Professional Tablets for TEOS

Installation Manual & User Manual

Document revision 1.4

Overview

Thank you for purchasing these products. These tablets are designed for professional use. They have professional functions such as Pro mode, Android Management, and IP control. Furthermore, by using optional software, you can add additional convenient features. Before operating the tablet for the first time, please read this manual thoroughly.

Table of Contents

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1. Tablet reference table for tablets currently available

All firmware of tablets can be found under https://bit.ly/sonypsetech under TEOS - Corporate Solutions >> 5 - Tablet for TEOS >> Firmwares

Prodvx tablets can be purchased with our partner AAV Hardware: https://aavhardware.com/

Brand	Model name	Android platform
Prodvx	APPC-7XPLN	7" tablet, Android 9 with NFC with led
	APPC-10XPLN	10" tablet, Android 9 with NFC with led
	APPC-10SLBN	10" tablet, Android 9 with NFC with led
	APPC-10SLBe	10" tablet, Android 11 AOSP with led
	APPC-15XP	15" tablet, Android 9
	APPC-22XP	22" tablet, Android 9
QBIC	TD-0350	3.5" tablet, Android 7 with led
	TD-1060	10" tablet, Android 10 with led
	TD-1050 Pro	10" tablet, Android 10 with led
	TD-1070	10" tablet, Android 11 with NFC and led
Yealink	RoomPanel	10" tablet, Android 9 with led
IAdea	WRP-1000-L	10" tablet, Android 9 with led
Philips	10BDL4551T/00	10" tablet, Android 8 with led
	24BDL4551T/00	24" tablet, Android 8
Innes	Qeedji TAB10s	10" tablet, Android 9

2. Prodvx tablets configurations

Please refer to the update firmware manual for more details on the firmware upgrade.
When installing a tablet, it is recommended to check and update the device in the latest version of firmware. First, go to home>settings>about device, the name of the device and the version of firmware is shown in the upper right side.
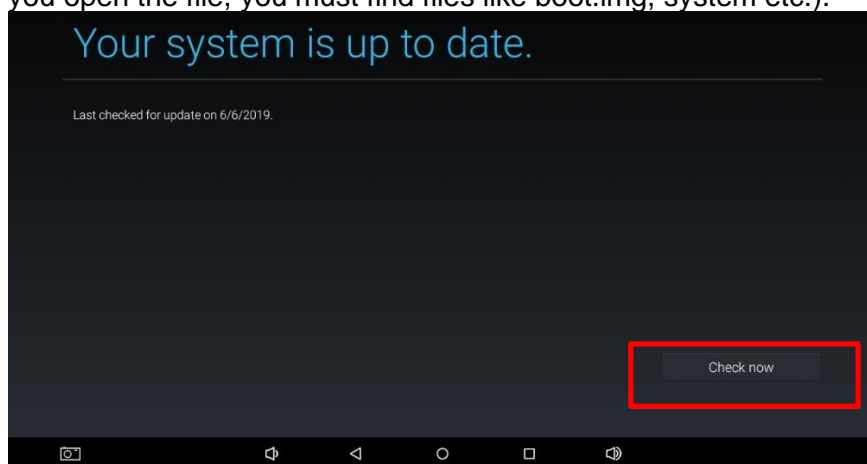
a) <u>Update firmware using USB stick</u>: go to home>settings>about device
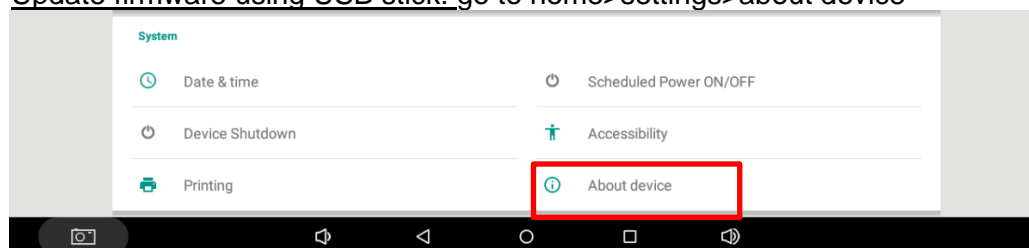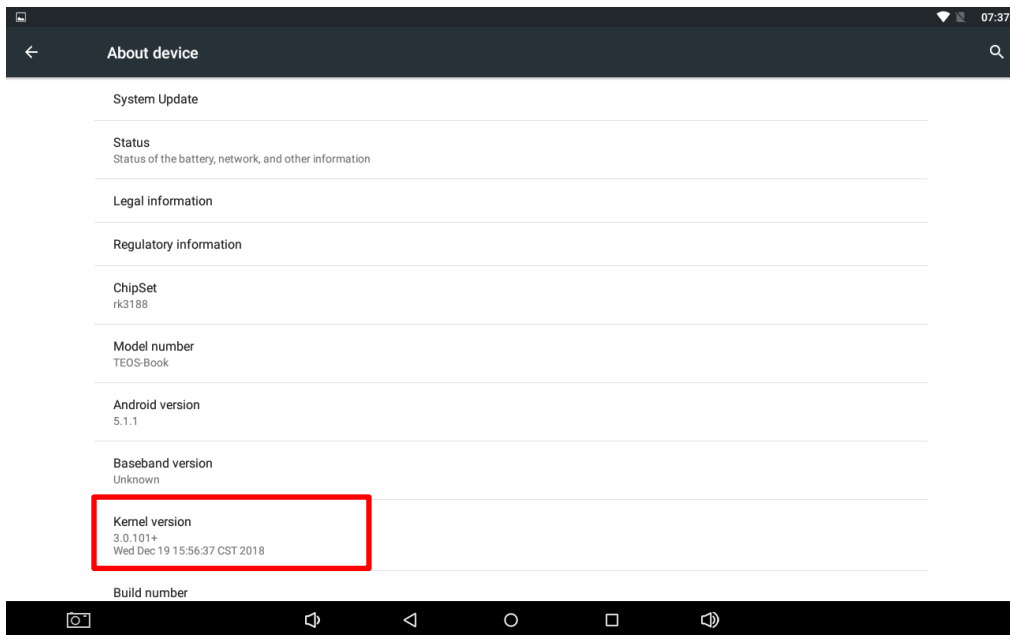
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b) <u>Update firmware using USB drive</u>

