

traulux

by **ch** Charmex
AV TECHNOLOGY

USER MANUAL V 1.0 INTERACTIVE MONITORS PERFORMANCE SERIES

TX65P | TX75P | TX86P



traulux.net | info@traulux.net

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• Airplay			
• Miracast			
• Chromecast			
• DLNA			



The background of the advertisement is a photograph of a modern interior space. It features large, floor-to-ceiling windows that offer a view of a wooded area. A wooden table is in the foreground, and a pendant light hangs from the ceiling. The overall atmosphere is warm and sophisticated.

MONITORS INTERACTIVES

TX PERFORMANCE SERIES

Simply Better

traulux
by  **Dahtron**

EVERYTHING YOU NEED
IN JUST ONE CLICK!

TX PERFORMANCE SERIES

Simply Better



Thank you very much for your confidence in TRAULUX products. We hope that your purchase will be very satisfactory and a useful tool for many years to come.

Our "Simply Better" philosophy is reflected in every process, tool and function of this interactive monitor.

One of our main objectives has been the development of a user interface as intuitive and simple as possible, accompanied by the best components currently available on the market for its construction.

The Android 13 operating system, with 8Gb RAM and 128 Gb ROM, is perfectly capable of handling virtually every need for classroom or business presentations, everything is displayed in 4K resolution, even Office documents, and features such as triple mode or multi-window are included for the first time.

In addition to a detailed description of all the functionalities of the monitor, in this manual you will find some videos that will help you to understand the processes.

To get started, you can click on the following link for an overview of the most important functionalities.



[You can watch the video "Overview" here](#)



1.1 NEW FUNCTION: TRIPLE MODE

3 general modes of operation to cover all needs.

[See section 3.1.1-. Triple mode of operation](#)



Mode 1: Android Total



Mode 2: Android Limited

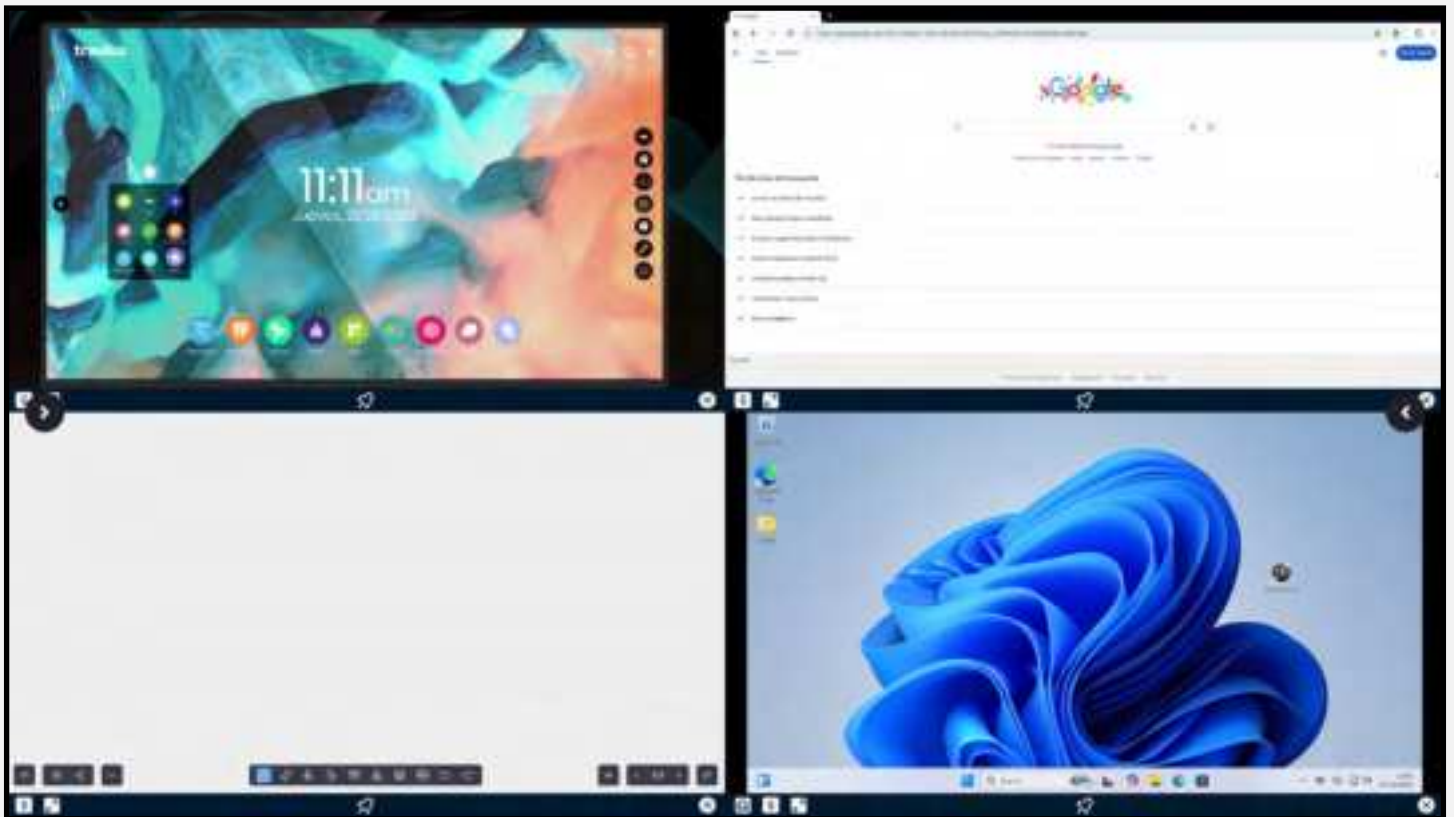


Mode 3: Android disabled

1.2-. NEW FUNCTION: MULTI-WINDOW

Quadruple your potential by working with four applications simultaneously.

[See section 3.3.12-. Multi-window](#)





1.3-. USE OF OPS MODULES OR PERSONAL DEVICES

Optionally, a Windows 11 PRO, Google EDLA or Chrome OS OPS module can be added, which will work together with the interactive's own embedded operating system. [See section 2.4-. Optional OPS modules.](#)

If you prefer to work with your personal device, you can also do so by connecting via the multiple inputs or projecting wirelessly.

All necessary cables are provided. There are three ways to do this:

1-. With two cables

- Video + audio streaming: HDMI, Displayport, VGA + audio
- Interactive transmission: USB A-B

2-. With a single USB-C cable

USB-C* transmits video, audio and interactivity. Plus, it also charges the device.

* USB-C - USB-C "Thunderbolt 3" cable provided. The connected device must be compatible with the Thunderbolt 3 specification or higher.

3-. Using the integrated wireless projection system

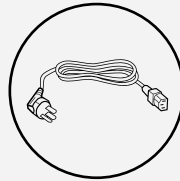
[See section 3.4-. Mirroring \(wireless projection\)](#)

2-. HARDWARE

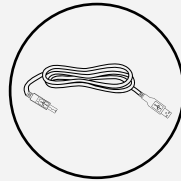
2.1-. INCLUDED ACCESSORIES



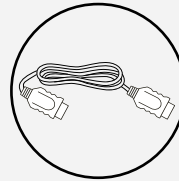
Remote control



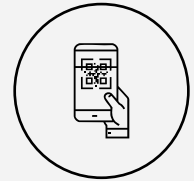
Power cable: 3 metres



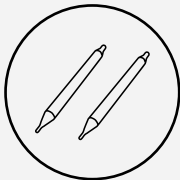
USB cable A-B (Touch): 3 metres



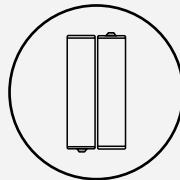
HDMI cable: 3 metres



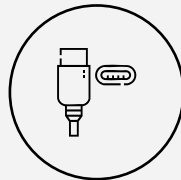
QR code to download the user manual



2 x pencils



2 x batteries



USB-C 1.80 metres



- 8 x Screws, washers and wall plugs.
- 2 x wall bracket security screws



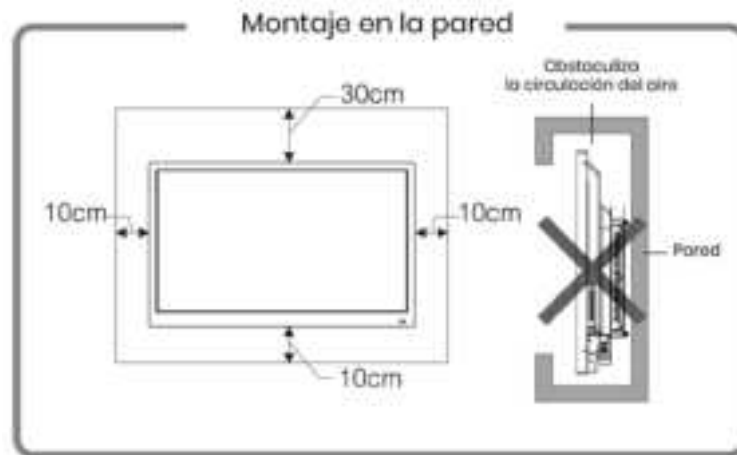
Wall bracket mounting instructions



2.1.1- . WALL BRACKET

For proper ventilation, the monitor should be installed with a minimum amount of space around it as shown in the picture below.

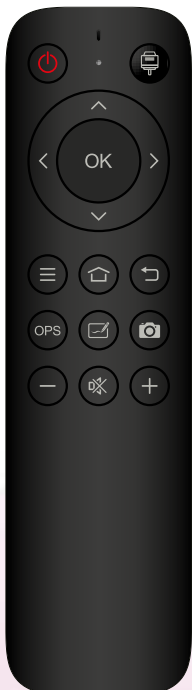
[You can see the technical drawings of the equipment in section 4.2-. Technical drawings.](#)



2.1.2- . REMOTE CONTROL



[You can watch the video "Remote control | Traulux Interactive Monitor TX90 and TXP series" here](#)



Power (off / on): Quick press - standby / Press for more than 1 second, displays a confirmation message beforehand, if not cancelled it switches off completely after 10 sec.

If the OPS is switched on, the OPS shutdown process shall be initiated earlier.



Input source selection: Displays all available inputs

Scroll arrows: These arrows have a different function depending on where we are.



Some examples: We can move between documents in the same folder, and click ok to open them.



Scroll between the boxes of an Excel file, change pages in a Power Point. Scroll within a PDF, Word...



Confirm transaction



Main menu



Home: Takes us to the home page



One step back



Direct access to PC-OPS



Direct access to the blackboard



Screenshot: The images are stored in the folder: **Local/Pictures/Screenshots**



Vol -



Mute

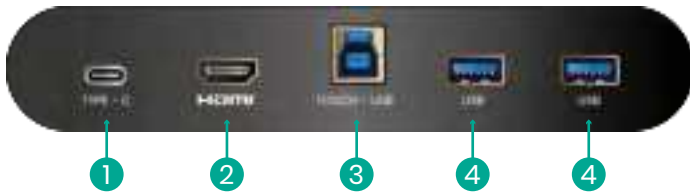


Vol +

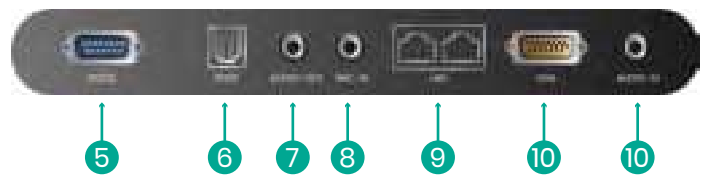


2.2-. CONNECTIONS AND CONTROLS

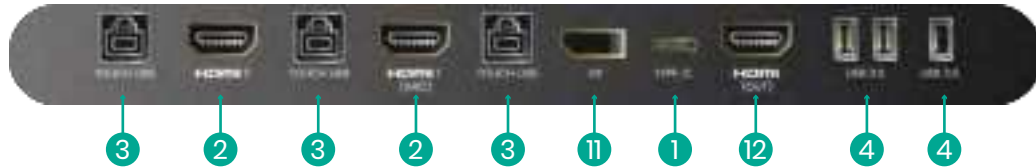
FRONT CONNECTIONS



BASE



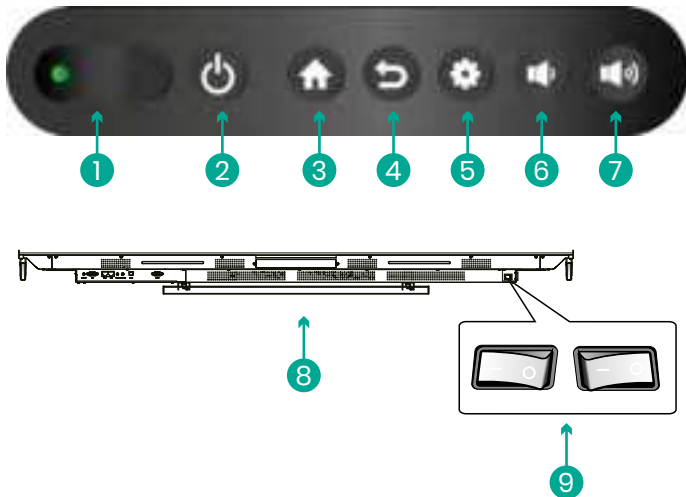
L A T E R A L



1	<p>USB-C ports: These ports transmit video, audio, interactivity and can also charge the device.</p> <p>Front USB-C: charges up to 60 watts, suitable for charging a laptop.</p> <p>USB-C side: charges up to 15 watts, suitable for charging a BYOD device, not suitable for charging a laptop. For proper operation, a cable with the minimum specification "ThunderBolt 3" (such as the supplied 1.8 m cable) must be used. At the same time the device must also be compatible with this specification.</p> <p>"Camera sharing" function: This function greatly simplifies installations. If we have a video conferencing bar connected via USB 2.0 to any of the monitor ports, and it has been recognised* By connecting a laptop to the USB-C port, the bar can be used without the need to connect more cables. See section 3.3.13.4-. Device management. to see if the device has been recognised.</p>
2	<p>HDMI-IN: The maximum supported resolution is 4K 60 Hz.</p>
3	<p>USB B Touch Ports: When a USB B Touch Port is connected to the same device as the input source, it can be operated from the pen display.</p>
4	<p>USB A 2.0 and 3.0 ports: USB A 2.0 and 3.0 ports are used to connect external memory devices to the Android system making it easy to read files through the file explorer. See section 3.3.7-. File Explorer.</p> <p>The maximum power supply is 500 mA for the USB A 2.0 port and 900 mA for USB A 3.0. Please note that if you are using a wireless keyboard, the USB receiver must be clearly visible with the transmitter, with a front port being the best option.</p> <p>Automatic switching between OPS module and Android: The USB A ports are operative in both systems, embedded Android and OPS module. Switching will be automatic between them according to the source that is being displayed at that moment.</p>
5	<p>RS232 port: Port for RS232 serial control. See RS232 codes in section 4.3 -. RS232 - IP commands.</p>
6	<p>Optical SPDIF digital audio output.</p>
7	<p>AUDIO-OUT: 3.5 mm mini-jack analogue audio output for connection of an amplifier or self-amplified speakers. When the mini-jack is connected, the monitor's own speakers will stop sounding.</p>
8	<p>MIC In port: 3.5 mm mini-jack analogue microphone input. The microphone must be a dynamic microphone. When a microphone is connected, it will sound through the monitor's own loudspeakers, or externally if the analogue output is being used. This input is always active, and will sound simultaneously with the rest of the sounds played in the monitor itself. It can be deactivated from configuration. See section 3.3.13.4-. Device management.</p>
9	<p>LAN ports: These LAN ports are operational on both the embedded Android system and the OPS, they switch automatically. The first port of the two that is connected acts as an input, and the second as an output.</p>
10	<p>VGA + Audio In</p>
11	<p>Display Port In</p>
12	<p>HDMI-OUT: This output replicates exactly the same signal displayed on the monitor (video + audio). E.g., a connected PC + annotation layer. See section 3.3.10.9-. HDMI output resolution.</p>



2.3-. FRONT BUTTONS



1	Remote control reception indicator
2	Switching on/off
3	Home
4	Backwards
5	Configuration
6 - 7	Volume
8	WiFi-integrated antenna
9	Switch

2.4-. OPTIONAL OPS MODULES



These modules are available in various configurations:

1-. Windows 11 PRO: Adds all the functionalities of the latest version of Windows to the interactive monitor.

2-. Android Google EDLA: Adds all the functionality of Google Workspace + Play Store, plus a whiteboard app, wireless projection, and QR code annotation layer. Can work locally and in the cloud.

3-. Chrome OS: Adds the Chrome OS operating system with Play Store with the possibility of linking to the Google management console. Can also be used for interactive digital signage applications or touch kiosks. Only works in the cloud.

The OPS modules are inserted into the side bay making installation and use much easier.

Consult the distributor for available OPS options.

PC-OPS - Start-up / shutdown: Selecting the PC-OPS as input source will automatically start it up.

When the monitor is switched off, if the PC-OPS is switched on, it will shut down with a corresponding **"shut down"**.



2.4.1- .WORKING WITH A WINDOWS PC-OPS AND TWO INTERACTIVE MONITORS



[You can watch the video "Working with two interactive monitors and a Windows PC-OPS - Traulux" here](#)



If we connect a second monitor to the HDMI output of the PC-OPS, the configuration of the graphics card will be as if we were working with a laptop PC.

The right mouse button (or long press on the monitor) brings up the menu, with the option of:

- Extend
- Duplicate
- Display only on monitor 2

In addition to setting the layout of the two monitors, you can indicate which monitor will be the main monitor.

In the case of both monitors being interactive, it is also necessary to configure the interactivity in extended mode, so that each monitor interacts only with the image it is projecting.

The procedure for setting up extended interactivity is as follows>>>>>

1. It is necessary to connect a keyboard to PC-OPS



**2. Click on the Microsoft logo to display the browser.
Search "control panel" (control panel) and click on it.**



4. Find the touch settings in the control panel and click on Tablet PC Settings



5. Click on setup and Touch Input



6. Follow the instructions on the screen:

We will be asked to identify each monitor using our finger.

To switch from one monitor to another and complete the process, it will be necessary to press the 'Enter' key.

The embedded processor with Android O.S. can solve virtually all presentation or classroom needs without the need for external equipment.

3.1-. FIRST START-UP

The first time the monitor is started up it will display the following messages. Any settings can be changed later.

Default language selection.



Date and time



Network configuration



Finally, it will give the possibility to choose between one of the three available operating modes.





[You can see the video "Triple mode of operation" here](#)

1-. Fully functional Android:

All Android functionalities are active



2-. Limited Android: Only the following basic functionalities remain active:

- Whiteboard (simplified version)
- Annotation layer + QR
- Mirroring (wireless projection)

[See section 3.4-. Mirroring \(wireless projection\).](#)

This mode is ideal for environments where you will be working only with an externally connected device (wired or wireless projection) or an OPS, but want to maintain basic functionality of the Embedded Android processor.



3-. Android deactivated: In this mode, the embedded Android system is completely deactivated in order to use only an external system connected by cable or OPS type.



HIDDEN PROCEDURE TO MOVE BACK TO A DIFFERENT MODE.

To change mode, once we have chosen one, we must enter the engineering menu*

Procedure*:

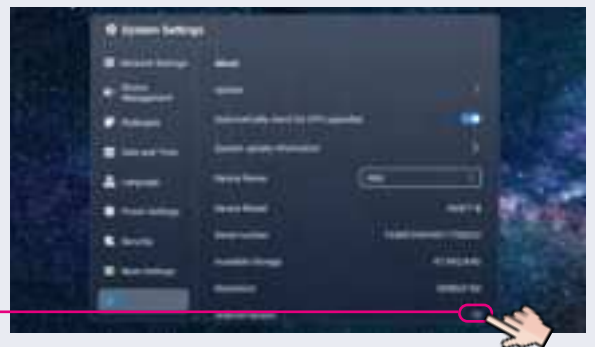
1-. Turn the volume down to the minimum



2-. Find the Android version in the configuration menu.

