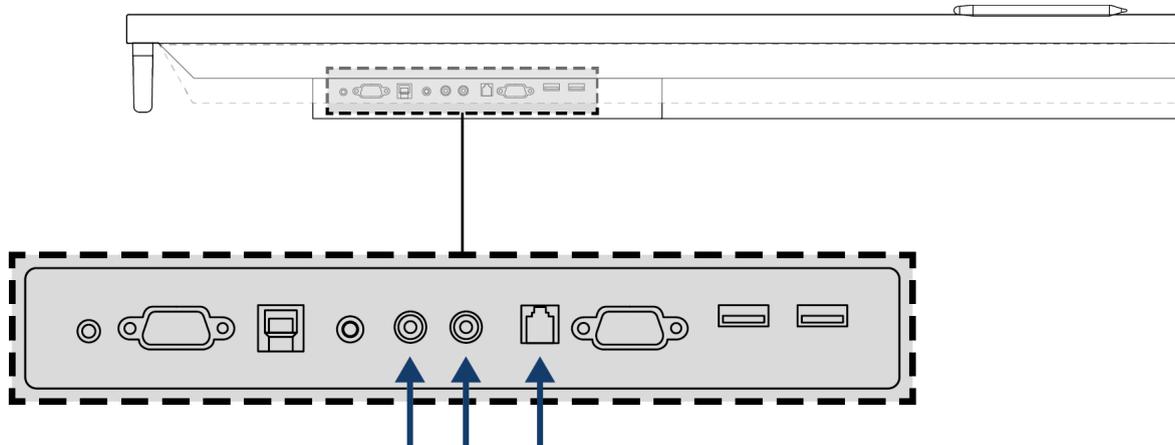
10.6.1. Connecting headphones

Connect headphones by plugging them into the analogue audio output “headphones”. Use the touchscreen’s volume control to adjust the headphones volume.



10.6.2. Connecting an amplifier

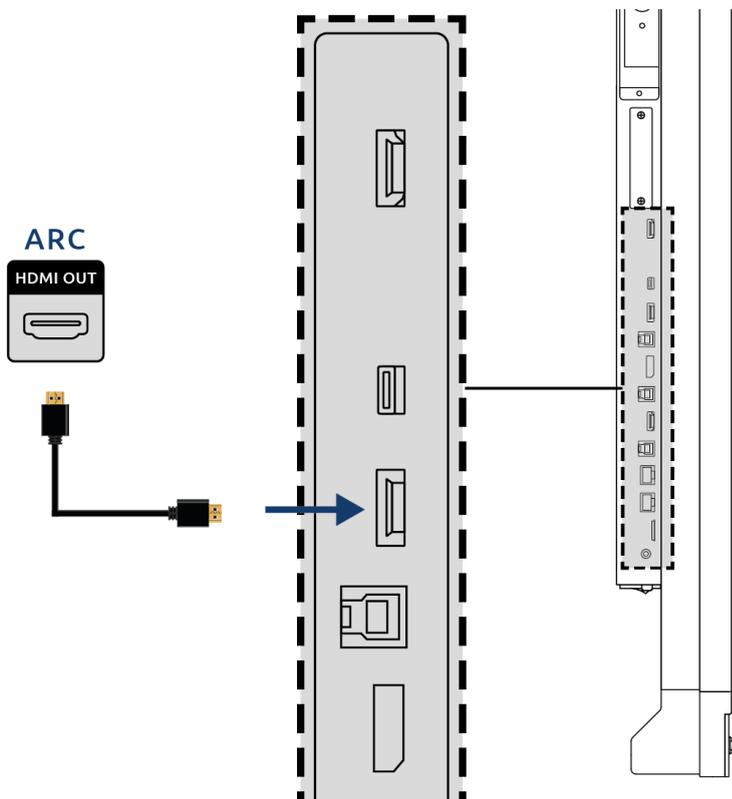
Connect an amplifier by plugging it into the analogue audio output or the digital optical SPDIF port. Use the amplifier's volume control to adjust the amplifier's volume.



PLEASE NOTE! The audio outputs (the analogue line output and the digital Coax port) are always active. If you connect an external audio device to the touchscreen and only wish to use this audio device, press the "Mute" button on the remote control or in the Central menu to turn off the touchscreen's internal speakers.

10.6.3. Connecting using the HDMI port (ARC)

It is possible to connect an external audio device using an ARC (Audio Return Channel) connection. This allows the external audio device to be controlled via the touchscreen. To connect an audio device via ARC, insert one end of an HDMI cable into the touchscreen's HDMI port with ARC support and the other end in the external audio device's HDMI port.



10.6.4. Microfoon en Camera passthrough

With microphone and camera passthrough, you can redirect your microphone and camera input on the touchscreen to your personal device. This enables you to easily join calls over Skype, Teams, Zoom, Google meet, etc.