Download the update.zip (please contact Sony to get it) file and copy it to the root of a USB stick (if you open your USB stick, you must find the update.zip file directly and if you open the file, you must find files like boot.img, system etc.).


USB request:
200MB or more

USB format:
FAT32

Place the USB stick in the USB port of the device. In settings>about device go to system update and click on "Check now" even if the tablet Is saying "Your system Is up to date".

c) Update Using recovery mode

If the firmware upgrade from the tablet is not working, you can use the method via the recovery mode. To enter the recovery mode, switch OFF the tablet and switch It to ON again pushing the menu/back button on top on the tablet. Stay with the button pressed until the recovery mode shows up.

SONY
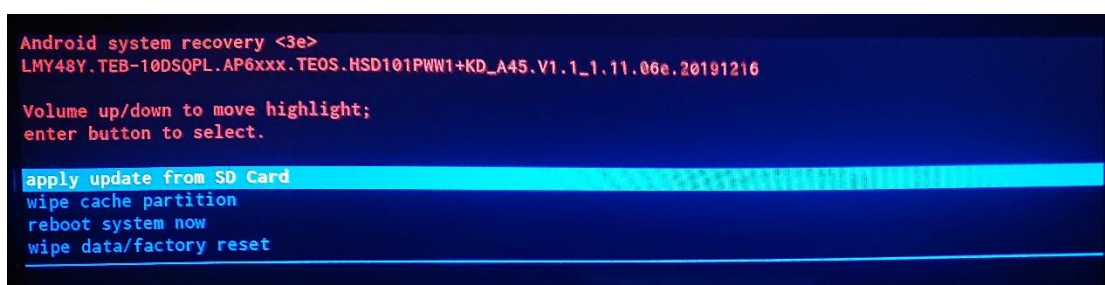
The options of recovery mode are:
- "Apply update from SD card", using an SD card with the same update.zip file as for the USB stick, you will be able to update the firmware of the tablet. The slot for the SD card Is on top of the tablet nearby the power led Indicator.

- Wipe cache partition, remove only some user data
- Reboot system now, reboot the tablet to go back in normal mode
- wipe data/factory reset, remove all the user data and go back to the factory settings.