3-. Click 9 times on the Android version

13



4-. Find the operating mode in the hidden menu and select the desired one.



5-. Click anywhere to exit this menu.



*Caution, improper use by inexperienced persons could lead to malfunctioning of the equipment and even invalidate the warranty. Only the procedure described above should be used.

3.2.1-. FLOATING ICON

The menu is expanded when you click on the floating icon, and collapses again when you select a function, or when you click anywhere outside the menu itself.

The floating icon will be available, by default, in all circumstances, even when working with an external source, with only one exception: when the whiteboard application is active, either in full screen or windowed mode.

In this case the floating icon will not be available and you will have to use the side menus to find the main functions.

The floating icon "Float Bar" can be deactivated from the configuration.



If we deactivate it, it disappears and the main functions will only be accessible from the side menus.

Even if it is deactivated, you can call the floating icon by pressing with two fingers in a V-shape for 3 seconds.

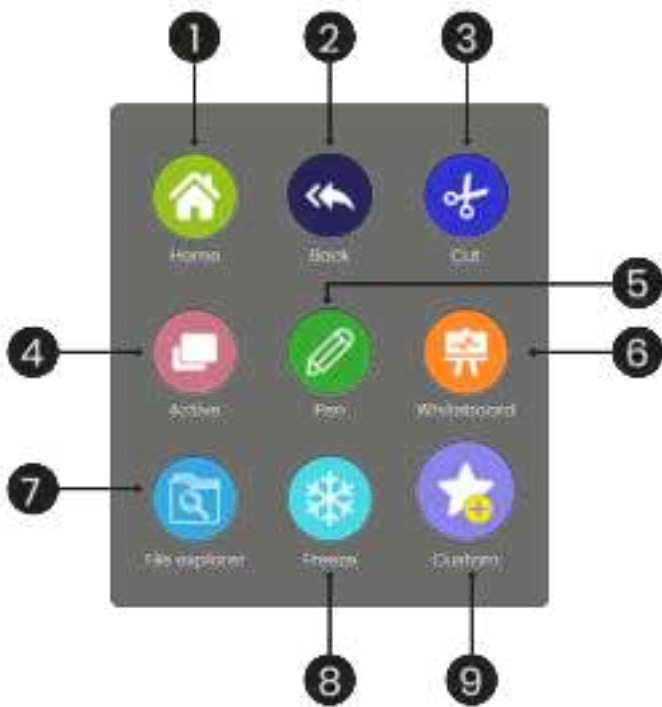
The floating icon can be moved to any part of the projection by dragging it.



It should be noted that there is a non-active touch area around the floating icon for other functions.

This means that if we want to interact in a nearby space, we may have to move the floating icon first.





1	Home: Direct access to the main menu
2	Back: (backwards): Undoes the last action in the current process
3	Cut: Captures or cuts out part of the screen to store it or send it to the whiteboard. See section 3.3.3-. Trimming.
4	Active: Displays active applications in the background. See section 3.3.4-. Assets.
5	Pen: (pencil) Displays the annotation layer on any image, projection or input source. See section 3.3.5-. Pencil - annotation layer.
6	Whiteboard: Opens the pre-installed whiteboard application. See section 3.3.6-. Blackboard (S-Write).
7	File explorer: Opens file explorer See section 3.3.7-. File explorer.
8	Freeze: Freeze / Defrost the projection. See section 3.3.8-. Freeze.
9	Custom: (favourite accesses) Allows you to add up to 3 favourite accesses. See section 3.3.9-. Favourites.

3.2.2-. SIDE MENUS

Some accesses are redundant and can be found both in the floating icon and in the side menu.

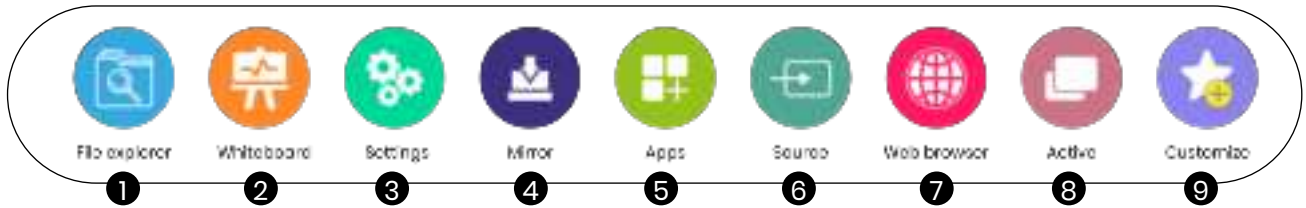
Access to the side menus can be disabled in the "settings" menu. In this case, the side menu will appear only by dragging from the outside to the centre. [See section 3.3.13.10-. Other configurations.](#)

	Back: (backwards) Undoes last action
	Home: Direct access to the main menu
	Source: Input source selection Input configuration Blackboard configuration HDMI output configuration See section 3.3.10-. Input source menu.
	Utilities: Utilities. See section 3.3.11-. Utilities menu.
	Utilities Volume adjustment Brightness Adjustment / Auto Brightness Multi window
	Settings: Settings . See section 3.3.13-. Configuration menu.
	Pen: Unfolds the annotation layer. See section 3.3.5-. Pencil - annotation layer.
	Active: Displays active applications in the background. See section 3.3.4-. Assets.



3.2.3-. MAIN MENU HOME

Some accesses are redundant in the floating and side icon.



1	File explorer: File explor er. See section 3.3.7 -. File Explorer.
2	Whiteboard: Black board. See section 3.3.6-. Blackboard (S-Write).
3	Configuration. See section 3.3.13 - Configuration menu.
4	Mirror: Deploys EsharePRO wireless projection. See section 3.4 -. Mirroring (wireless projection).
5	Apps: Application Explorer. See section 3.5 -. Application Explorer.
6	Source: Input source selection. See section 3.3.10-. Input source menu.
7	Web browser: Web browser, either Firefox or Chromium. See section 3.3.13.10 -. Other configurations.
8	Active: Active applications. See section 3.3.4-. Assets.
9	Customize: Allows you to add up to 6 shortcuts to your favourite apps. See section 3.3.9 -. Favourites.

3.3-. FUNCTIONALITIES



[You can watch the video "Functionalities" here](#)

In this section we will review all the functionalities. We will follow the order of appearance from:

- 1.- Floating**icon** (most commonly used)
- 2.- Sid**emenus**
- 3.- HOM**Emenu.**



3.3.1-. HOME



Accessible from the floating icon and side menu. Takes us directly to the home page.

3.3.2-. BACK



Accessible from floating icon and side menu. Executes a step backwards in the active process.



3.3.3-. SNIP



This function is accessible from the floating icon, side menu / utilities.
Clicking on the crop displays a central box, leaving the rest of the projection darker.



The possibilities for cuts are as follows:

1. Rectangular cut-out

We can resize the box using the points at the ends. Once the rectangular area of the cut-out has been determined, we can send it directly to the blackboard by clicking on the icon shown in the image. After clicking, the whiteboard with the inserted cutout will be displayed. If the whiteboard application was not active, it will be activated at this point.



2. Freehand cutting

Select the freehand crop by clicking on any of the "freehand crop" icons indicated in the image. The rectangle will turn into a circle. Now you can drag with your pencil/finger to determine the area of the freehand cutout.



In both cases, when we finish setting the area of the clipping, we can send it to the board or simply store it in the internal memory, folder: **Local / Pictures / Screenshots**.



The possibilities for cuts are as follows:

3. Cropping of the entire screen

Click on the following icon to capture the full screen, which can be sent to the whiteboard or stored in the internal memory, **Local / Pictures / Screenshots folder**. Click on the X to exit.

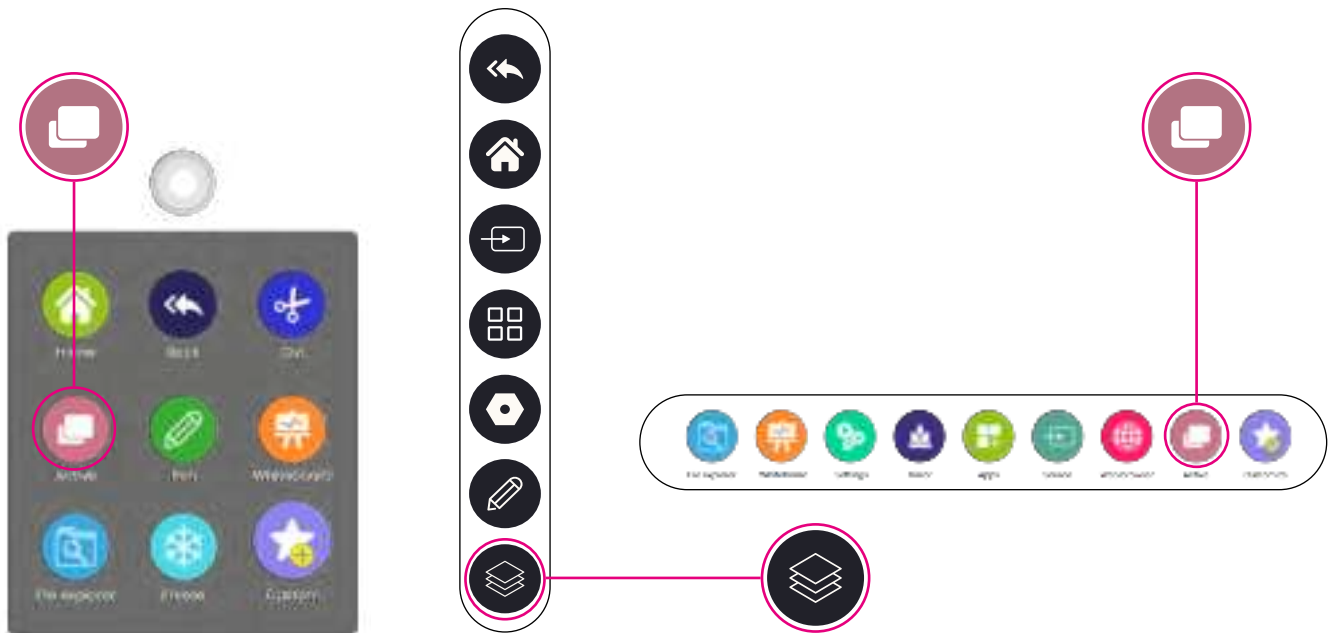


4. Quick screenshot of the full screen

Clicking for more than 3 seconds on one of the side accesses will automatically capture the full screen and store it in the internal memory, **Local / Pictures / Screenshots folder**.



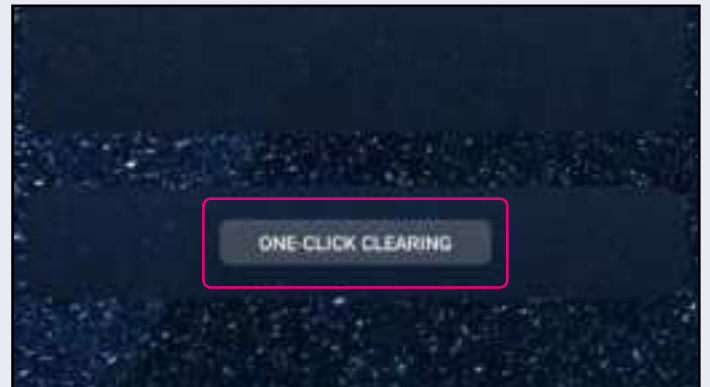
The "active" function is available from the floating icon, side menu and home menu.



"Active" shows all applications that are active in the background.



Click on the thumbnail to enter the app, or click on the X to close it.

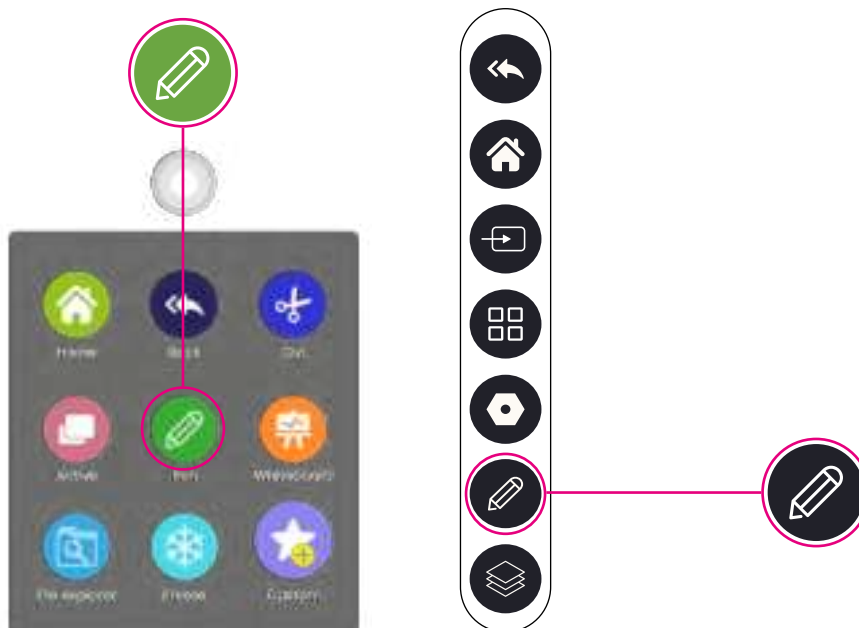


If we wish, we can also close them all at the same time.



3.3.5-. PENCIL - ANNOTATION LAYER

The pencil is accessible from the floating icon or from the side menu



Selecting the pen generates a transparent layer over any projection, either from the embedded Android or from an external source.

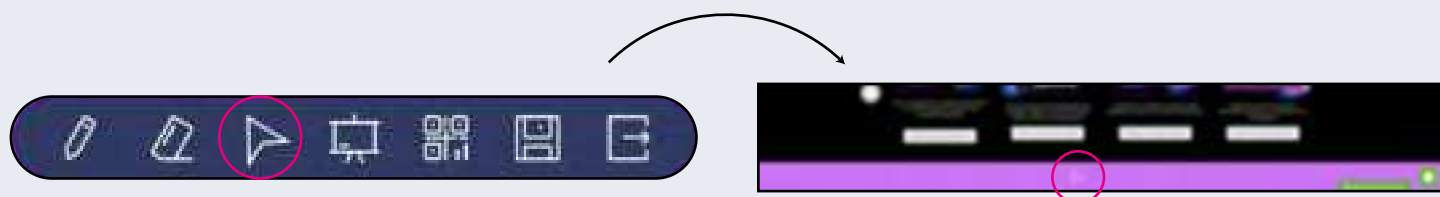


We can score quickly by choosing one of the available colours and thicknesses.



Annotations can be erased with the palm of the hand, a flat object such as a traditional whiteboard eraser or by using the precision erase option, if activated. For precision erasing we use the coarse tip of the pencil.

Scroll arrow: The arrow activates the interaction with the background while in the annotation layer. At this point the annotation will disappear, but by clicking on the same arrow again, we return to the previous state and the annotations will still be there.



Trimming of annotation layer and sending to whiteboard: This access activates the trimming function, to send to the whiteboard or store in the internal memory, **Local / picture / Screenshots folder**, part or all of the annotation area.



3.3.5.1- . SHARING ANNOTATIONS WITH QR CODE



While the annotation layer is active, we can generate a QR code to share what is currently visible (with or without annotations). The QR code is a direct link to a cloud server where the capture is stored and kept for 24 hours. In this way it is not necessary to be on the same network to capture the image from our mobile device.

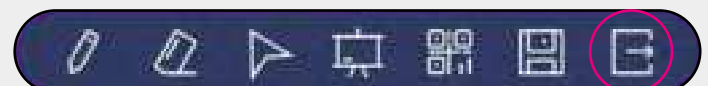
For example, we can even share annotations with our interlocutors in a video call. The monitor needs to be connected to the Internet. The QR code can be encrypted so that only those who have the code can download the image to their mobile device.



If we click on **save**, the capture will be saved in the internal memory in PNG format: **Local / postil / Png folder**.



Finally, if we want to exit the annotation layer we click on "exit".





3.3.6-. WHITEBOARD (S-WRITE)



[You can watch the video "S-Write Slate" here](#)

The pre-installed S-Write whiteboard application is accessible from the floating icon, side menu / utilities / multi window or home menu.



In case of activating the whiteboard in multi-window it will be active as a window, not as a full screen.

[See section 3.3.12-. Multi-window.](#)



This blackboard has been designed to replace traditional blackboards such as chalk boards, dry erase markers, flipcharts etc...

You can write on it with the pencil provided, with your fingers or even with another type of pencil/pen as long as it has the cap on and is not made of a material that is aggressive to the surface (harder than quartz, 7 MOHS).

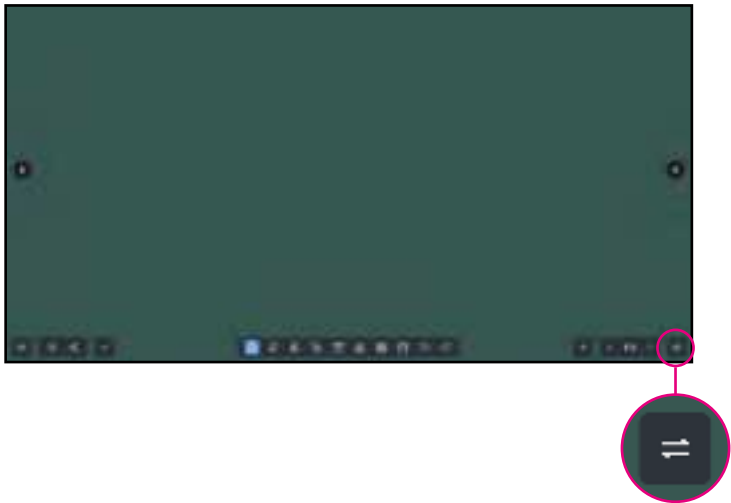
Similarly, to erase, we can use the palm of our hand, or an eraser of similar dimensions, such as a chalk or dry erase marker board

This is an "infinite" type of whiteboard, which means that there is more virtual workspace than is initially shown.

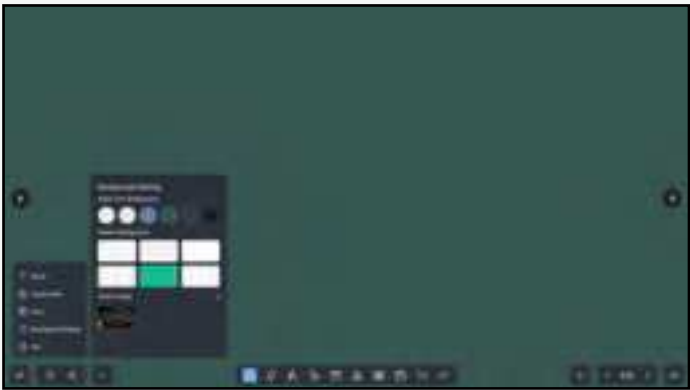
To take advantage of this additional space we can use the process of selecting, moving, resizing annotations or objects (see tool description select), or we can leave the touch input at a single point, allowing us to use multiple fingers to move or resize the entire whiteboard while using a single finger / stylus to annotate.

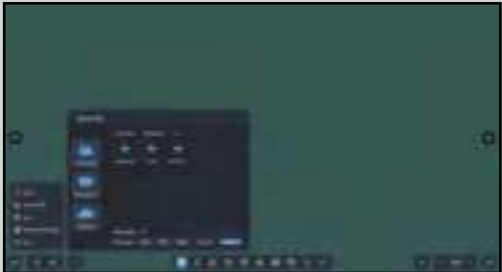


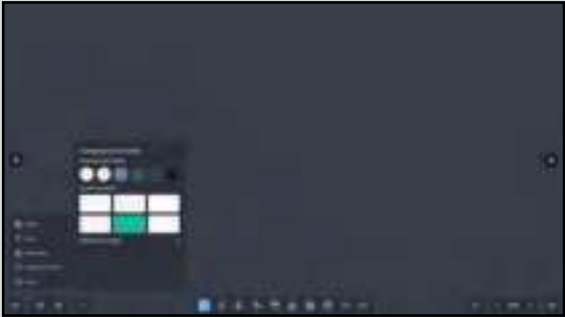
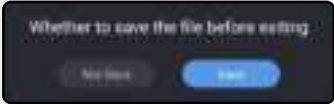
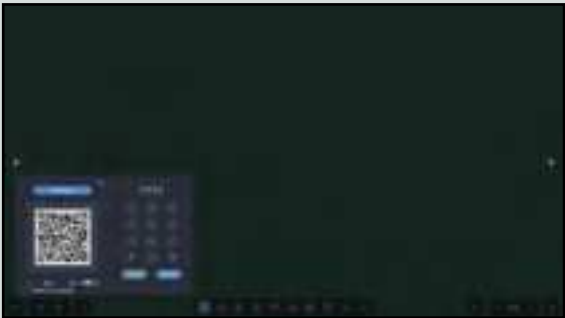


Swapper: Swap sides of the slate menus at the base.