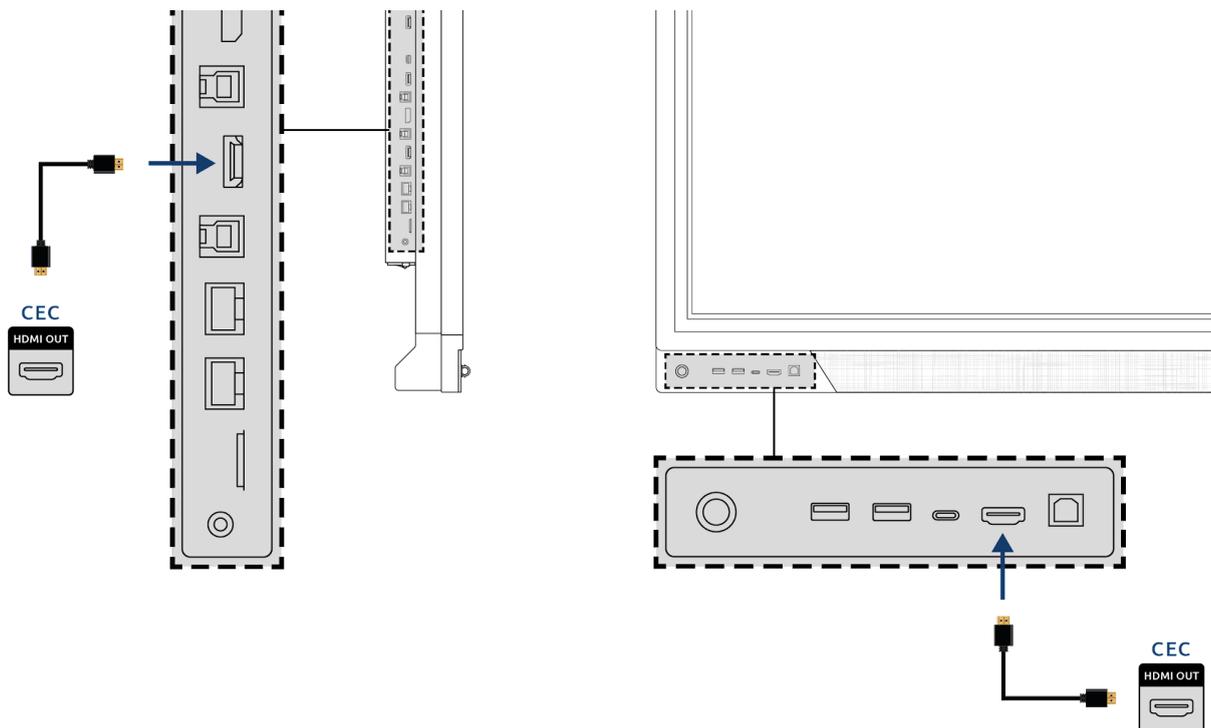
Technical

- Your personal device needs to be connected with the USB-Touch or USB-C port.
- Please make sure the USB cable is not too long.

10.6.5. Connecting using the HDMI port (CEC)

CEC (Consumer Electronics Control) is a functionality that works via HDMI. The devices that are connected to each other in this way communicate via CEC. This allows these devices to be controlled via the touchscreen's remote control.

Connect a device via CEC by inserting an HDMI cable in the touchscreen's HDMI port.



10.7. Using an SD card

To expand the memory of the screen in the Central environment, you can use an SD card which can be installed in the SD card slot. This is also an easy way to prepare files, which are not online, for your screen.

Please note! The SD card slot supports SD cards up to 128GB (FAT32).

Appendix

RS232 protocol

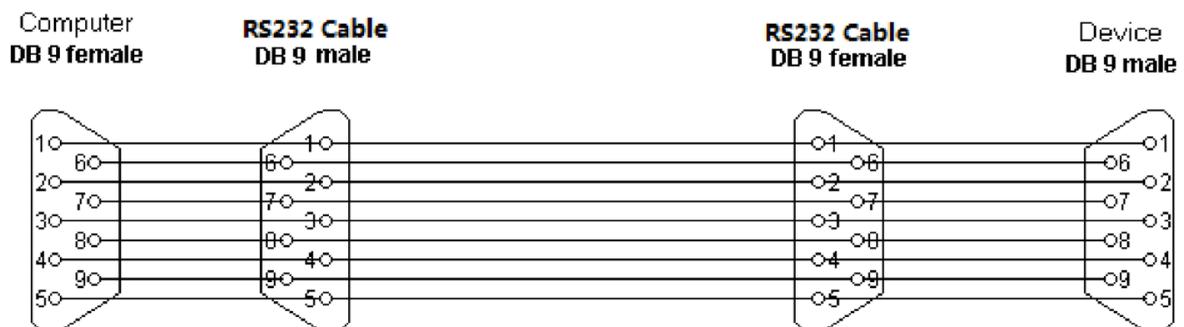
This appendix describes the hardware interface specification and software protocols of RS232 interface communication between the touchscreen and the connected PC or other control unit with RS232 protocol. The RS232 code list can be found on www.prowise.com.