Depending on the firmware upgrade required and when using the recovery mode, It can be good to do a "wipe data/factory reset" to Install a firmware and use all the new features coming by the firmware.

2.1   About controls
Control of the tablets can be done directly using the Android interface, touch screens and physical buttons on the tablets. The rest of the controls can be managed remotely, for example via API for the control of the LEDs and using Android (java) language for the rest of the usage. Controls are dependent on Android platform access.

2.2   Standby modes
Standby mode on Tablets are disabled by default from the factory. A standby mode can only be started manually via the buttons on the tablet. As the tablets are connected by PoE and based on Android, there is no technical way to power it on remotely (only if power it cuts into the tablet).

a)   Standby mode button
You can use the button on the button left side of the tablet, if you want to switch the tablet on again, you will have to switch the small button to ON.

b)   Remote screen saver mode
Remote standby is not possible on this Android device, to save power you can perform a screen off command. The command to send a screen off instruction to the device and disable touch activity is found here:
Https://developer.android.com/reference/android/os/PowerManager.html
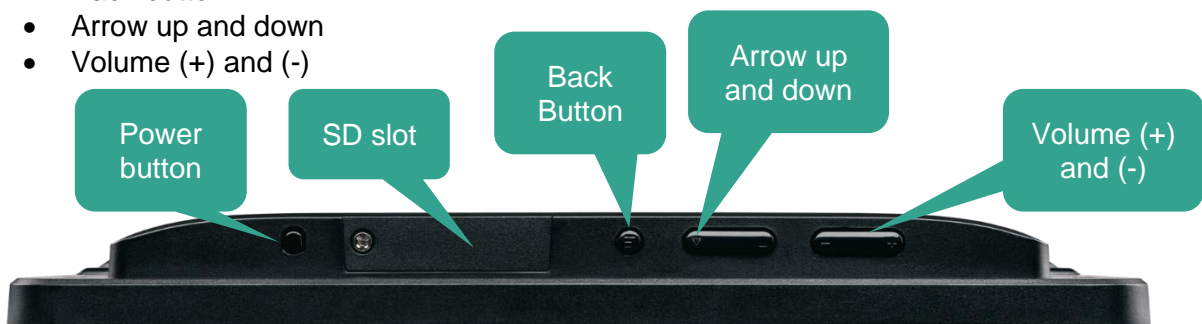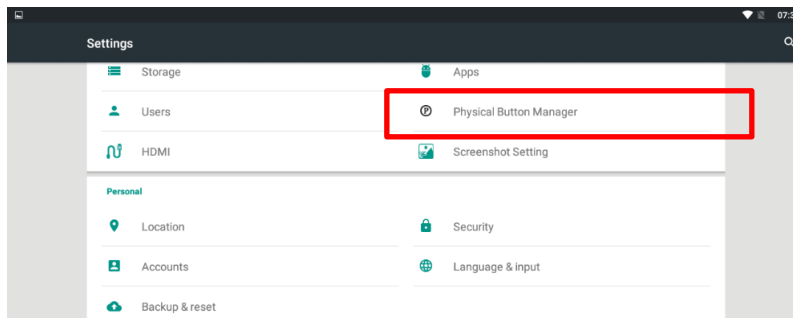
2.3   Physical button & status bar activation
All the tablets have physical buttons that can be used when moving around the tablet interface.
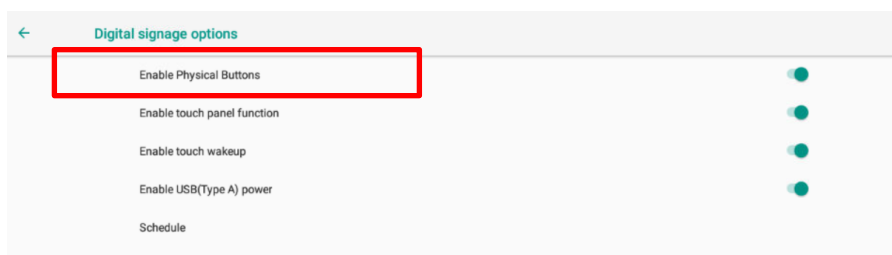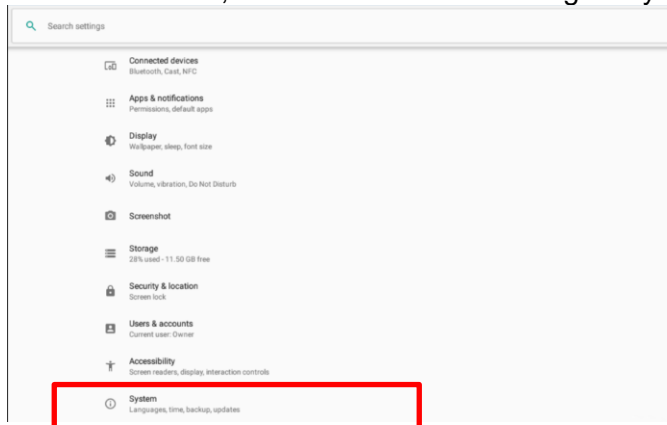The physical buttons are:
- Back button
- Arrow up and down
- Volume (+) and (-)