3.3.6.1-. SLATE OPTIONS




1	<p>Brush: Sets the font style for handwriting recognition.</p> <div><div>handwritting</div><div>Hei style</div></div> <div><div>handwritting</div><div>Song style</div></div>
2	<p>Import Note: Import an editable whiteboard document <i>.iwb</i>. You can also open an <i>.iwb</i> document by clicking directly on it from the file explorer.</p>
3	<p>Save: By default the whiteboard files are saved in <i>.iwb</i> format, being editable later in the S-Write app of the monitor. The default path where the whiteboard files are stored is Local disk/writeboard.</p> <p>It should be noted that these files can only be edited on another monitor with the same whiteboard application pre-installed. To open them in another type of application we can save them in PDF or PNG format, or generate a QR code as you will see in paragraph 6-. Share.</p> <p>Documents can also be stored in another folder on the internal memory, USB key or uploaded directly to the cloud (One drive / Google drive).</p> 

<p>4</p>	<p>Background setting: Choose from various colours, templates or custom images for the whiteboard background.</p> <p>The background changes will be effective from the current page and in all the pages that will be generated until the next change.</p>	
<p>5</p>	<p>Exit: It will ask whether or not we want to save the board before exiting.</p>	
<p>6</p>	<p>Share: Generate a QR code for sharing with BYOD mobile devices.</p> <p>The options can be.</p> <ul style="list-style-type: none"> • Only one page • All pages • Encryption - Generates a protection code • Switch Lan Sharing (if enabled it will not be stored in the cloud and you need to be in the same local network and range to capture) 	
<p>7</p>	<p>Hide the tools menu</p>	 

3.3.6.2- . PENCIL AND ERASER TOOL

There are several types of pencil to choose from.

<p>1</p>	<p>Standard pencil: We can choose thickness and colour.</p> <p>Colours can be customised or even cloned, e.g. to delete part of a content as we will see in the following example.</p>	
----------	---	--



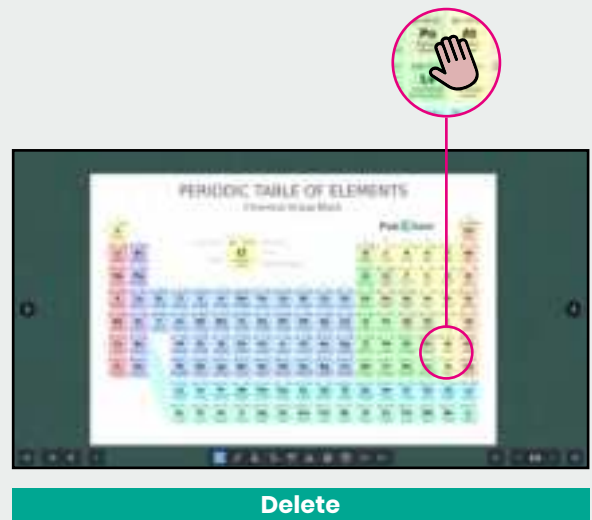
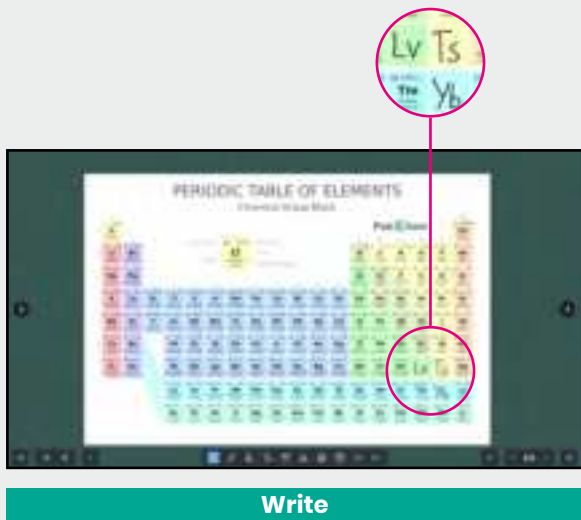
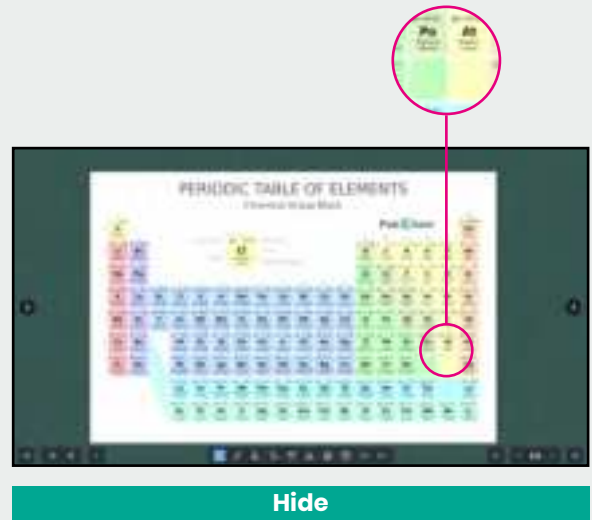
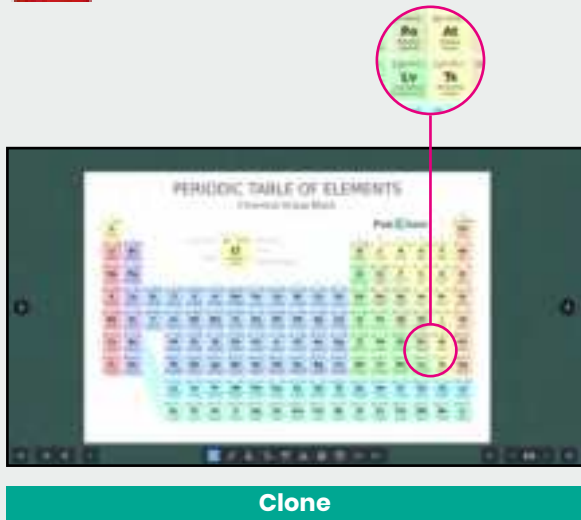
Practical use of the clone tool:

In the following periodic table exercise we can clone the colour of the box to make the name of the element disappear, write over it and erase with the palm of the hand to discover the correct answer.

This is a simple example of how we can apply gamification in any presentation to gain dynamism and interaction.

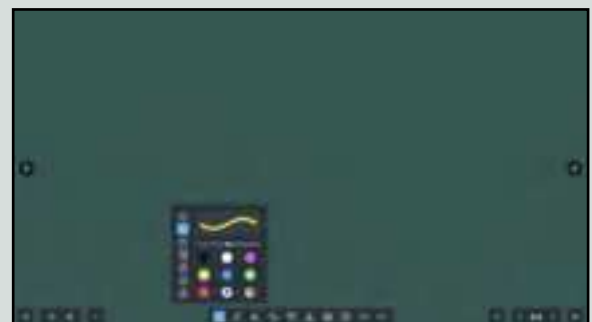





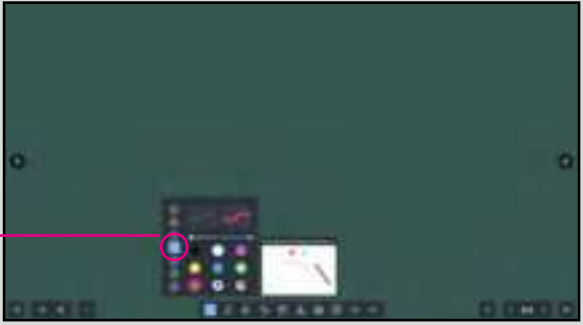





[You can watch the video "Practical use of the cloning tool - S-Write Whiteboard" here](#)



2

Highlighter pencil



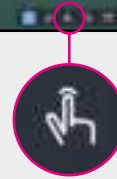
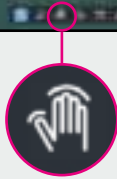
<p>3</p>	<p>Pen stylus: This type of stylus does not support multi-touch input.</p> 	
<p>4</p>	<p>Double-ended pencil: The double-ended pencil allows us to set different colours depending on the tip we use.</p> <p>The fine tip will score with the colour of your choice when playing with the fine tip, the same for the coarse tip.</p> <p><i>In some functions you will see a question mark that will give access to an explanatory animation.</i></p> 	
<p>5</p>	<p>Precision erasing: The fine tip will annotate, the coarse tip will erase with precision.</p> 	
<p>6</p>	<p>Freehand writing recognition pen: With this pen selected, freehand writing will be recognised.</p> <p>The font style will be according to the one chosen in the blackboard menu.</p>	
<p>7</p>	<p>Recognition of geometric shapes.</p> 	<p>Eraser menu: Set the thickness of the erasure, or erase the whole page.</p> 

3.3.6.3-. MULTI INPUT TOOL

Multi input: In this state we can write with several inputs up to a maximum of 40.

Every time we click on it, the status changes (from single-entry to multi-input).

Simple input: In simple input it only responds to the first touch input, so if while we are writing we accidentally touch the board with another object, or even someone else touches the board, it will not respond, it will continue to respond only to the first input.



During single input mode, we can use more than one finger to zoom in/out gesture or to drag the background in search of more space "infinite slate".


3.3.6.3-. SELECT TOOL





When selecting an object, a menu appears on the base.

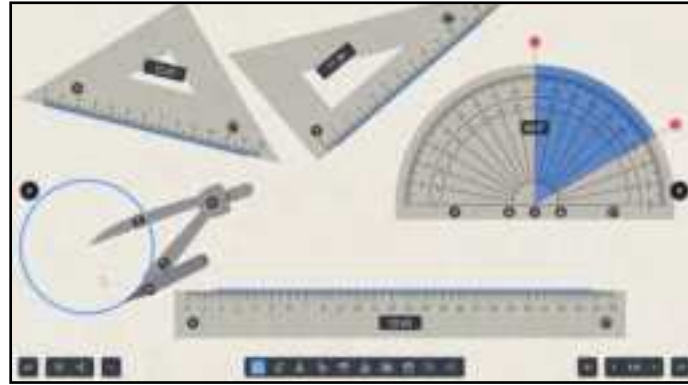


1	Delete	
2	Duplicate	
3	<p>Search: If it is a handwritten word, it will use the transcription system to interpret the word and search for it on the internet. We will be able to embed images or clippings from an internet page in the page.</p>  You can watch the video "Searching and embedding from Web - S-Write Whiteboard" here	
4	Invest	
5	Change colour	



3.3.6.4-. TECHNICAL DRAWING TOOLS

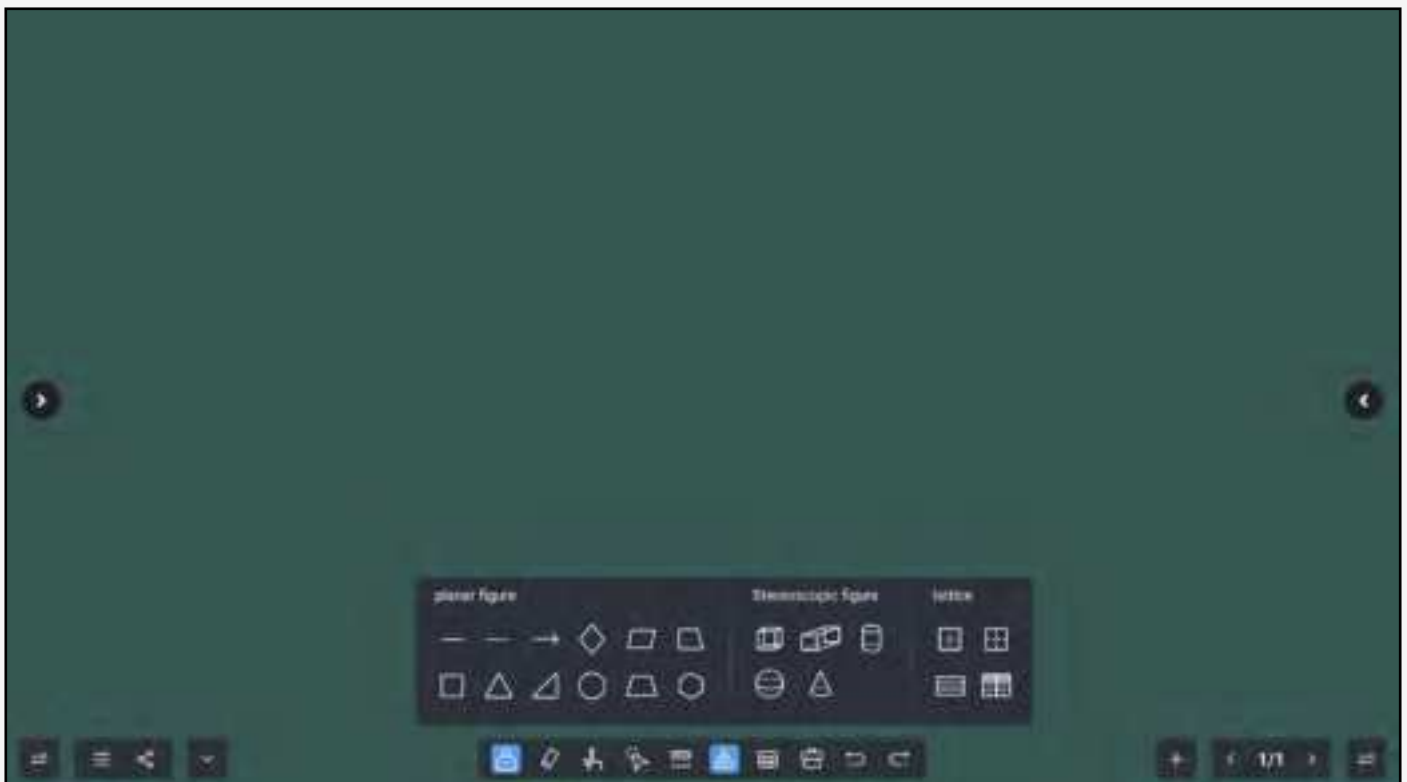
[You can watch the video "Technical Drawing Tools" here](#)



Procedure

- 1 We choose the pencil, type, thickness and colour.
- 2 **Select the tool and it will appear on the blackboard.** To move it, click anywhere on the tool except the millimetre space. To make a stroke we put the pencil just in the millimetre space.

Insertion of geometrical shapes, 2D and 3D



Inserting tables



Insertion of elements

From here we can insert various types of elements to our blackboard.

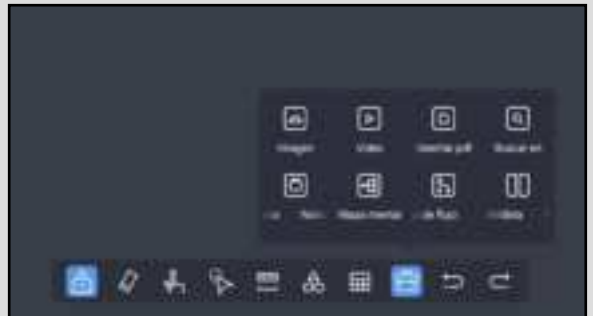
1-. Image and video*: These will be inserted in the whiteboard file, so that when we open it again from the S-Write whiteboard application, they will still be there.

***Only .mp4 videos**

2-. Sticky Notes

3-. Mental map

4-. Flow diagram



 [You can watch the video "Inserting S-Write Whiteboard elements" here](#)

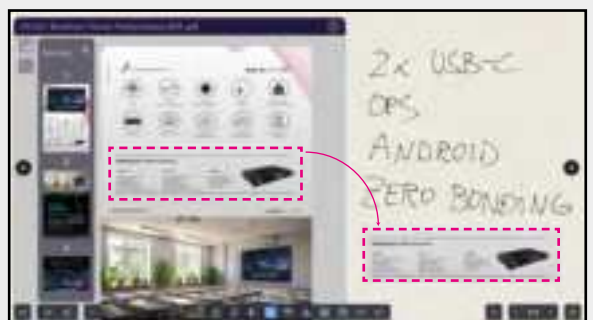


PDF insertion

In this case it is an overlay, the PDF is not inserted.

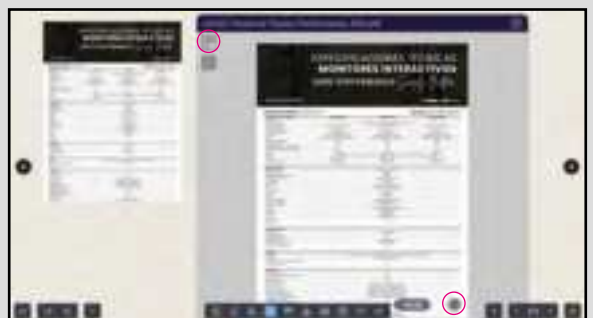
We can crop an area of the PDF and send it to the whiteboard using the crop tool from the side menu.

[See section 3.3.3-. Trimming.](#)



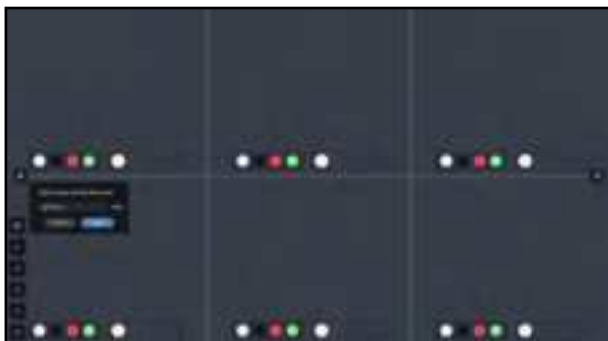
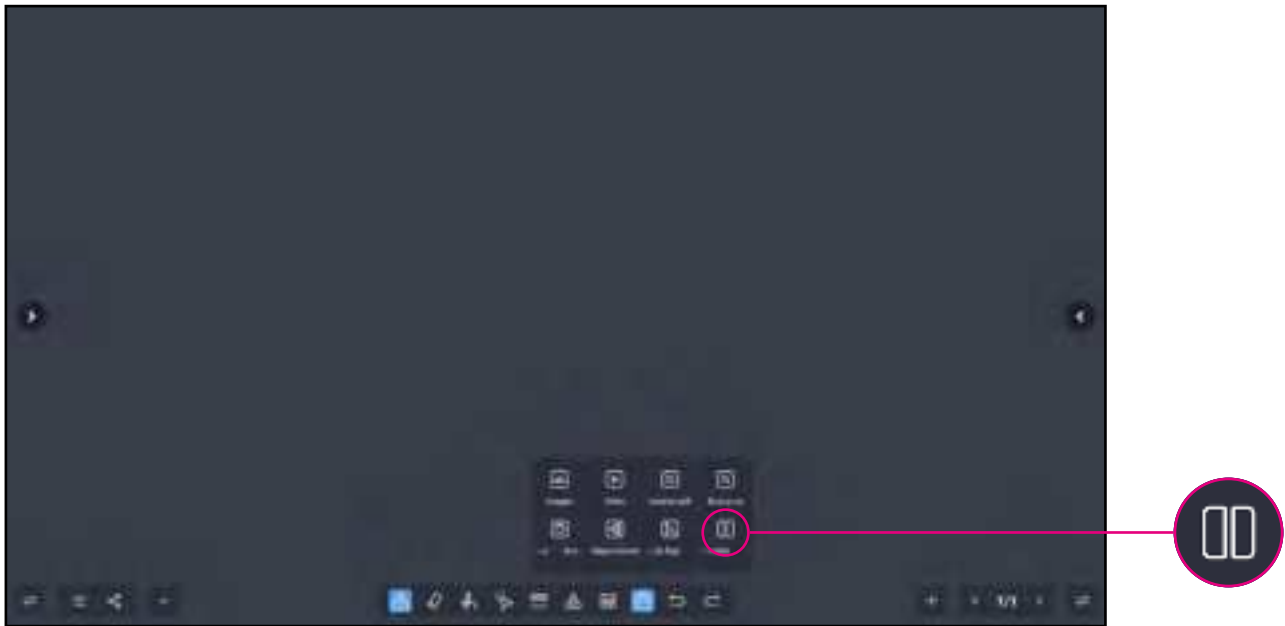
The preview tool will show thumbnails of the pages.