**Male DSUB 9Pin
(outside view)**



Pin #	Signal	Remark
1	NC	
2	TXD	Output to TV
3	RXD	Input from TV
4	NC	
5	GND	
6	NC	
7	NC	
8	NC	
9	NC	
frame	GND	

To establish a serial connection between the mainboard and a RS232 console (Male DB9) the used cable must be a **crossed** cable (Female DB9 to Female DB9).



Serial Port Settings

Items	Value
Baud Rate	Default: 9600 bps Optional: 57600 or 115200 bps
Data Bits	8 (fixed)
Stop Bits	1 (fixed)

Parity	None (fixed)
Stream Control	None (fixed)

IP232 Protocol

Mandatory steps for IP-232 in Prowise Touchscreen

Important to know is that IP232 is always activated. It is not necessary to activate this function separately.

Step 1: Make sure your PC is connected to the **same** local area network.

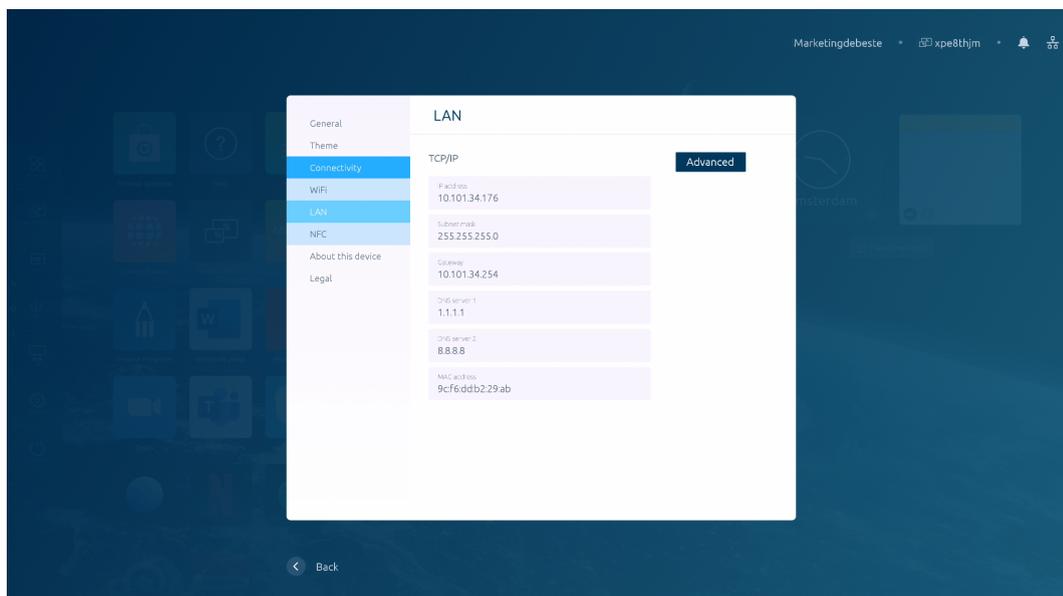
Step 2: Insert the LAN cable to the mainboard RJ45 port. (LAN In)



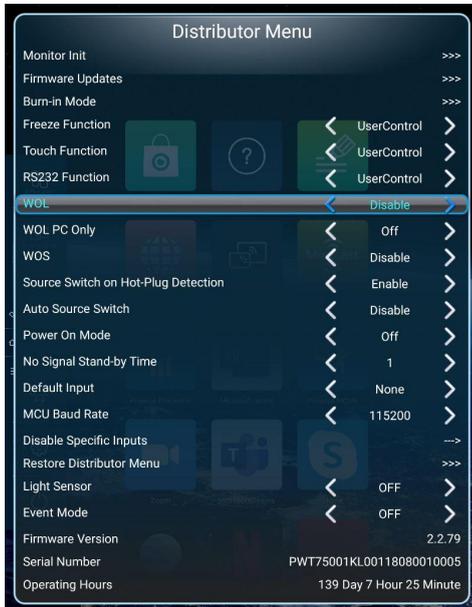
Step 3: Open the TCP232 software on your pc.

Step 4: Get the IP address from the Prowise Touchscreen.

Step 4.1 For the P_On command you need the MAC address of the screen to wake up the screen via **WOL**. ("Setting-Connectivity-Ethernet" - IP Address and IP address.)



Note: Make sure that WOL is enabled.



Step 5: Additional information to work with TCP IP client software.

1. Protocol: TCP Client
2. Server IP: Touch screen's IP
3. Server Port: 4660