This button can be disabled using the tablet settings > physical Button Manager for Android 6

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Under Android 8, this button is under settings > system settings Digital signage options
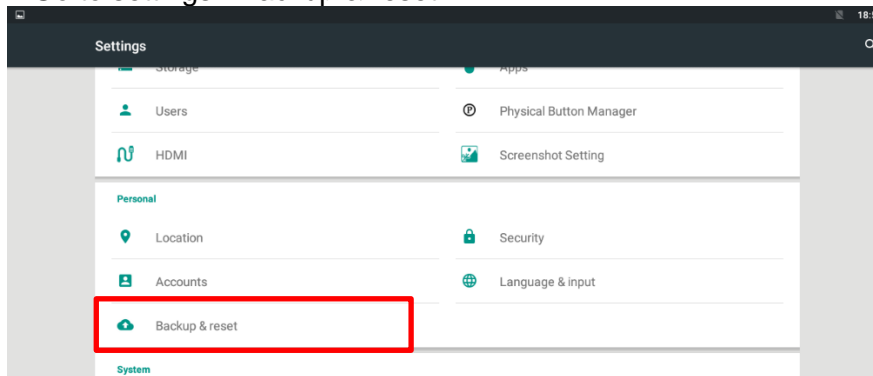

When using TEOS Android App, you need to disable the status for the users to not go Into the Android menu. To do so, go to Settings>Display and check "activate status bar"
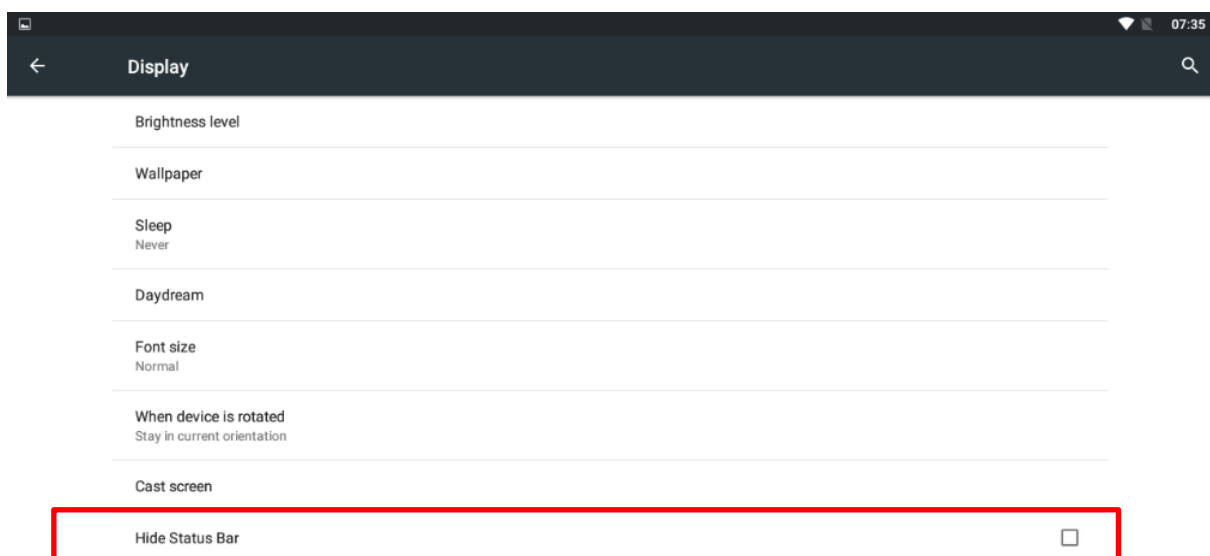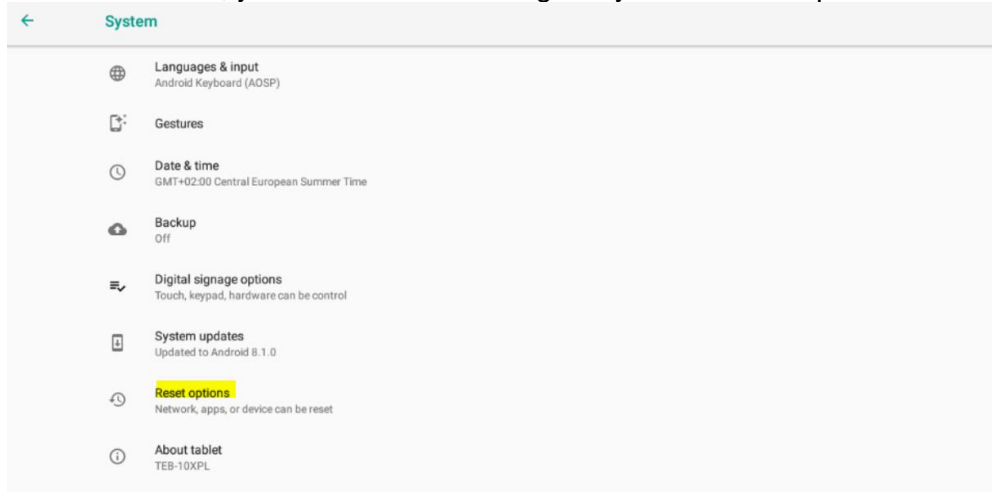