With the crop tool, in the PDF itself, we can send the whole page to the whiteboard.



3.3.6.6-. DIVIDED BLACKBOARD

In the same menu for inserting elements you will find at the end the access to the split blackboard.



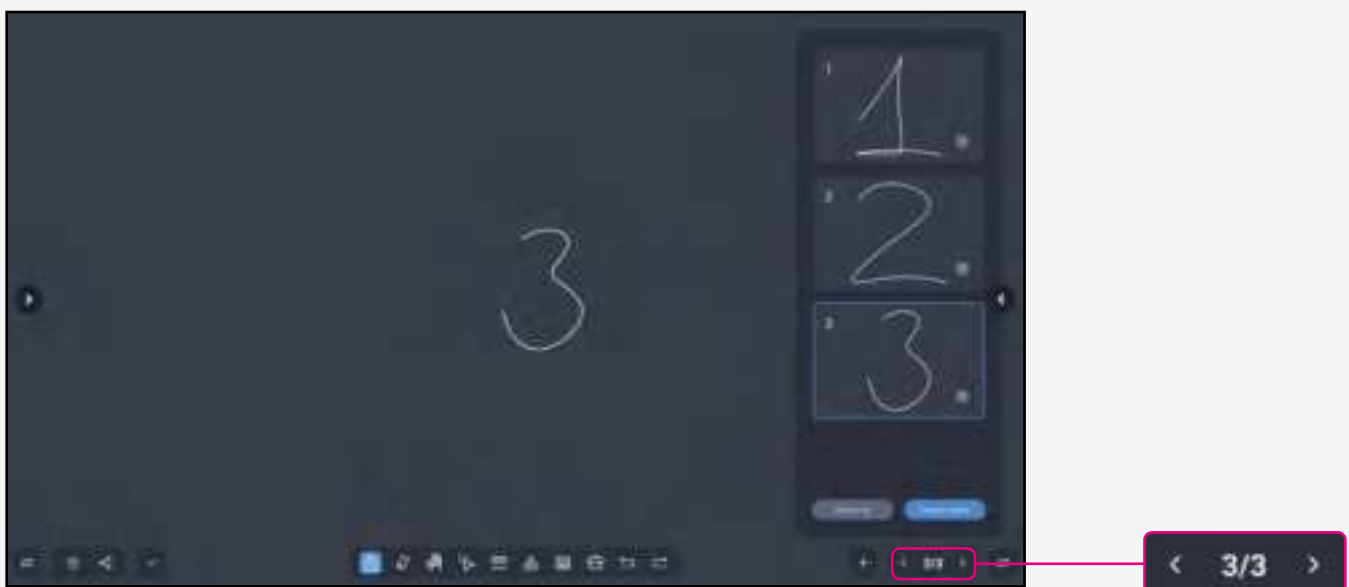
"Split screen" (split screen)

Generates up to 6 independent workspaces, allowing simultaneous writing and deletion if done in a different space.

In this case the whiteboard document can only be stored as an image.

3.3.6.7-. BLACKBOARD PAGES MENU

This menu allows you to add, move or delete pages.





3.3.7-. FILE EXPLORER

Accessible from the floating icon in the home menu.



From this explorer we have access to the files stored in internal memory, or on a USB key.

It will also open automatically when an external USB memory stick is inserted.

From the file explorer we can view the folder structure from the root, or filter by file type.



When you click on a folder or file for more than 2 seconds, it is selected, giving access to one of the following actions:



1	Paste
2	Copy
3	Cut
4	Delete
5	Change the name
6	Save to the cloud. See section 3.7 "Cloud".

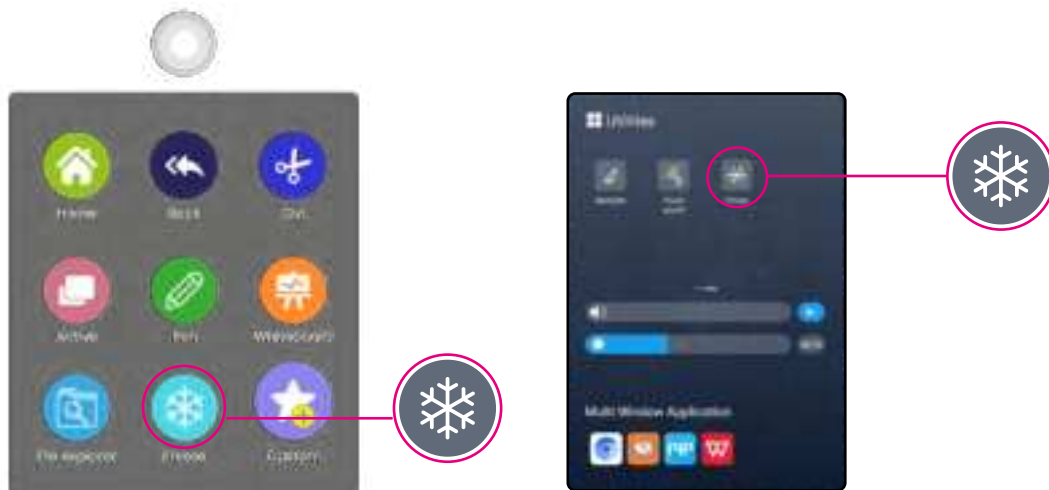
In case of using a USB stick we can eject it by clicking on the following icon:



3.3.8-. FREEZE

Accessible from the floating icon or side menu / utilities / page 2.

When you click on it, the projection stops. Very handy for preparing the next slide on your PC, while the audience is watching the frozen projection.

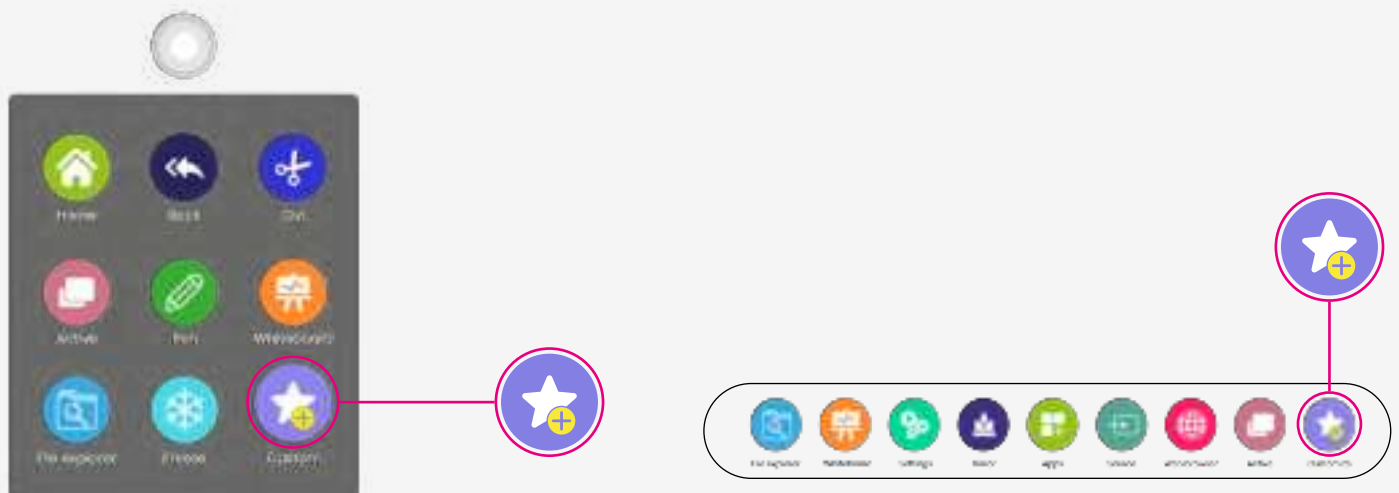


To defrost, slide the icon that appears on the upper band.



3.3.9-. FAVOURITES

We can configure up to 4 shortcuts from the floating icon, and 6 from the home menu.



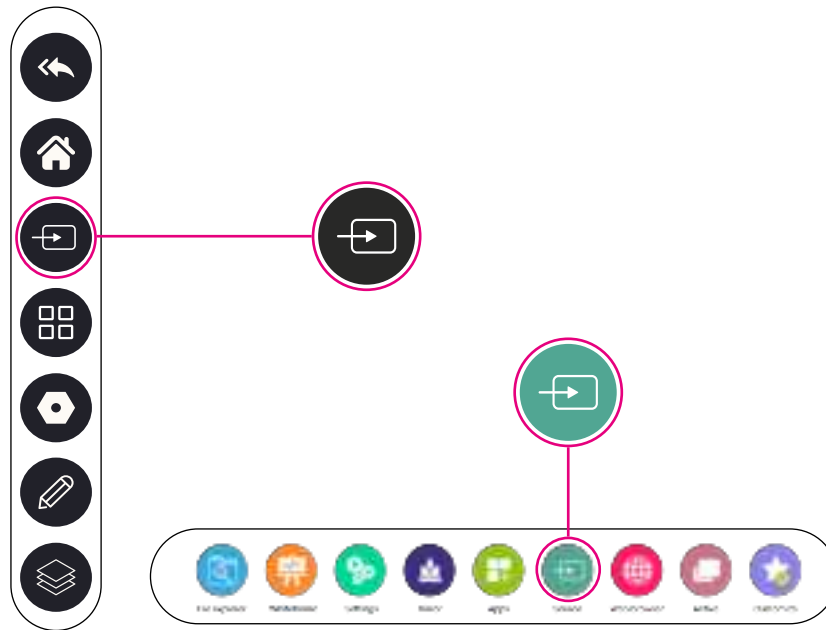
If we click on an access for more than 2 seconds, it will give us the option to delete it.





3.3.10-. INPUT SOURCE MENU

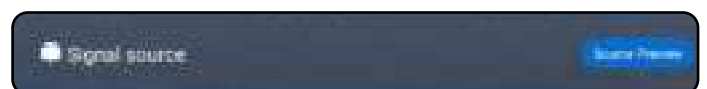
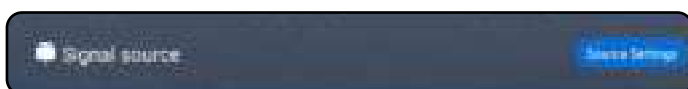
This menu is accessible from the side menu, home menu or with the front button.



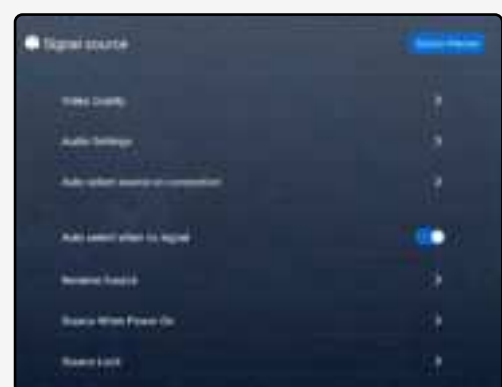
Inputs with a source connected will illuminate blue .

From here we can directly select the desired source, or go to the Source Settings menu:

To return to the previous menu click on the access.

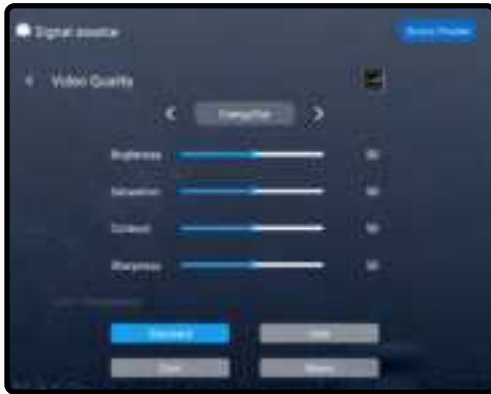


3.3.10.1-. INPUT SOURCES CONFIGURATION MENU



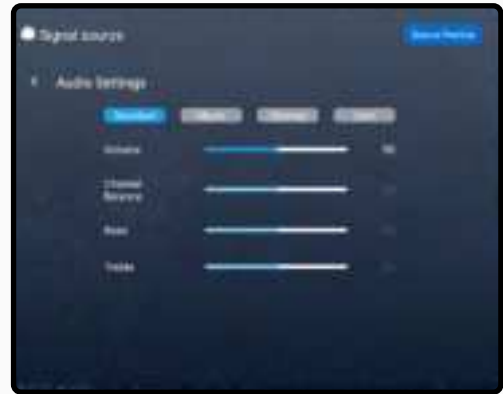
3.3.10.1.1-. VIDEO SETTINGS

Video settings, custom or pre-configured.



3.3.10.1.2-. SOUND SETTINGS

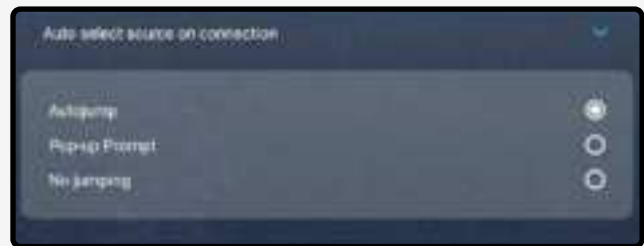
Video settings, custom or pre-configured.



3.3.10.1.3-. SOURCE SELECTION SETTINGS

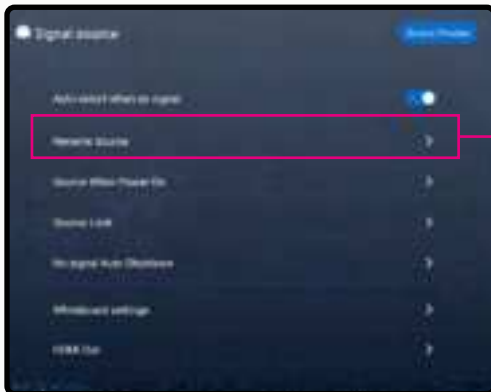
We select the behaviour for when a source is connected.

- Automatic gearbox
- A warning appears
- No effect



3.3.10.1.4-. RENAME FONTS

Allows you to rename input sources with a familiar name.



3.3.10.1.5-. SOURCE TO BE SWITCHED ON

Select the first source to be displayed at start-up.



3.3.10.1.6-. BLOCKING OF SOURCES

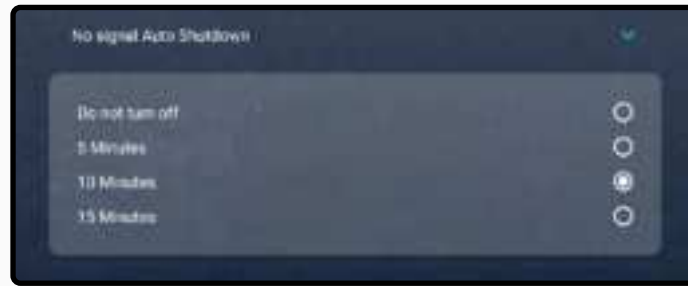
Locking fonts. Locked fonts will not be displayed when the font selection menu is displayed.





3.3.10.1.7-. CONFIGURATION WITHOUT INPUT SIGNAL

We set the behaviour when there is no input signal, between no shutdown or shutdown after a certain time.



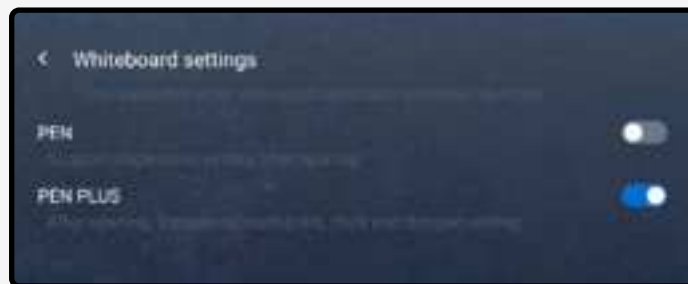
3.3.10.1.8-. SLATE SETTINGS

For this interactive display PEN and PEN PLUS have the same function, and define how the interactivity will behave when using external equipment, be it OPS modules or wired equipment.

IMPORTANT NOTE:

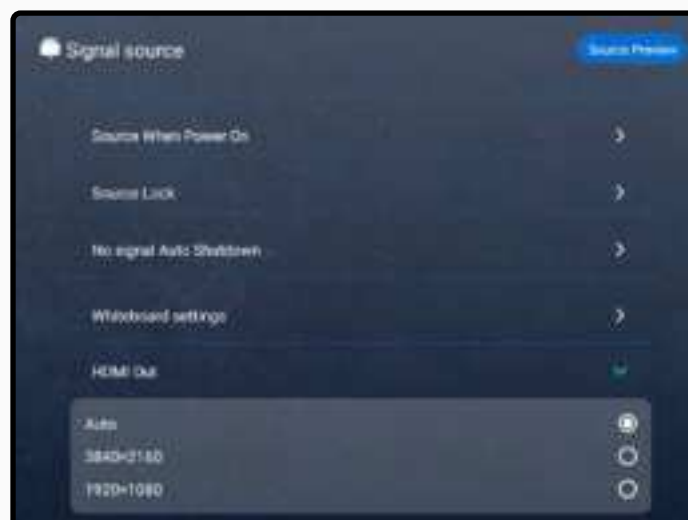
By default PEN PLUS is activated. This gives you Windows INK compatibility (fine tip writes, coarse tip or finger scrolls/gestures, palm erases) whether you are using an embedded Windows OPS PC or an externally connected one.

For the use of the Google EDLA Traulux OPS we recommend to deactivate PEN PLUS, which will give a better touch performance.



3.3.10.1.9-. HDMI OUTPUT RESOLUTION

This setting will allow us to adapt the output to the audiovisual infrastructure that we have connected to the output. Some monitors, matrices, mixers, cables, converters, etc, are not compatible with 4k, in which case we will have to reduce the resolution to Full HD 1080P.

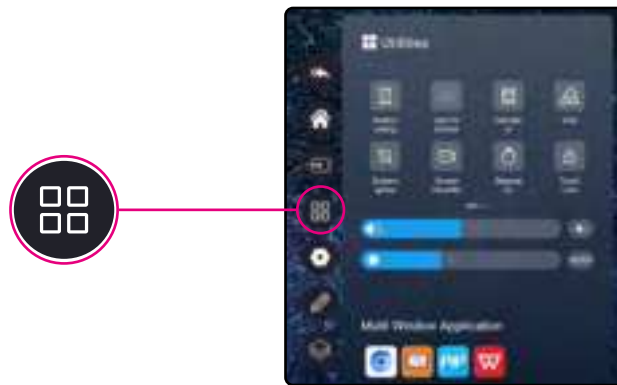


3.3.11-. UTILITIES MENU

Accessible from the side menu.