2.4   factory reset

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Soft reset of the tablet can be done from the Android interface under Android 6
1. Go to settings> Backup & reset

Under Android 8, you can find in in settings > system > reset options > factory reset all

2. Select reset and remove data, the device will reset all the data and go back to default settings

2.5   Landscape and Portrait Mode
All the tablets are capable of landscape and portrait mode. This can be adjusted in settings>display where you can lock the orientation by selecting "stay in current orientation". The option by default is "rotate the contents of the screen" which allow apps to pushing their configuration preference.

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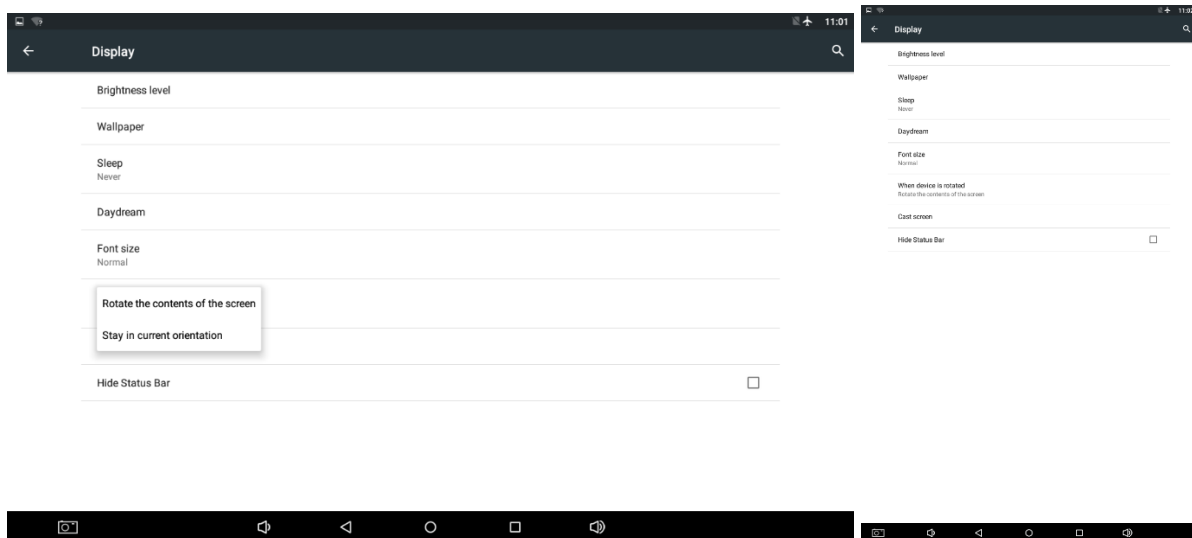
2.6 Configure time and use timer

All FY20 tablets have a date and time setup with pool.ntp.org by default and can be changed if needed.