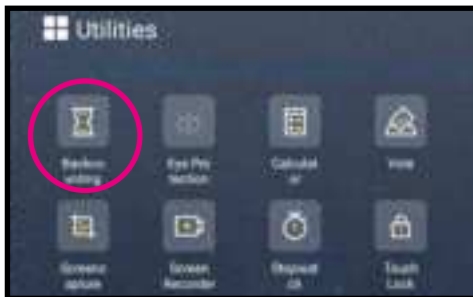


[You can watch the video "Menu utilities" here](#)



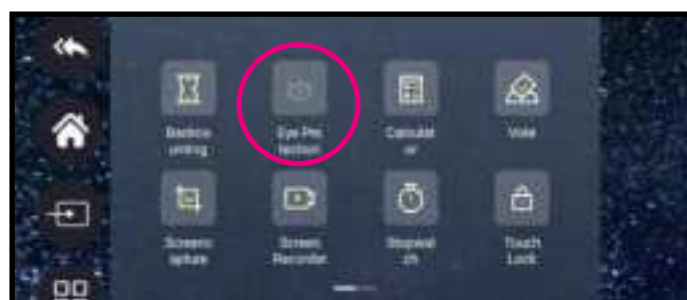
3.3.11.1-. COUNTDOWN

Select a date and a countdown will be set and can be placed anywhere in Home

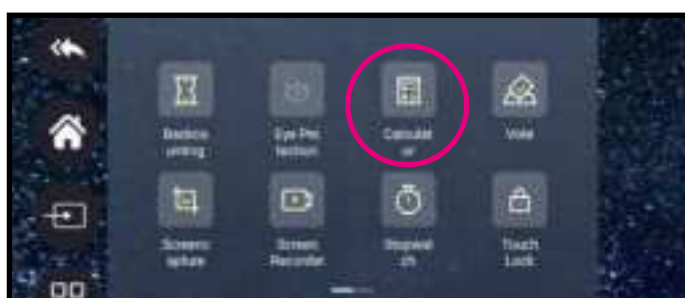


3.3.11.2-. EYE PROTECTION (BLUE FILTER)

Each click changes the overall tone from cooler to warmer, 3 tones in total. The warmer tones are more suitable for more relaxed viewing, especially at dusk.



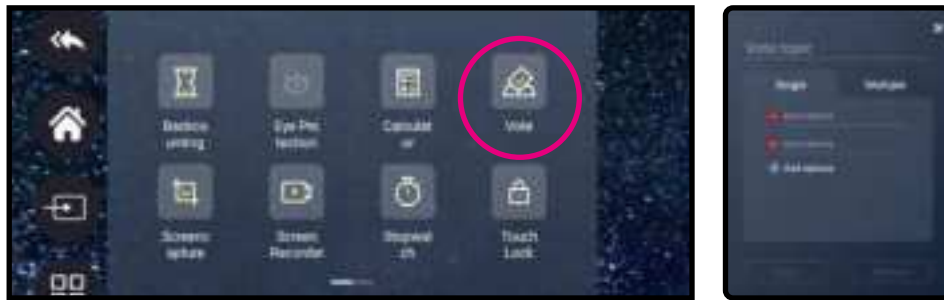
3.3.11.3-. CALCULATOR





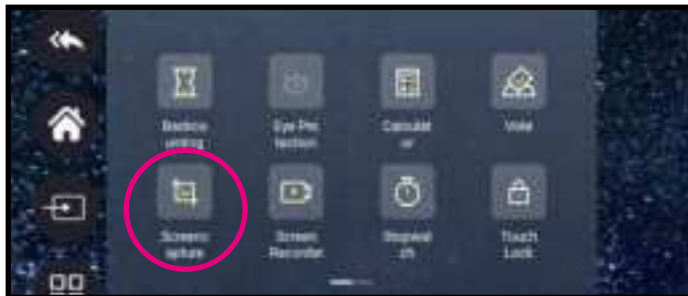
3.3.11.4-. INTERACTIVE VOTING

We can send surveys to mobiles or tablets, which can be single or multiple response. By means of a QR code the devices are linked to the survey. At any time we can see the result with hits and misses.

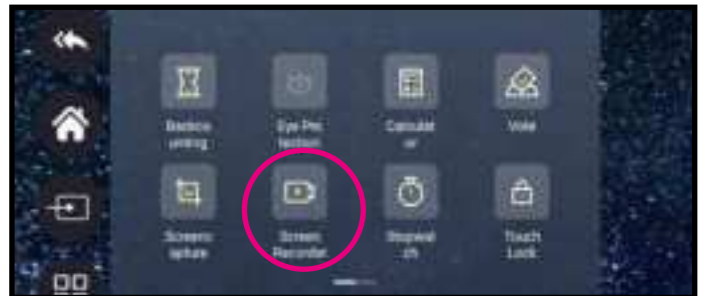


3.3.11.5-. CUTTING

[See section 3.3.3-. Trimming.](#)

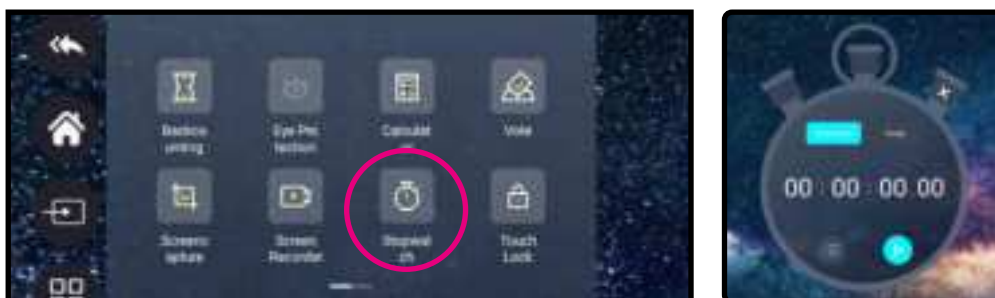


3.3.11.6-. VIDEO CAPTURE - DESKTOP



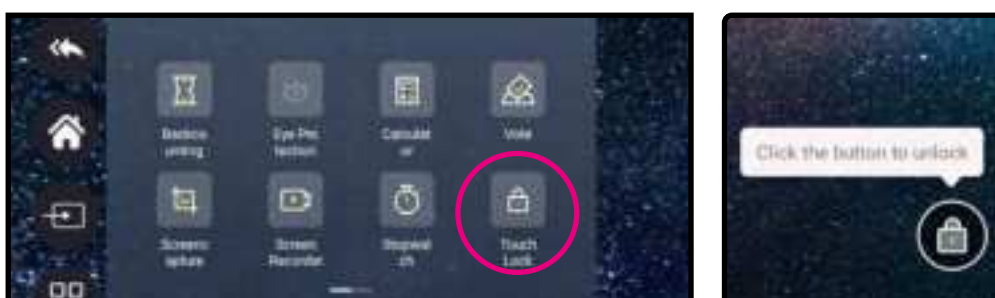
The videos will be stored in the folder **local/recorder/mp4**

3.3.11.7-. STOPWATCH OR TIMER



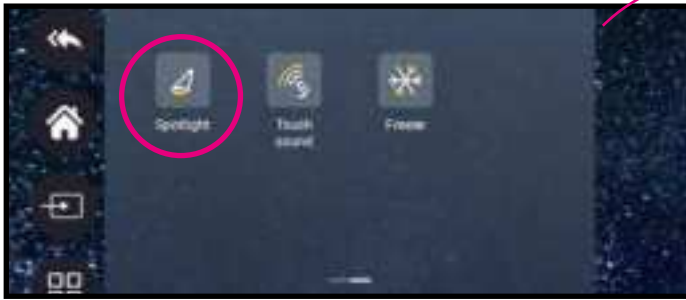
3.3.11.8-. TOUCH LOCK

Unlocking shall be done by means of an access at the base, on the right hand side.



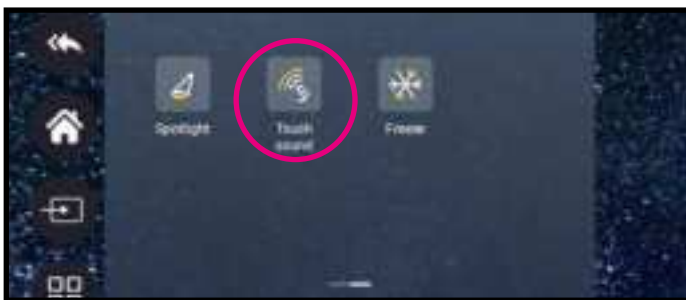
3.3.11.9-. FOCUS

A tool to focus attention on a particular place.



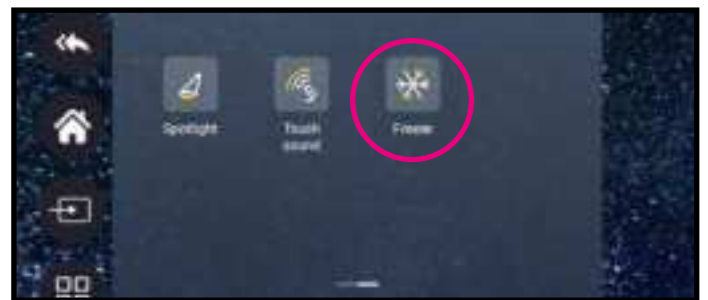
3.3.11.10-. TACTILE SOUND

Enables / disables the tone that plays when you click.



3.3.11.11-. FREEZE

[See section 3.3.8-. Freeze.](#)



3.3.11.12-. TOUCH ADJUSTMENT OF VOLUME AND BRIGHTNESS

The auto position, in the brightness setting, will adapt the intensity to the detected light conditions by the front sensor.



3.3.12-. MULTI WINDOW



[You can watch the video "Multi window" here](#)

The multi-window functionality is one of the main attractions of the Performance series.

Thanks to its powerful processor, it is capable of displaying 4 windows simultaneously, which can be distributed anywhere or fixed in one of the quadrants.

You will find the access in the side menu / utilities.



1

Open the chromium browser in windowed mode



2

Open the whiteboard in windowed mode



3

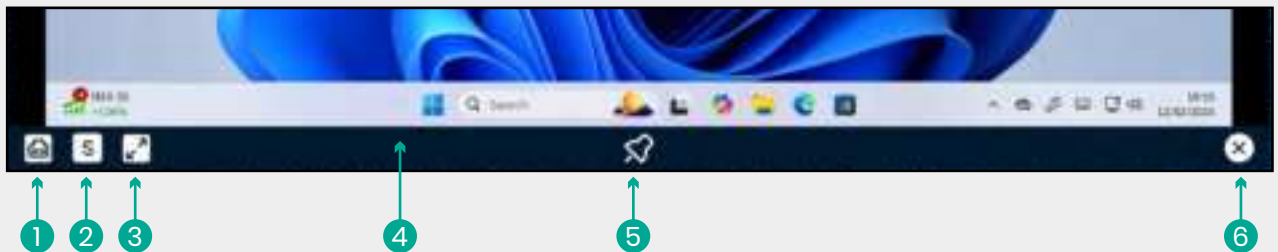
Opens an external source in windowed mode (PIP).

We can choose from all sources.



4

Opens an office document in windowed mode.



Window options



1. Source change (PIP only)



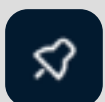
2. Change of size



3. Full screen



4. Dragging from the base moves the window.



5. Fix the window: When it is fixed, it will always be visible, even if we are in an external source. We will still be able to interact with this window.

In the case of the whiteboard, in windowed mode, we will be able to annotate on it, something especially useful if we want to take notes while showing any other content, even if it is an external source or OPS.



6. Close



Distribution of windows

We can drag the windows to distribute them

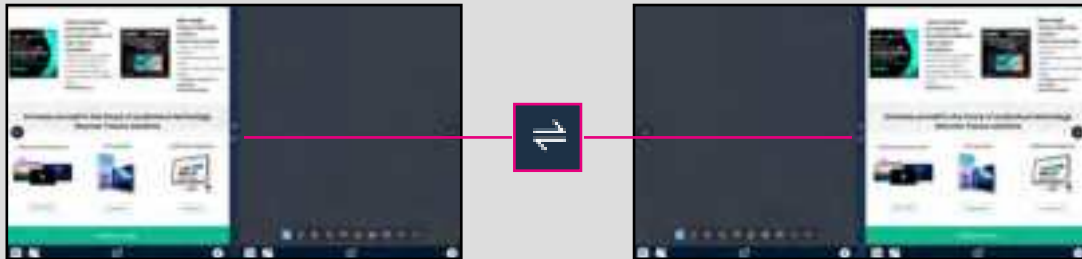
Dragging them to the edges will fix them to the sides or corners, as Microsoft Windows does.

For example:

- 1-. Open web browser and whiteboard by clicking on their multi-window icons.
- 2-. Drag the web browser window to the left-hand side, until a box indicates that it will be fixed.
- 3-. When we release the web browser window, the two windows will be arranged as shown in the image, one in each half.



Now we can swap sides by clicking on the swap icon.



Or change the size by moving the dividing line by clicking on the icon to give more prominence to the blackboard or the website.



If we open three windows we can leave them arranged as in image 1 and if we open all four, we can leave one in each corner as shown in image 2

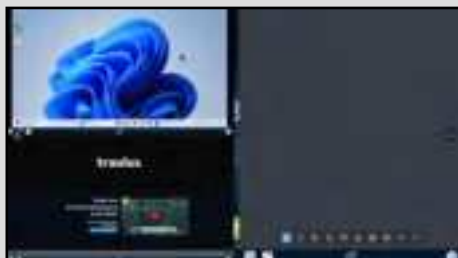


Image 1



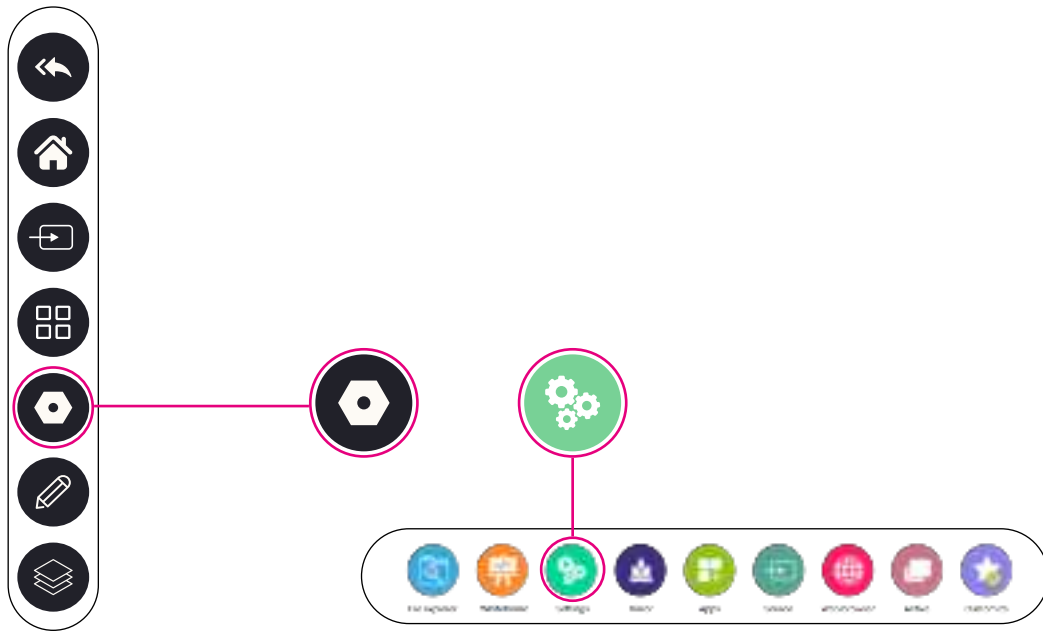
Image 2

The interactivity will be re-scaled in each case according to the size of the image, in order to be able to continue interacting with the apps and/or external source.



3.3.13-. CONFIGURATION MENU

Accessible from the side menu or the home menu.



3.3.13.1-. NETWORK CONFIGURATION

Wireless: The MAC of the WiFi will be shown directly (image 1).

We can add a hidden wireless network manually by clicking on the + sign, choosing the type of encryption, or simply choose one of the available networks shown in the list (image 2).



Image 1

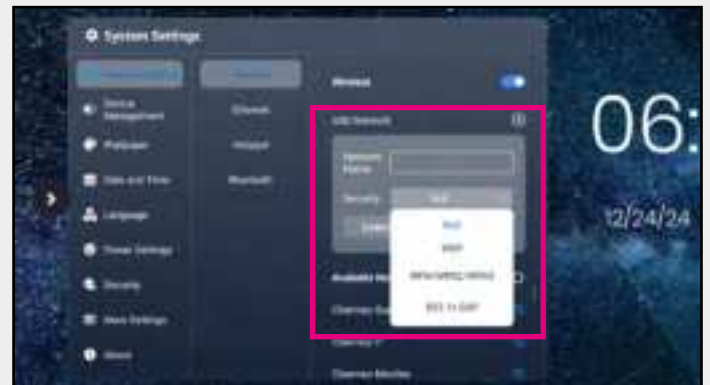
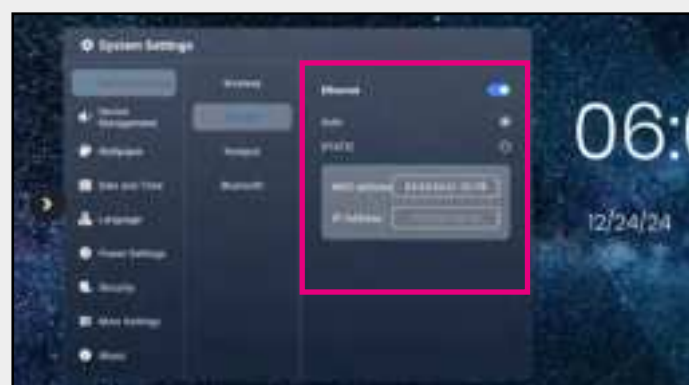


Image 2

Wired LAN network configuration: We set whether it is an automatic or static network with its MAC address and if IP.





3.3.13.2-. HOT SPOT (SHARED ACCESS POINT)

This function allows us to generate our own wifi network that we can activate at any time.

Note: To use the USB-C dongle it will be necessary to activate the hot spot first. [See section 3.4.5-. Eshare PRO Dongle.](#)

We can choose the name, password, frequency and channel, to achieve the best possible coverage.



3.3.13.3-. BLUETOOTH

For linking peripheral devices such as keyboards, mice, speakers, etc... The name can be edited.



3.3.13.4-. DEVICE MANAGEMENT

AUDIO INPUT: Indicates the audio devices connected and recognised.



We can choose to use them in apps, or disable them.

USB CAMERA: Connecting a compatible USB camera to one of the USB-A ports will display the camera with its part number.



This camera can be used on a laptop whether it is connected by cable or wirelessly using the "Camera sharing" function and you can choose that camera in the active video conference. In the case of connecting several cameras from here we can choose the one that will be shared.



3.3.13.5-. WALLPAPERS (WALLPAPER)

From this section we manage the welcome or home screen background images.

Add wallpaper: We can add images to be available as Home wallpaper.

- Clicking on the plus button takes you to the image folder, although you can switch to any other folder.
- By holding down the image for 1 sec. and then clicking insert, it is added to the list of available images. Only one image can be added at a time.
- Subsequently, by clicking on an image in the list, it will be set as the Home wallpaper.
- Pressing and holding one of the images allows you to delete it.



3.3.13.6-. WALLPAPER SHUFFLING (WALLPAPER SHUFFLING)

Allows you to program the automatic playback of wallpapers, and time intervals.

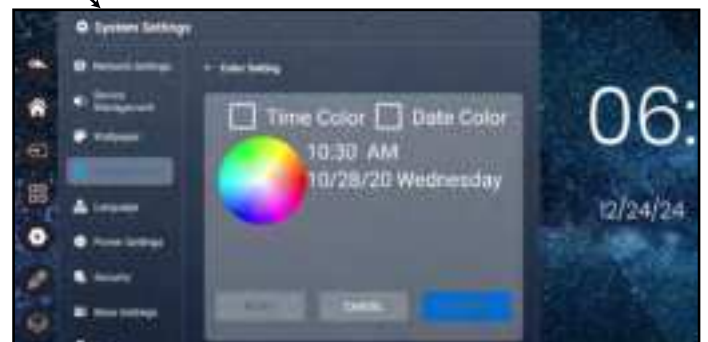
Setup carousel wallpapers:

- We choose the images to be displayed in the background autoplay, preloaded or added.
- To select click on the image, a green frame will indicate that it has been set for autoplay.
- A second click undoes the selection.