This section explains how the tablet's clock works and how to configure time and use the In-built professional timer.
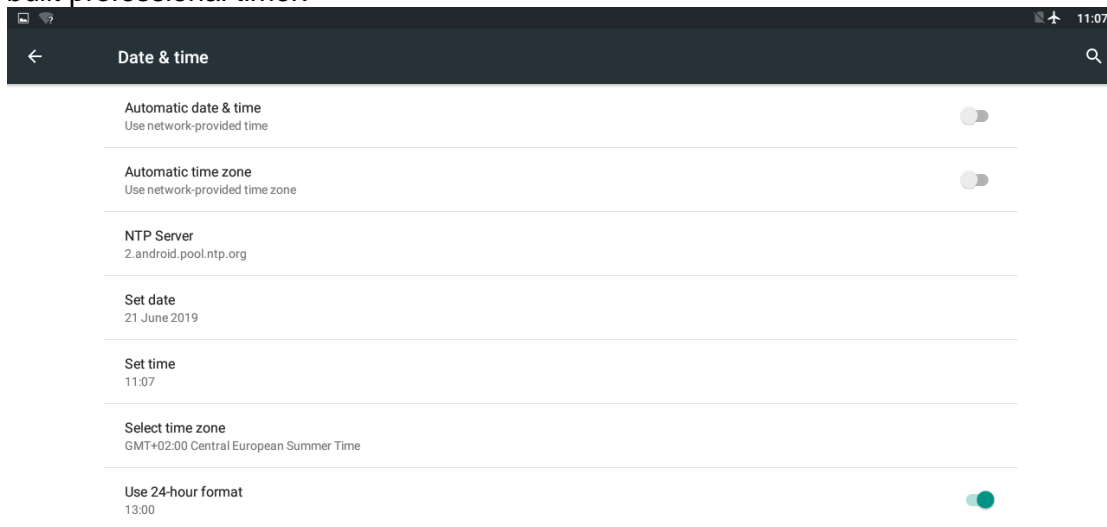

Go to settings>date & time, the features available under this menu are:

- Automatic date & time: use automatically network provided time
- Automatic time zone: Use automatically network provided time zone
- NTP Server: Configure by IP or name you NTP server
- Set date: set manually date
- Set time: set manually time
- Select time zone: set manually your time zone
- Use 24h format: you can choose 12 or 24 hour clocks

If in your date & time menu, NTP clock synchronization is not available or if you want to schedule the NTP synchronization, y ou can use an external app such as clocksync.
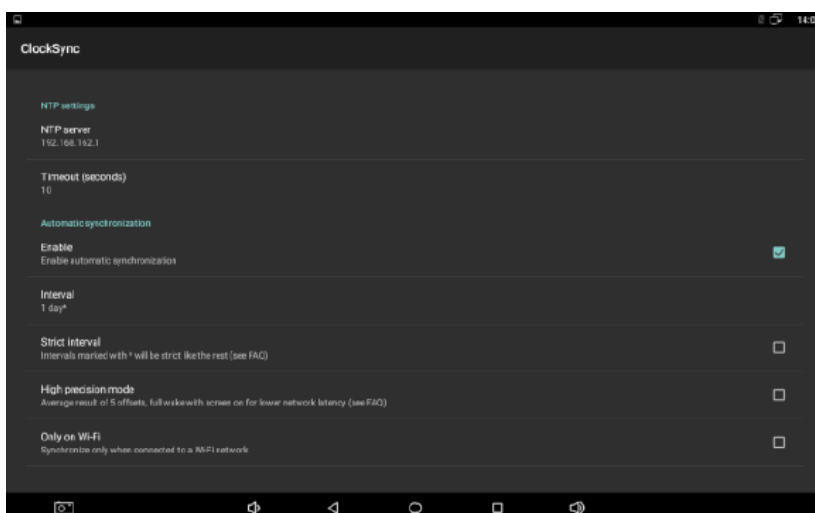
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Go into the tablet menu>apk installer and install the apk clocksync.apk (can be found has well under https://bit.ly/sonypsetech in tablet for TEOS > apps
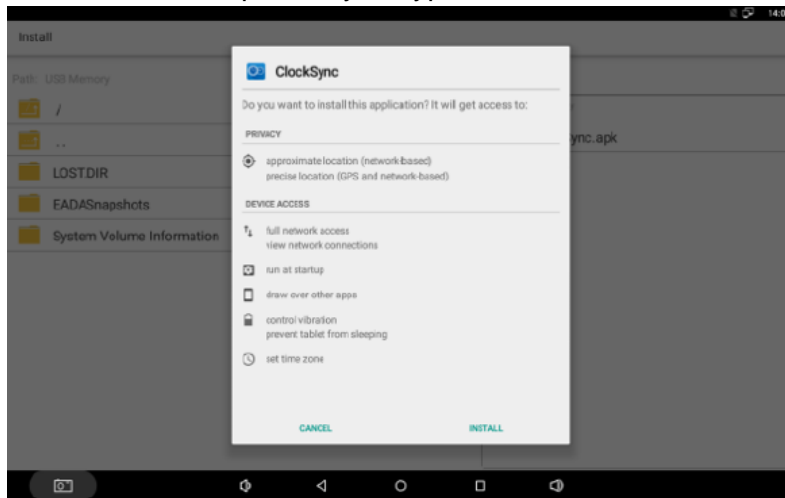
1. Open the application clocksync and go to settings
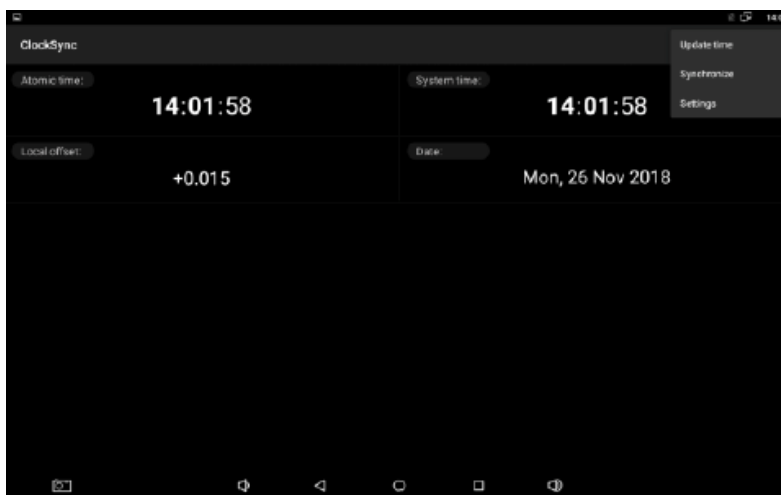
2. Configure NTP server and activate automatic NTP synchronization

## 2.7   Network configurations

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This section explains all the settings available in the network configuration of the tablets.
First go to Settings>Wireless & Network section. You will see WIFI option and if you click on more you will see the ethernet configuration menu.
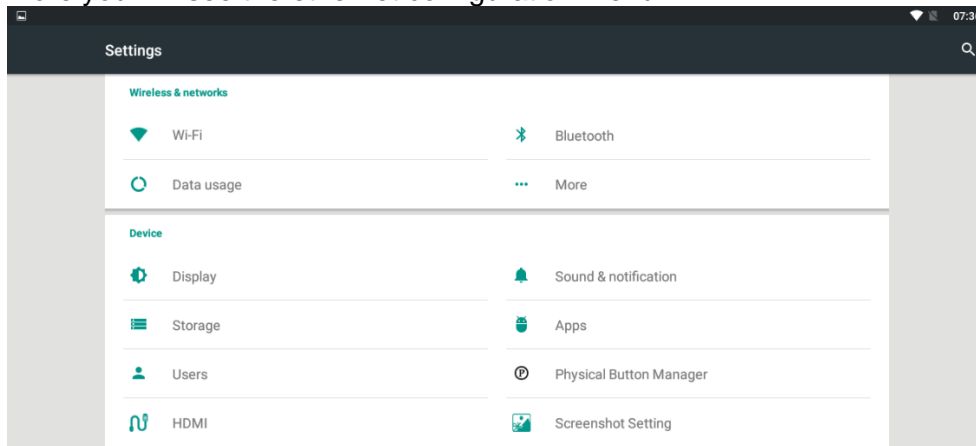