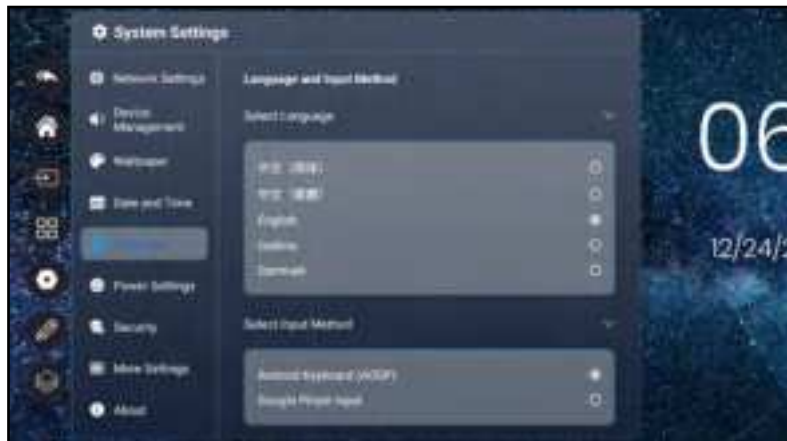
3.3.13.7 -. DATE AND TIME

From here we access the classic date and time settings that will be displayed on the HOME welcome page. We can hide this information, or choose the colour. The "Colour setting" will allow us to choose the date and time colours that best suit the chosen Home background image.





3.3.13.8-. LANGUAGE AND KEYBOARD



3.3.13.9 -. POWER SETTINGS, POWER ON AND OFF

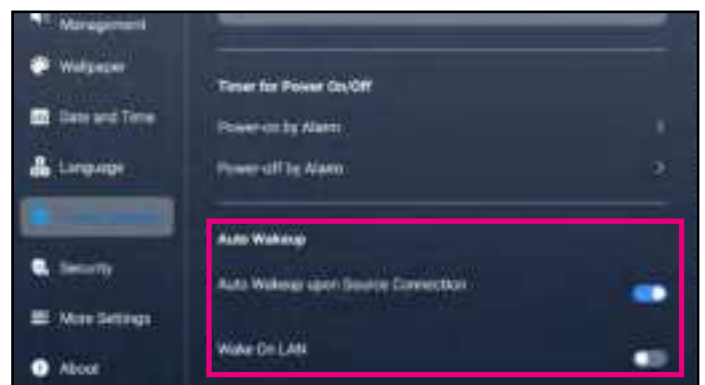
From here everything related to switching the monitor on/off is set:

- **Inactivity shutdown:** The equipment will shut down completely after the programmed inactivity time.
- **Power On:** Always turns on in the same channel that was closed, e.g. ops.



On and off routines: Here we can set times during the week for the computer to start up automatically. The menu is the same for both start-ups and shutdowns.

Auto wake up / Wake up LAN: From here we set whether we want the monitor to start up only when a source is connected and/or the remote switch-on via the network "Wake On Lan".



3.3.13.10-. SECURITY

Access to all security and locking-related functionalities.

We set the desired configuration to access the functions of the embedded Android after start-up.

- **Remote block:** Block the remote control.
- **Button Lock:** Locks the front keypad except power.
- **USB Lock:** Locks the USB inputs.



3.3.14-. OTHER CONFIGURATIONS

3.3.14.1-. FLOATING ICON CONFIGURATION

"**Float Bar:** Choose whether the floating icon is displayed. If we choose to display it, it gives us two more options:

- That it always shows
- Displayed only when clicking for more than 2 seconds with two fingers.



3.3.14.2-. "SMART EMBELLISH SCREEN" SCREEN PROTECTION

Screen protection mechanism: We can program the time interval between protection and protection (during protection it projects a mosaic of frames for one second).

Prevents problems such as residual images, watermarks, etc., when the same still image is projected for a very long time. **We advise not to deactivate it.**

3.3.14.3-. "SIDE BAR GESTURE SWITCH" SIDE MENU SWITCH



If we activate this function, the side icons will disappear: In this case we will have to drag from the edge inwards, on either side, so that the side menus appear.



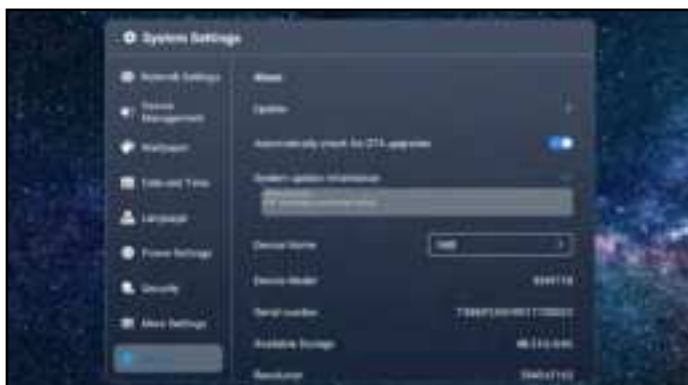
3.3.14.4-. "SELECT LAUNCHER BROWSER" BROWSER SELECTION

Select the web browser that will be opened by clicking on the access in the main menu.
Firefox by default or Chromium.



3.3.14.5-. FIRMWARE UPDATE

In the about section of the configuration menu, you will find the update options and information on the new features of the latest firmware installed.



System network upgrade: For an *OTA "Over The Air"* update, which means over the network, click on the "System network upgrade" option.

It should be noted that the update can take between 1 Gb and 2 Gb, so it is advisable to connect the interactive via cable and above all not to stop the process.

This type of update preserves the configuration and documents stored on the equipment.

To ensure maximum performance of the equipment, it is highly recommended, at least after the first start-up, to check whether an update is available.

Local upgrade "System local upgrade": For a local upgrade, click on "System local upgrade".

This option is used for environments where the internet connection speed is not reliable enough and cannot guarantee an uninterrupted download.

To update it we will have to send you the firmware file.

If you have any problems during the update, or need the local firmware, please contact us at info@traulux.net and we will get back to you as soon as possible.



3.3.15-. ABOUT: FACTORY RESET

From here you can access all device information, as well as the "**Factory reset**" function. Please note that the **factory reset** process will erase all settings and documents stored in the internal memory.



3.4-. MIRRORING (WIRELESS PROJECTION)



[You can watch the video "Mirroring" here.](#)

Integrated wireless projection system.

The pre-installed **EsharePRO** application provides the ability to project from mobile devices up to 9 simultaneously, do reverse projection from monitor to device with the ability to interact, send documents from the device to the monitor or even use the mobile device as a remote control.

Compatible with Android, MAC OS - iOS, Linux, Windows and Chrome.



On Windows PC and MAC O.S. the device can be controlled from the monitor, i.e. the wireless touch feedback is integrated.



3.4.1-. DETAIL OF THE FUNCTIONALITIES

Mirroring: Mirror the screens of devices (iPhone, iPad, Android, MacBook, Chromebook, Windows and Ubuntu) on the interactive monitor to view, and in some cases control them, without the need for cables.
File casting (file casting): Share any file (such as audio, video, photo, office document, PDF, etc.) from mobile phones or tablets to the interactive.
Remote Control: Wireless control function via wireless mouse, infrared mouse, keyboard, touchpad and remote control, etc.
Camera: Transmits the camera and microphone to the interactive in real time.
Wireless Annotations: Annotate the interactive with client applications in real time.
TV Mirror: Duplicates the screen of the interactive on several mobile devices. In addition, control of the interactive can be taken from the device.
Multiple Screens: Simultaneously transfers the screens of several devices to the interactive, which will be accumulated in a split screen.
Display Group (display grouping): Duplicate projection to other interactives running the same EsharePRO application and connected to the same network and range.
Moderator Mode: The moderator can determine on which devices mirroring, TV Mirroring, annotations, etc. can be done.
AirPlay: Compatible with the AirPlay function of Apple devices.
DLNA: Supports any App compatible with DLNA protocol.
Miracast: Supports screen projection and touch response for Windows laptops or Android phones that support the Miracast protocol.
Chromecast: Compatible with Google Chrome browser, ChromeOS devices, Youtube app and Android phones to project the screen.
WebCast: With WebCast enabled, users can share screens via a web browser on the laptop without having to install an App or be on the same network.

3.4.2-. NETWORK REQUIREMENTS AND NETWORK CONFIGURATION

Ports: This information may be useful for advanced configurations, enterprise networking or troubleshooting.

EShare on your network use the following ports	Type	Service or protocol	Used by
80/443	TCP	Hypertext Transfer Protocol (HTTP, HTTPS) Destination: casts.app gw.casts.app h1.ee-share.com	WebCast
1900	UDP	Simple Service Discovery Protocol (SSDP)	Bonjour
51010-51060	TCP	EShare Proprietary	EShare Apps, AirPlay
8121, 57395, 8080, 52025, 8600	TCP	EShare Proprietary	EShare Apps
48689	UDP	Device Discovery	EShare Apps
5353	UDP	Multicast DNS (MDNS)	Bonjour, AirPlay
10000-65535	UDP	DTLS	WebCast

If you have any questions please contact us at info@traulux.net



3.4.2.1- . BANDWIDTH USED

Mirroring (from laptop or BYOD to interactive): The maximum speed can reach 30 Mbps, but the average speed is much lower. For a reliable user experience, it is recommended to connect the interactive via Ethernet and the laptop/BYOD via the 5GHz Wi-Fi band.

TV Mirror and Display Group: The average bitrates of each TV Mirror or Display Group connection are 4 Mbps, bandwidth should be reserved accordingly. For example, in case there are 40 iPads or Laptops in the classroom using TV Mirror, $40 * 4\text{Mbps} = 160\text{Mbps}$ of local traffic bandwidth is required.

WebCast: The average bit rate of each WebCast connection is 4~5 Mbps. It is recommended to reserve a constant bandwidth of 5 Mbps for each WebCast Mirroring.

Network configuration:

For transmission to be possible the mobile device and the monitor must be connected to the same range of the local network except in the following cases:

- Webcast. [See section 3.4.3.4- . Web Cast.](#)
- Using the USB-C dongle (optional accessory) [See section 3.4.5- . Eshare PRO-DONGLE.](#)

The local network can be configured:

1-. By structured LAN cable: The interactive and mobile devices (in this case usually desktops) can be connected to the wired network. As long as they are in the same range, projection is possible.

interactive over LAN, WiFi mobile device: As long as it is in the same range, projection is possible.

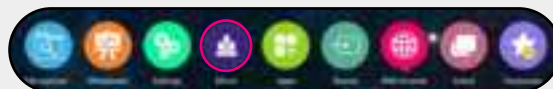
3-. Interactive by LAN + Hot Spot: We can generate a Hot Spot* to share with the devices we want to project. In this way we avoid that these devices, probably visitors or students, must connect to the same network as the monitor. We can activate, set the network name and password only in case we want to share.

The frequency and transmission channel of the Hot Spot can also be configured. In this case the internet output via LAN will be shared to the mobile devices * [See section 3.3.13.2- . Hot Spot \(Shared Access Point\).](#)

4-. Use of dual band WiFi: In this case the interactive is connected to the local WiFi and generates a hot spot* so that mobile devices can project. For the rest it will work in the same way as in the previous configuration, sharing the internet output, which in this case will be via WiFi, to the devices connected to the Hot Spot. * [See section 3.3.13.2- . Hot Spot \(Shared Access Point\).](#)

3.4.3- . APPLICATION IN THE INTERACTIVE

EsharePRO is accessible from the main menu:

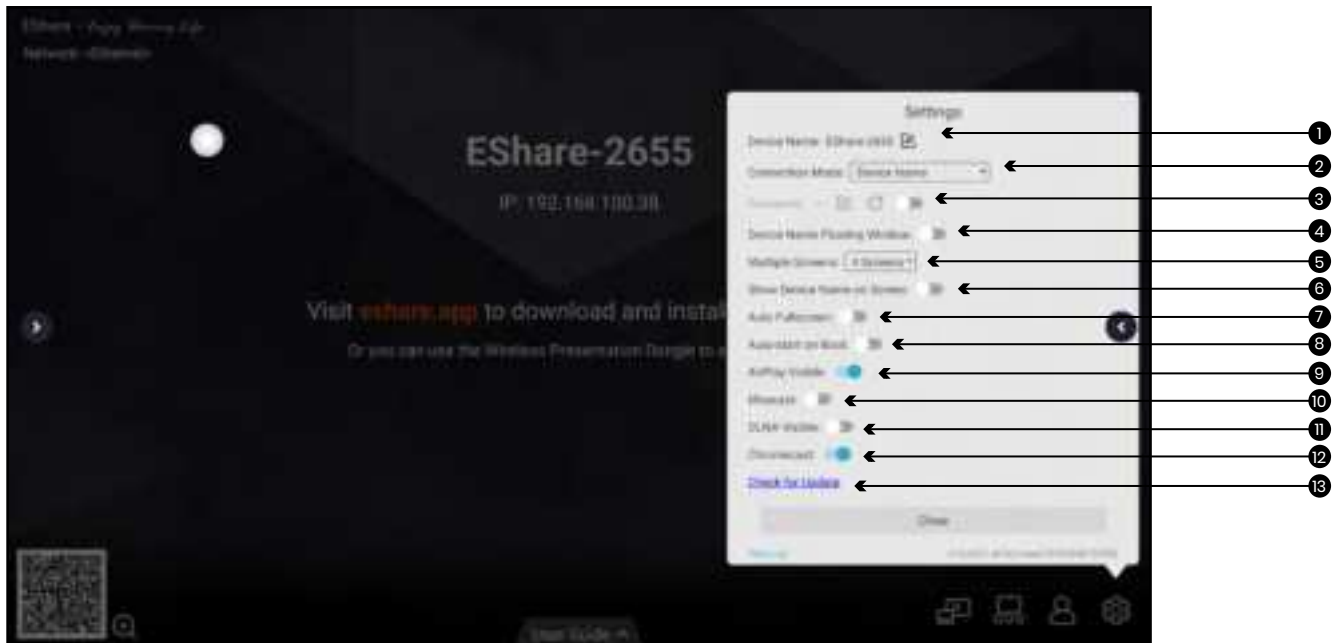


Clicking on the Mirror icon will display the welcome menu. As shown in the image, the ESharePro home page will display the network name, QR code, device name, IP address, quick guide, etc. At the bottom right, there are the three main options of the display group, *Moderator*, *Control Centre* and *Settings*. In the "User Guide" tab, we can display the guide with the basic instructions.





3.4.3.1-. CONFIGURATION

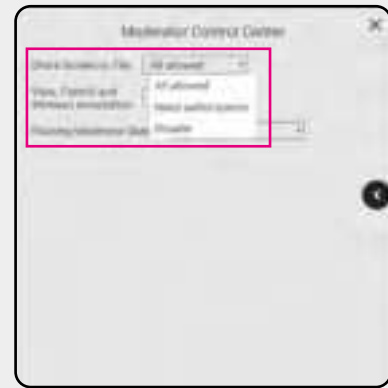


1	"Device name" Name of the monitor that will be visible on the devices as a receiver.
2	"Connection mode: By default, by simply clicking on the name of the receiver that will appear on the mobile device, the projection will start.
3	Password: A password is set which will be requested on the mobile device before the screening.
4	Display name in floating window.
5	Multiple screens: Devices, as they are connected and projected, will be displayed up to a limit that is set with this function.
6	Display the name of the device on the screen.
7	Auto full screen" will fill the monitor screen when the format of the transmitting device does not match that of the monitor (this will distort the aspect ratio of the original image)
8	Auto start on Boot: Activates the system after the boot process.
9	Airplay Visible: Here we can deactivate / activate the "AirPLAY" receiver (Apple's native projection system)
10	Miracast Visible: Here we can deactivate / activate the Miracast receiver, the native projection system of Microsoft and Android. Note that in this mode the hot spot will be disabled. The connection is a direct link so it is not necessary to be in the same network and range.
11	DLNA Visible: For the use of compatible services.
12	Chromecast Visible: Here we can deactivate/activate the Chromecast receiver (Chrome OS native projection system)
13	Search for updates.

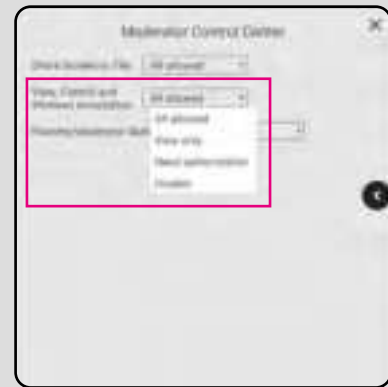


3.4.3.2- . MODERATOR MENU

In this menu we can configure the moderator mode: "Share screen or File" We set whether it is possible to project, share files, or whether prior authorisation from the moderator is required.

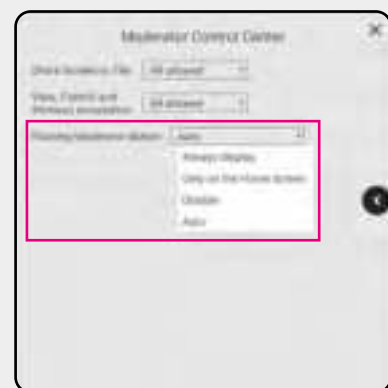


"View, Control and Wireless Annotation": This refers to the reverse projection mode, i.e. the monitor is projected onto the PC or mobile device. Here we can set whether it can only be viewed, whether it can also be controlled, or finally whether it can be controlled, but with the prior authorisation of the moderator.



"Floating moderator button: Enables or disables the floating moderator mode shortcut. The moderator shortcut can be configured to be always present, only in Home or never present

From the device list itself, in the moderator menu, we can select the devices we want to see. In addition, we can also unlink them or activate/deactivate the remote control in case of reverse projection (TV Mirror).



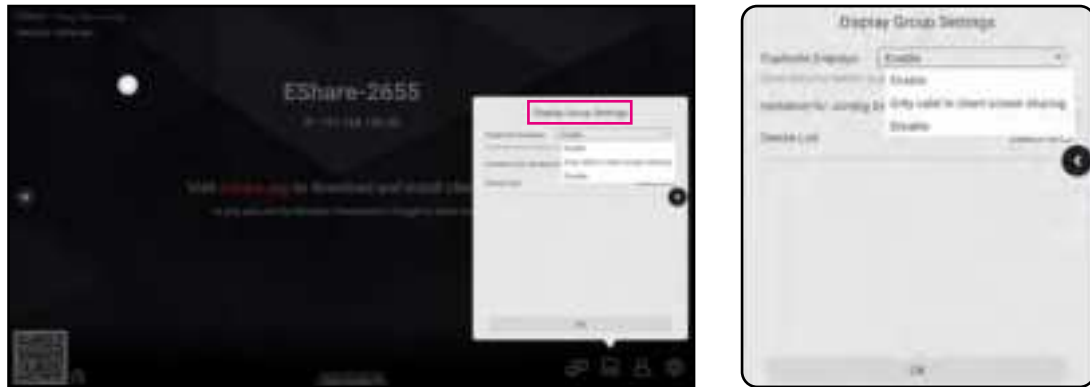


3.4.3.3-. DISPLAY GROUP SETTINGS

Projection to other TRAILUX interactive monitors (not compatible with the Standard series): Here we can set the projection to other **interactives** to be direct, with acceptance or disabled.

From here we can see the list of Traulux interactive monitors, with EsharePRO, that are connected to the same Network and same range. By selecting one or more, the same image will be projected on them*

**No interactivity or sound is replicated.* A confirmation message will be displayed on the receiving monitors before projecting.



Invitation options:



Self-accepting: Other screens can share their screen with this screen without any permission.

Notify me: You will see a dialogue box when your screen is invited to join the group, and other screens will be able to share their screen with this screen only when you allow the invitation.

Disable: All screen group invitations will be automatically rejected.



3.4.3.4-. WEB CAST

With the WebCast function, you can cast the screen by entering the ID in the browser without having to download and install the application. You also do not need to be on the same network.

It is compatible with Windows, MacOS, Ubuntu, Chrome OS, etc. Recommended browsers are:

Windows: Google Chrome, Microsoft Edge,

MacOS 10.15 and later: Apple Safari, Google Chrome

Chrome OS: Google Chrome

Ubuntu: FireFox, Google Chrome

Note: WebCast does not work with mobile phone browsers. Touch response does not work with WebCast.

Procedure:

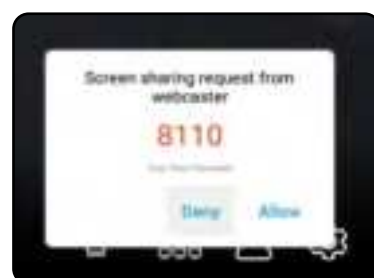
Activate Web Cast in the interactive



- 1.- Visit "**casts.app**" with your laptop's web browser and enter your WebCast ID shown in the interactive.

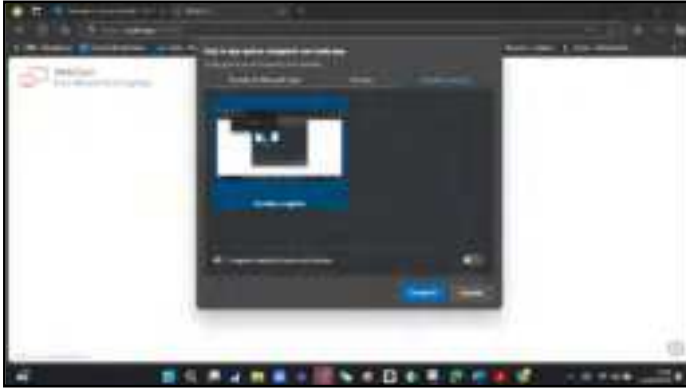


- 2.- **Enter** the one-time password displayed in the interactive or click the "Allow" button in the interactive to establish a WebCast connection. The moderator can allow or deny your request.





3.- The screen sharing content selection dialog **will appear** , you can choose "Full Screen", "Window" or "Chrome Tab", and check the "Share System Audio" option. Then click the "Share" button to start streaming.



3.4.3.5-. PROJECTION VIA NATIVE PROTOCOLS

If the Airplay, Miracast, Chromecast and DLNA applications are activated via the corresponding switches on the configuration page, these streaming protocols can be used.

3.4.4-. APPLICATION OF THE DEVICES

3.4.4.1-. DOWNLOAD WEBSITE

<https://eshare.app/#once>



3.4.4.2-. ANDROID - IOS

Make sure the mobile device and the interactive device are connected to the same network.

Connection modes:

"Device Name" (default setting): Launches the EShare application to automatically discover the interactives that are on the same network, and then selects one to project onto it.

"PIN code (6 digits)/PIN code (8 characters)": Launch the EShare app and enter the PIN code to connect to the interactive.

Enter IP to connect: Enter the IP address of the receiving device to connect.

Scan the QR code to connect: Launch the EShare application and scan the QR code to connect.

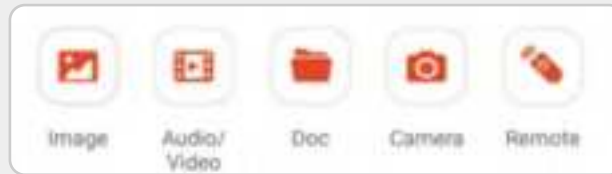


File sharing:

Image: select any image to share in the interactive.

Audio/Video: select any audio/video to share in the interactive.

Doc: select any document (Word, PPT, Excel, TXT, etc.) to share in the interactive.



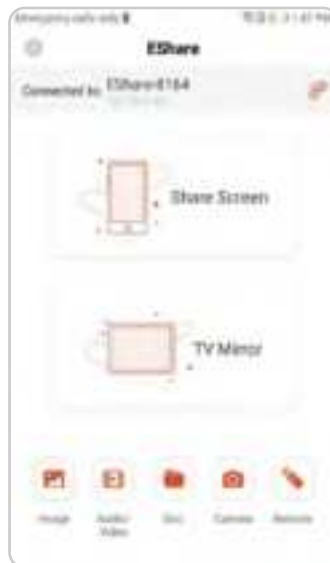
Storage: Tap "Storage" in the top right corner of Doc's sharing page to launch wireless storage, and visit the URL displayed on mobile devices to upload files to or download files from storage.



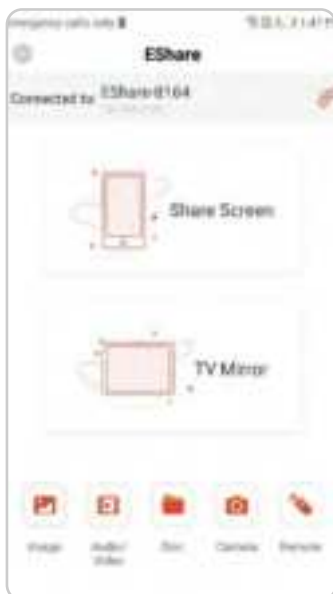


Screen sharing:

Android: Click on "Share screen" to share screen with the big screen.



IOS devices: Tap "Screen Sharing" and follow the instructions that appear to project your screen in the interactive.



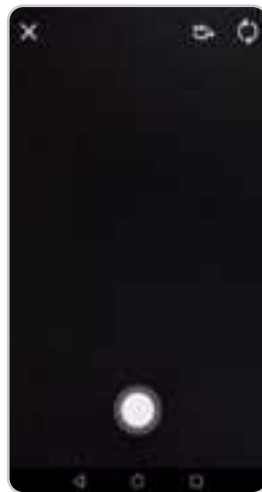
Full-Screen: Press the **Full-Screen** button to display your screen in a unique way in the interactive.



TV Mirror: Click "TV Mirror" to mirror the interactive's screen to your mobile device (BYOD) and tap to control. Tap "TV Mirror", then tap the writing pen button in the sidebar to start wirelessly annotating the interactive.



Camera: Tap "Camera" to share real-time photos, audio or video captured by your phone's camera and microphone on the interactive.



Remote control: Tap "Remote" to make your BYOD act as a wireless mouse, remote control, keyboard, air mouse, etc.



Download the application from: <https://eshare.app/#once>

Choose PC operating system / Connect PC to the same WiFi Network or use LAN and open.

Connecting to the interactive: Make sure that the Windows / MacOS / Chrome OS / Ubuntu client devices and the interactive are connected to the same network.

There are four connection modes:

1.-**Set "Device Name" as connection mode (default setting):** Launch the application and EShare will automatically search for interactives on the same network. Select the interactive from the list to project on it.

2.-**Set "PIN code (6 digits)/PIN code (8 characters)" as connection mode:** Start the EShare app and enter the PIN code to connect to the interactive.

3.-**Enter IP to connect:** Enter the IP address of the receiving device to connect to the interactive.

4.-**Select the device in the history list to connect:** Press the "Enter IP or PIN code to connect" input box and you will see the history list (if available). Select the device to connect to the interactive.



Screen sharing: Touch "Share screen" to share your PC screen on the interactive, and touch to control client devices from the interactive.



Extended screen sharing (for Win 10 1607 or later): For Windows users, you can click on "Source" and select "Extended Screen Sharing" to share only the second screen to the interactive.



Shortcut to the desktop for quick screen sharing: After connecting to the receiving device, click the "Shortcut" button (Windows only) to create a shortcut with the name of the receiving device.

Run this shortcut on your desktop for quick screen sharing to the specific interactive.



TV Mirror: Click "TV Mirror" to mirror the interactive's screen on the PC. You can take control of the interactive from the PC.





Wireless annotations: Tap "TV Mirror" and tap the writing pen button in the sidebar to initiate wireless annotations interactively from the PC.



Fullscreen: Fullscreen displays your screen exclusively on the interactive, closing the rest if any.



Mirroring Invitation: By clicking on "Mirroring Invitation" in Settings, we get the following options:

Accept automatically: Automatically accept the moderator's screen sharing invitation. When the moderator presses the "Share screen" button in the Moderator Control Centre, your PC screen will be displayed in the interactive.

Notify: When the moderator presses the "Share screen" button in the Control Centre, your PC screen will not be displayed in the interactive until you accept the invitation.



3.4.5-. ESHARE PRO DONGLE

Optional accessory: Eshare Pro – USB-C Dongle. [Download the instructions here](#)



[You can watch the "Eshare Pro – USB-C Dongle" video here](#)

3.5-. APPLICATION EXPLORER

The application explorer is accessible from the main menu.



[You can watch the video "Application Explorer" here](#)



In addition to direct access to the applications, from here you can:

- 1-. Remove applications:** Press and hold an application for 1 second to display "uninstall" (unistall).
Factory installed apps cannot be uninstalled.



2-. Reorder applications on a new page.

Press and hold an app for more than one second to move it to the far right.
When you reach the end of the screen, you will see a new





OTHER PRE-INSTALLED APPLICATIONS

3.5.1 WPS



You can watch the video "[Working with Office files Traulux interactive monitor TX90 and TXP series](#)" [here](#)

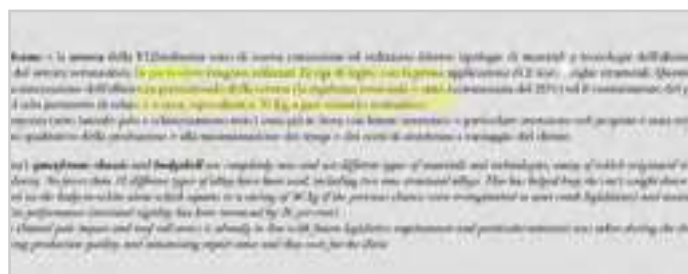
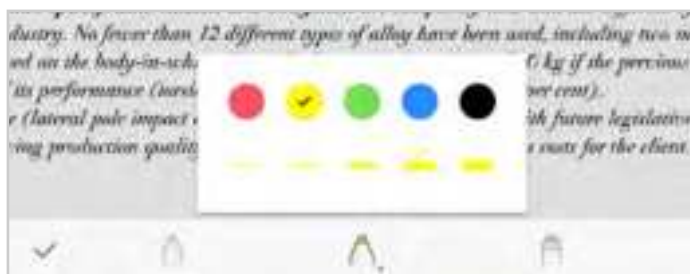
Office file reader: Select "use finger" + pen type + colour + thickness to make annotations inserted in the document. **In this situation, if we touch the document with two fingers, the document and the inserted annotations will scroll.**



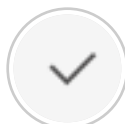
PDF: PDF annotations and document scrolling are somewhat different.
Choose the "PDF Annotation" tool at the bottom, then the pencil:



Then the type of pencil, colour and thickness:



The annotation will be inserted in the PDF at the end of the process by clicking on the tick*
*Inserted annotations can no longer be deleted



Magnifying glass: On a PDF document we can enlarge a section of text with a magnifying glass to make it easier to read. To display the magnifying glass, simply drag the text over the desired text.



3.7 "CLOUD" CONFIGURATION OF UNITS IN THE CLOUD



[You can watch the video "Cloud Application" here](#)

Allows us to set up / link a drive in the One drive or Google Drive cloud.

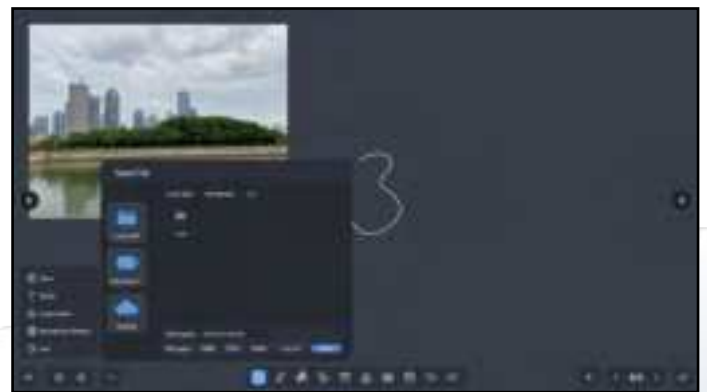


Subsequently, the drives will be available from the file explorer for uploading files or documents.

If we go into the cloud app, once we have linked an account, from there we will be able to:

- Download files
- Create folders
- Delete folders and files
- Reorganise folders and files

We can also access the drive units from the whiteboard, save, Netdisc.





3.8 "FILE TRANSFER" FILE TRANSFER FROM MOBILE PHONE OR TABLET



[You can watch the "File transfer application" video here](#)

This application allows you to transfer files (images, videos or compatible files) from your mobile or tablet.



Clicking on the icon will display a pop-up menu with a QR code.

Reading the QR code will display an interface on the mobile or tablet that will allow us to choose photographs, video or files (compatible with the interactive).



The photos, videos or files selected from the mobile phone's photo library or file explorer will be previewed in the workspace.

At this point we can select them and upload them to the server.

Clicking "upload" will start the upload process.

Once uploaded to the cloud server, they will be previewed in the interactive application.

The previewed files can be opened or downloaded (only one at a time) in a local folder.

Images and videos (mp4) can be sent directly to the board if downloaded.

We can also delete unwanted files.

A bar in the file itself will indicate the status of the process.

From the top right access we can minimise the application to continue having access to the files that are in the cloud.





4.- TECHNICAL DOCUMENTATION

TX PERFORMANCE SERIES

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DISPLAY FEATURES	TRAULUX TX65P	TRAULUX TX75P	TRAULUX TX86P
Diagonal	65"	75"	86"
Visual technology		IPS D-LED (18 hours / 7 days continuous service)	
Active area (mm)	1428.48 (H) x 803.52 (V)	1428.48 (H) x 803.52 (V)	1428.48 (H) x 803.52 (V)
Aspect ratio	16:9	16:9	16:9
Contrast (Typ./Dyn)	1200:1 / 5000:1	1200:1 / 5000:1	1200:1 / 5000:1
Resolution	4K Ultra HD (3840 * 2160)	4K Ultra HD (3840 * 2160)	4K Ultra HD (3840 * 2160)
Brightness	400 cd/m2 (auto adjustment)	400 cd/m2 (auto adjustment)	400 cd/m2 (auto adjustment)
Response time	5 ms	5 ms	5 ms
Viewing angle	178°	178°	178°
Programming of switch-off time	Yes	Yes	Yes
Auto power off programming	Yes	Yes	Yes
Speakers	2x20 Watt	2x20 Watt	2x20 Watt
Glass	Tempered / 3.2 mm thick / Anti-reflective / Anti-fingerprint / Ultra glide / Hardness 7 MOHS		
Bondin	Zero Bonding.	Zero Bonding.	Zero Bonding.
LED Panel Life	50,000 Hours	50,000 Hours	50,000 Hours
CONNECTIVITY			
HDMI Input (2.1)	3 (2 lateral, 1 frontal)		
HDMI Output (2.1)	1 (base)		
DisplayPort Input (1.2a)	1 (side)		
USB-B (Touch 3.0)	4 (3 side, 1 front)		
USB-A (2.0)	1 (side)		
USB-A (3.0)	4 (2 side, 2 front)		
USB-C	2 (1 side 15 W, 1 front 65W)		
VGA + Audio	1 (base)		
RJ45 LAN	2 In/Out (base)		
RS232	1 (base)		
Headphones Output	1 minijack 3.5 mm (base)		
Audio digital output	1 SPDIF Optical (base)		
Mic input	1 (base)		
Wi-Fi	802.11a/b/g/n/ac (2.4GHz/5GHz)		
Bluetooth	2.1+EDR/4.2/5.1.1		
OPS Slot	(JAE 80 pin)		
SD Card	1 Micro SD (base)		
LAN Control	Yes		
Wake on Lan	Yes		
INTERACTIVITY			
Technology	IR - Double thickness		
Touch accuracy	1mm		
Response time	5 ms		
Touch points	40 (20 writing)		
Writing tools	Pen or finger		
Palm erase	Yes		
ANDROID			
Processor	Android 13, CPU: 8 Core (Quad core A73) + Quad coreA53) GPU MaliG52 MP8		
Memory	8G RAM, 128GB Flash		
Automatic updates (OTA)	Yes		
Interface resolution	4K		
SOFTWARE			
Freeze image	Yes		
Floating icon and side menus	Yes		
Multiview Window	4 (1 PIP)		
PIP (Picture in Picture)	Yes		
Infinite* whiteboard	Yes (up to 6 independent zones)		
Recognition	Yes text, lines and shapes (Off Line)		
Insertion in whiteboard	Images, video, PDF, flowchart		
Tools in whiteboard	2D3D Shapes / Tables / Maths / Sticks		
Blackboard direct web search	Yes (with direct image insertion)		
Video capture	Yes		
BYOD direct file sending	Yes		
Radix VISO Premium MDM	Yes (pay-per-use)		
Google Drive / One Drive integration	Yes		
Freehand clipping	Yes		
QR generator	Yes (Cloud encryptable)		
Visual Protection	Yes (auto brightness adjustment and blue filter)		
Eshare PRO 4K Mirroring	9 simultaneous projections, Hot Spot (2.4 Gb / 5 gb) Android, iOS, Chrome, Ubuntu, Windows, MAC O.S		
Miracast, Chromecast, Airplay	Yes		
Web cast	Yes, Windows, Mac OS		
INCLUDED ACCESSORIES			
Wall bracket	Yes		
Double-ended pencils	2		
Remote control	1		
USB-C cable (Thunderbolt 3)	1		
Power cable	1 x 3 m		
HDMI cable	1 x 3 m		
USB A-B cable	1 x 3 m		
DIMENSIONS / WEIGHT			
VESA	600 x 400	800 x 400	800 x 600
Net / Gross Weight (kg ±2)	38 / 46	53 / 62	66 / 77
Dimensions (W. x D. x H.)	1482 x 87 x 897 mm	1717 x 87 x 1032 mm	1962 x 88 x 1170 mm
Packaging (W. x D. x H.)	1640 x 185 x 1010 mm	1860 x 185 x 1125 mm	2095 x 185 x 1265 mm
ELECTRICAL			
Voltage	100 - 240V AC	100 - 240V AC	100 - 240V AC
Consumption standard/max/relay	150W / 300W / <0.5W	190W / 380W / <0.5W	230W / 460W / <0.5W
WARRANTY			
5 years On-site with re-installation (Spain / Portugal)			

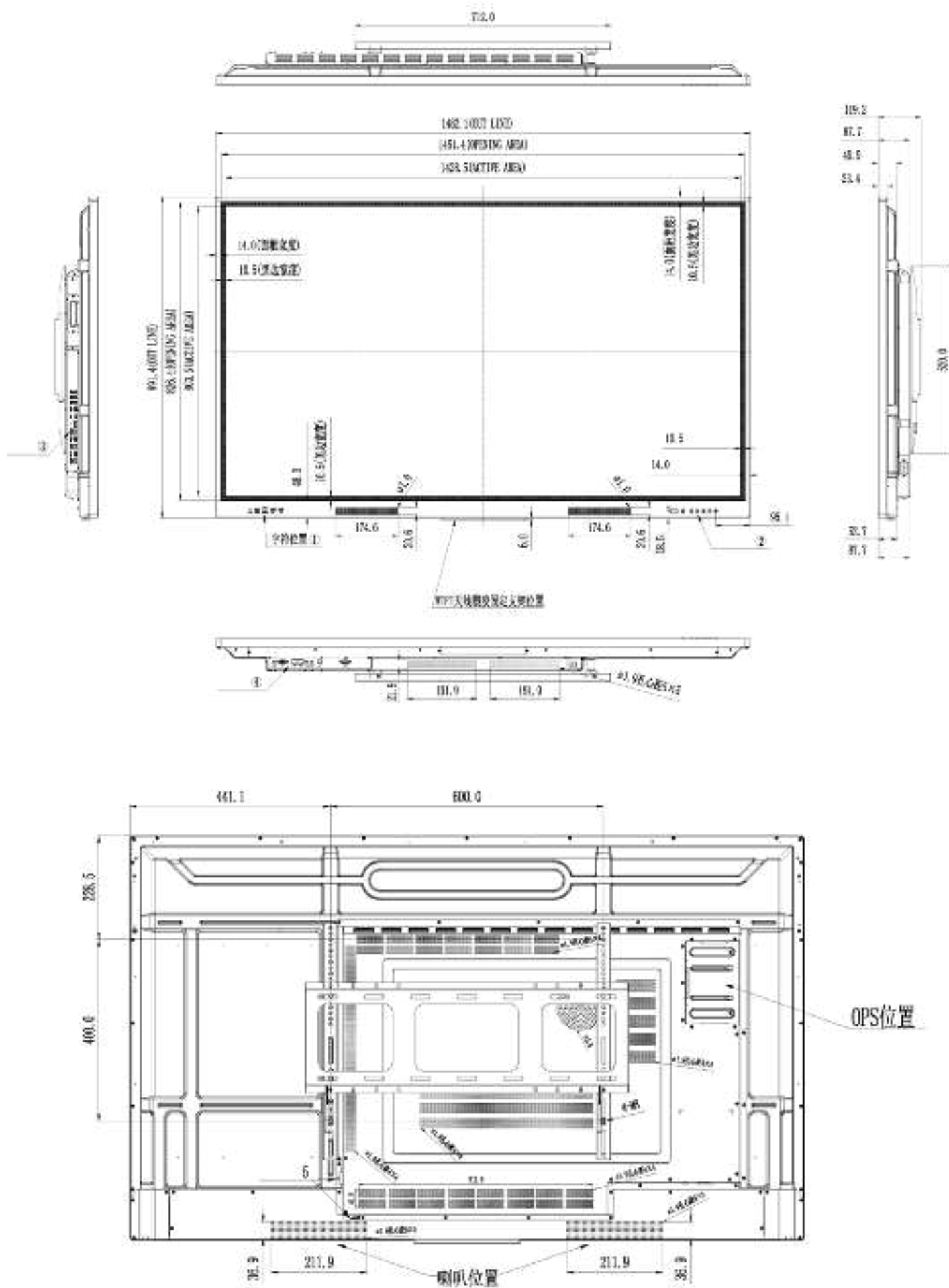


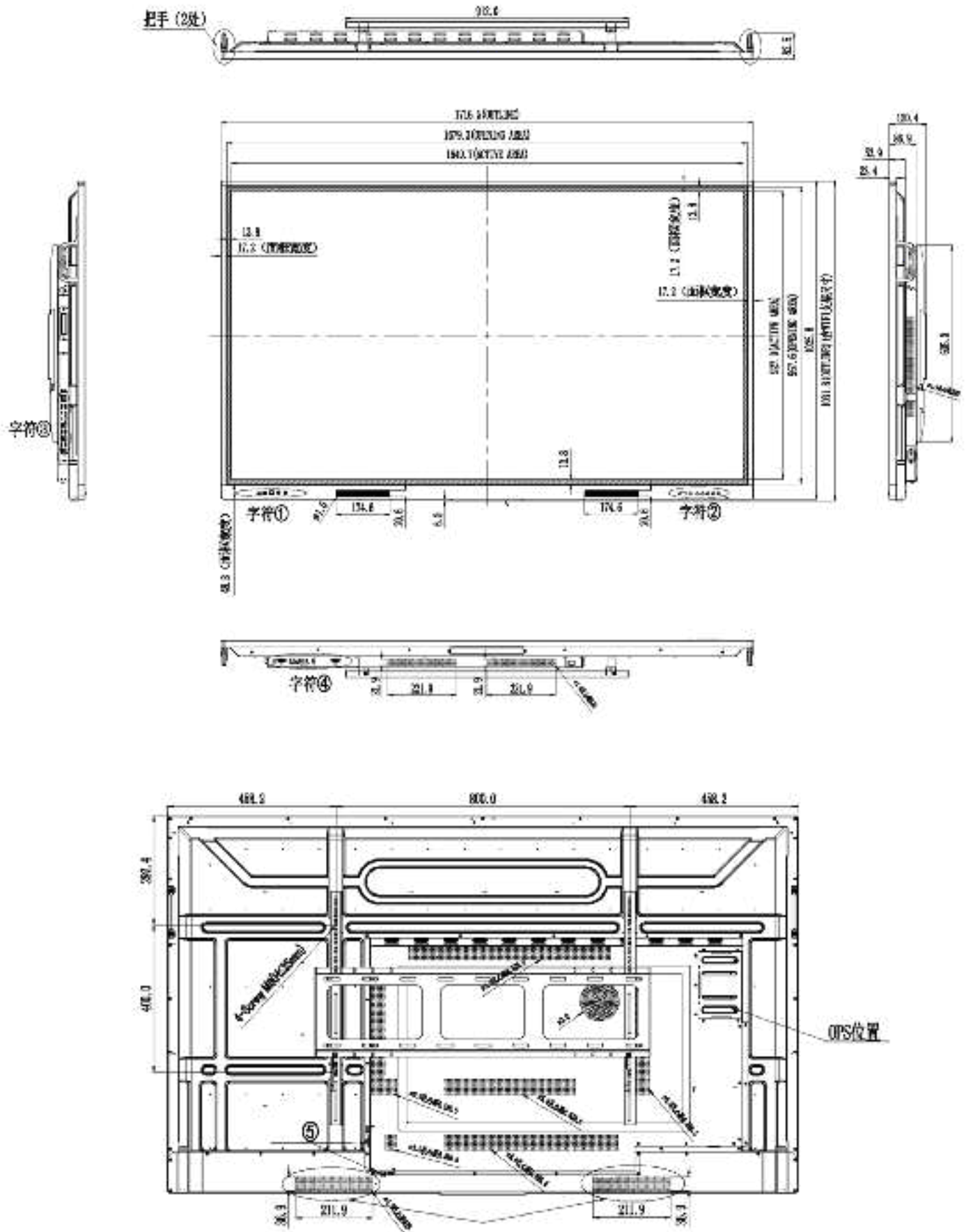


4.2-. TECHNICAL DRAWINGS

TX PERFORMANCE SERIES

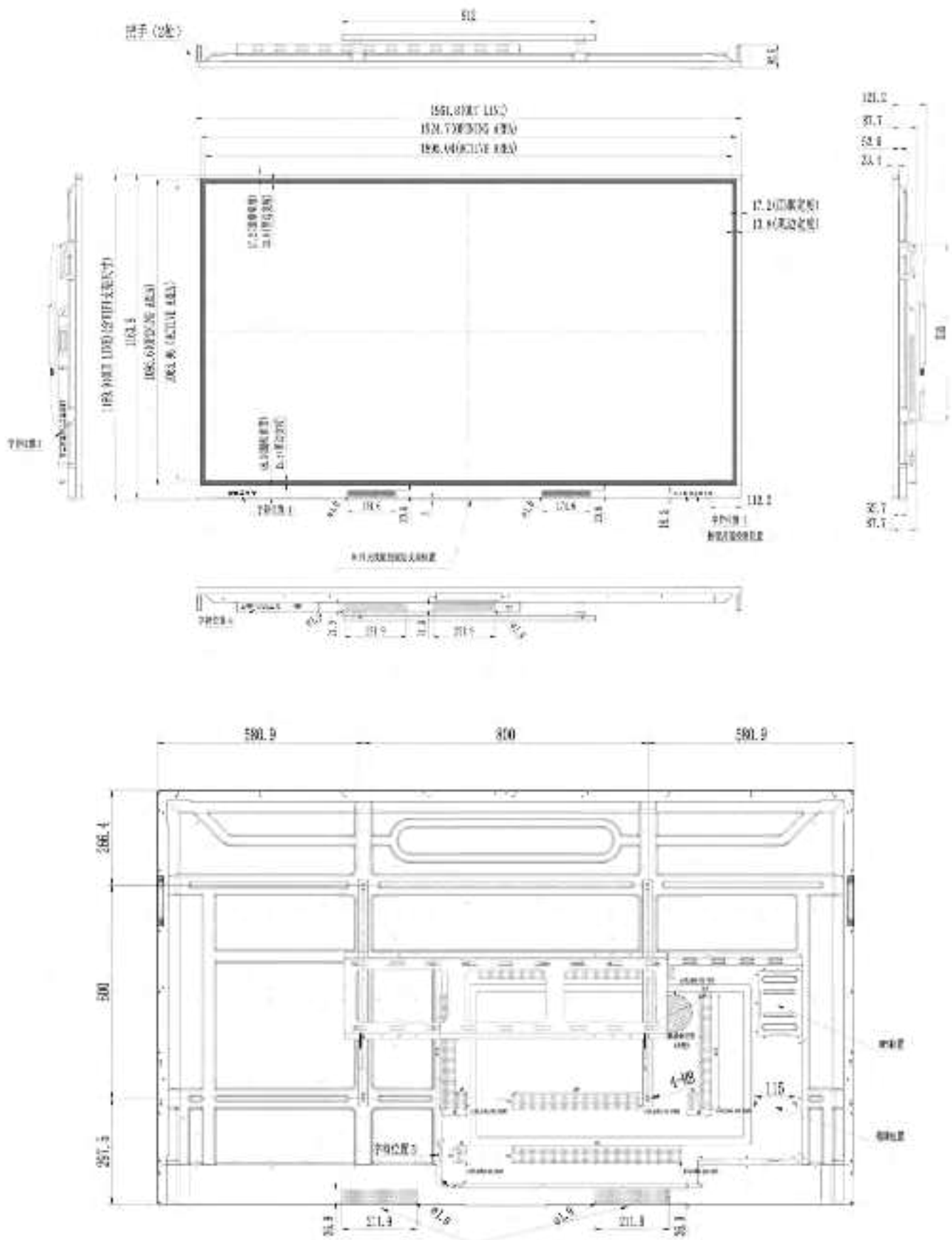
Simply Better







TECHNICAL DRAWINGS TX86P





4.3 - . RS232 COMMANDS

TX PERFORMANCE SERIES

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RS232 COMMANDS

Code	Command	DQA (Eleventh session completed) edition_20230328)
6B303173413030300D	SET_POWER_STANDBY	OK
6B303173413030310D	SET_POWER_ON	NG
6B30317342303030340D	SET_SOURCE_TO_HDMI	OK
6B303173423031340D	SET_SOURCE_TO_HDMI1	OK
6B303173423032340D	SET_SOURCE_TO_HDMI2	OK
6B30317342303030360D	SET_SOURCE_TO_VGA	OK
6B30317342303030370D	SET_SOURCE_TO_OPS	OK
6B30317342303030430D	SET_SOURCE_TO_TYPEC	OK
6B30317342303030390D	SET_SOURCE_TO_DP	OK
6B30317342303030400D	SET_SOURCE_TO_REAR_TYPEC	OK
6B30317342303030410D	SET_SOURCE_TO_ANDROID	OK
6B303173433X3X3X0D	SET_CONTRAST	OK
6B303173443X3X3X0D	SET_BRIGHTNESS	OK
6B303173453X3X3X0D	SET_SHARPNESS	OK
6B303173463X3X3X0D	SET_SATURATION	OK
6B303173483030300D	SET_COLOUR_MODE_NORMAL	OK
6B30317348303030310D	SET_COLOR_MODE_WARM	OK
6B30317348303030320D	SET_COLOUR_MODE_COLD	OK
6B30317348303030330D	SET_COLOR_MODE_USER	OK
6B3031734A3X3X3X0D	SET_BASS	OK
6B3031734B3X3X3X0D	SET_TREBLE	OK
6B3031734C3X3X3X0D	SET_BALANCE	OK
6B3031734E3030300D	SET_LANGUAGE English	OK
6B3031734E303030310D	SET_LANGUAGE French	OK
6B3031734E303030320D	SET_LANGUAGE English	OK
6B3031734E303030330D	SET_LANGUAGE Traditional Chinese	OK
6B3031734E303030340D	SET_LANGUAGE Simple Chinese	OK
6B3031734E303030350D	SET_LANGUAGE Portuguese	OK
6B3031734E303030360D	SET_LANGUAGE German	OK
6B3031734E303030370D	SET_LANGUAGE Dutch	OK
6B3031734E303030380D	SET_LANGUAGE Polish	OK
6B3031734E303030390D	SET_LANGUAGE Russia	OK
6B3031734E3031300D	SET_LANGUAGE Czech	OK
6B3031734E3031310D	SET_LANGUAGE Danish	OK
6B3031734E3031320D	SET_LANGUAGE Swedish	OK
6B3031734E3031330D	SET_LANGUAGE Italian	OK
6B3031734E3031340D	SET_LANGUAGE Romanian	OK
6B3031734E3031350D	SET_LANGUAGE Norwegian	OK
6B3031734E3031360D	SET_LANGUAGE Finnish	OK
6B3031734E3031370D	SET_LANGUAGE Greek	OK
6B3031734E3031380D	SET_LANGUAGE Turkish	OK
6B3031734E3031390D	SET_LANGUAGE Arabic	OK
6B3031734E3032300D	SET_LANGUAGE Japanese	OK
6B3031734E3032310D	SET_LANGUAGE Thailand	NA
6B3031734E3032320D	SET_LANGUAGE Korean	OK
6B3031734E3032330D	SET_LANGUAGE Hungarian	NA
6B3031734E3032340D	SET_LANGUAGE Persian	NA
6B3031734E3032350D	SET_LANGUAGE Vietnamese	NA
6B3031734E3032360D	SET_LANGUAGE Indonesian	NA





Code	Command	DQA (Eleventh session completed) edition_20230328)
6B3031734E3032370D	SET_LANGUAGE Hebrew	NA
6B3031734F303030300D	Power_Lock_Unlock	NA
6B3031734F303030310D	Power_Lock_Lock	NA
6B303173503X3X3X0D	SET_VOLUME	OK
6B303173503230300D	SET_VOLUME_DOWN	OK
6B303173503230310D	SET_VOLUME_UP	OK
6B303173513030300D	SET_MUTE_OFF	OK
6B303173513030310D	SET_MUTE_ON	OK
6B30317352303030300D	SET_BUTTON_LOCK	NA
6B30317352303030310D	SET_BUTTON_UNLOCK	NA
6B303173533x3x3x0D	SET_NUMBER	OK
6B3031735B3030300D	KEY_PAD_UP	OK
6B3031735B303030310D	KEY_PAD_DOWN	OK
6B3031735B303030320D	KEY_PAD_LEFT	OK
6B3031735B303030330D	KEY_PAD_RIGHT	OK
6B3031735B303030340D	KEY_PAD_ENTER	OK
6B3031735B303030350D	KEY_PAD_INPUT	OK
6B3031735B303030360D	KEY_PAD_MENU	OK
6B3031735B303030370D	KEY_PAD_EXIT	OK
6B30317356303030300D	SET_REMOTE_CONTROL_LOCK	OK
6B30317356303030310D	SET_REMOTE_CONTROL_UNLOCK	OK
6B30317358593x3x0D	SET_DATE_YEAR	OK
6B303173584D3x3x3x0D	SET_DATE_MONTH	OK
6B30317358443x3x0D	SET_DATE_DAY	OK
6B30317359483x3x0D	SET_DATE_HOUR	OK
6B303173594D3x3x3x0D	SET_DATE_MIN	OK
6B30317359533x3x0D	SET_DATE_SEC	OK
6B3031735A3030300D	SET_RESET_DEFAULT	OK
6B3031735C3030310D	SET_TOUCH_LOCK	OK
6B303167613030300D	GET_CONTRAST	OK
6B303167623030300D	GET_BRIGHTNESS	OK
6B303167633030300D	GET_SHARPNESS	OK
6B303167643030300D	GET_SATURATION	OK
6B303167663030300D	GET_VOLUME	OK
6B303167673030300D	GET_MUTE	OK
6B303167683030300D	GET_CURRENT_INPUT_SOURCE	OK
6B303167693030300D	GET_POWER_STATUS	NG
6B3031676A3030300D	GET_REMOTE_CONTROL_LOCK	OK
6B3031676B3030300D	Get_Power_Lock	NA
6B3031676C3030300D	GET_BUTTON_LOCK	NA
6B3031676E3030300D	Get_Temperature	NA
6B3031676F303030300D	GET_OPERATION_TIME	OK
6B303167704830300D	GET_DATE_YEAR	OK
6B303167704D30300D	GET_DATE_MONTH	OK
6B303167704430300D	GET_DATE_DAY	OK
6B303167714830300D	GET_DATE_HOUR	OK
6B303167714D30300D	GET_DATE_MIN	OK
6B303167715330300D	GET_DATE_SEC	OK
6B303167723030300D	GET_DEVICE_NAME	OK
6B30316773303030300D	GET_MAC_ADDR	OK
6B303167753030300D	GET_TOUCH_LOCK	OK





RS232 COMMANDS - RETURN VALUE FORMAT

AB07XXXXXXXXXX0D = AUTO_WHITE_BALANCE	OK
RETURN_CONTRAST = 6B303172613X3X3X0D	OK
RETURN_BRIGHTNESS = 6B303172623X3X3X0D	OK
RETURN_SHARPNESS = 6B303172633X3X3X0D	OK
RETURN_SATURATION = 6B303172643X3X3X0D	OK
RETURN_VOLUME = 6B303172663X3X3X0D	OK
RETURN_MUTE_ON = 6B3031726730303010D	OK
RETURN_MUTE_OFF = 6B303172673030300D	OK
RETURN_INPUT_SOURCE = 383031726A3X3X3X0A	OK
RETURN_INPUT_HDMI_NOSIGNAL = 383031726A3032340A	OK
RETURN_INPUT_HDMI_NOSIGNAL = 383031726A303030340A	OK
RETURN_INPUT_HDMI2_NOSIGNAL = 383031726A3031340A	OK
RETURN_INPUT_VGA_NOSIGNAL = 383031726A303030360A	OK
RETURN_INPUT_OPS1_NOSIGNAL = 383031726A303030370A	OK
RETURN_INPUT_TYPEC_NOSIGNAL = 383031726A3031390A	OK
RETURN_INPUT_DP_NOSIGNAL = 383031726A303030390A	OK
RETURN_INPUT_REAR_TYPEC_NOSIGNAL = 383031726A303030350A	OK
RETURN_INPUT_HDMI_SIGNAL = 383031726A3132340A	OK
RETURN_INPUT_HDMI_SIGNAL = 383031726A3130340A	OK
RETURN_INPUT_HDMI2_SIGNAL = 383031726A3131340A	OK
RETURN_INPUT_VGA_SIGNAL = 383031726A3130360A	OK
RETURN_INPUT_OPS1_SIGNAL = 383031726A3130370A	OK
RETURN_INPUT_TYPEC_SIGNAL = 383031726A3131390A	OK
RETURN_INPUT_DP_SIGNAL = 383031726A3130390A	OK
RETURN_INPUT_ANDROID_SIGNAL = 383031726A3130410A	OK
RETURN_INPUT_REAR_TYPEC_SIGNAL = 383031726A3130350A	OK
RETURN_POWER_ON_STATUS = 6B3031726930303010D	
RETURN_POWER_OFF_STATUS = 6B303172693030300D	
RETURN_REMOTE_CONTROL_LOCK = 6B3031726A303030310D	OK
RETURN_REMOTE_CONTROL_UNLOCK = 6B3031726A3030300D	OK
Return_Power_Lock = 6B3031726B303030310D	NA
Return_Power_Unlock = 6B3031726B303030300D	NA
RETURN_BUTTON_LOCK = 6B3031726C303030310D	NA
RETURN_BUTTON_UNLOCK = 6B3031726C303030300D	NA
Return_Temperature = 6B3031726E3X3X3X0D	NA
RETURN_OPERATION_TIME = 6B3031726F3X3X3X3X3X0D	OK
RETURN_DATE_MONTH = 6B303172704D3X3X3X0D	OK
RETURN_DATE_YEAR = 6B30317270483X3X0D	OK
RETURN_DATE_DAY = 6B30317270443X3X0D	OK
RETURN_DATE_HOUR = 6B30317271483X3X0D	OK
RETURN_DATE_MIN = 6B303172714D3X3X0D	OK
RETURN_DATE_SEC = 6B30317271533X3X0D	OK
RETURN_DEVICE_NAME = 6B30317272XXXXXX0D	OK
RETURN_MAC_ADDR = 6B30317273XXXXXXXXXXXXXXXXXX0D	OK
RETURN_TOUCH_LOCK = 6B3031728D303030310D	OK
RETURN_TOUCH_UNLOCK = 6B3031728D303030300D	OK





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