a) <u>Network WIFI setup</u>:
Set up internet and local network connections:
- o Easy: In WIFI, go directly to WIFI option, activate it and select the SSID network you want to connect. Take note that only the 2.4GHz can be detected by FY18 tablets. Only the FY19 tablet can find 5GHz network
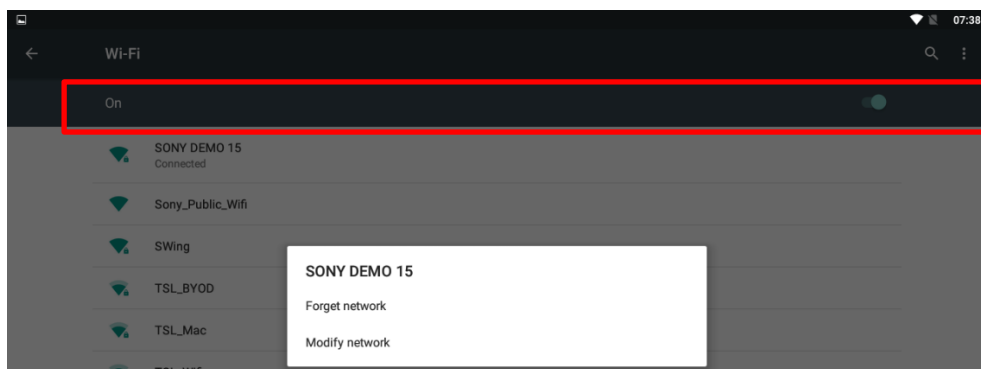
- o Easy: For ethernet connection, only plug the cable, the tablet is by default in DHCP, which means that the tablet will take an IP address if your network provides it.

- o Expert: advanced way to setup the Wi-Fi or Wired LAN connection
  - In Wi-Fi part, a SSID can be selected and a static IP address can be defined
    For this, just press the SSID you want to connect until you get the popup to configure the password. You will then see the option "See password" and "Advanced option". Press advanced options and you will be able to configure proxy information and a static address to the device.

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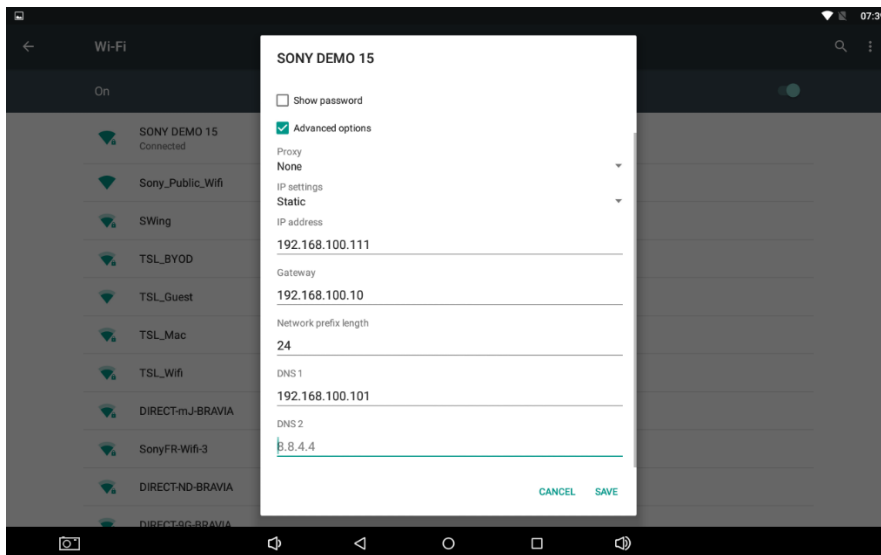
- In Wired LAN, it is possible to select DHCP mode to retrieve automatically an IP address or to define a static IP address. Note that it is mandatory to define a gateway and DNS address even if there isn't one in the network otherwise the device will not be fully configured in the network part.
- Proxy settings can be configured, a host name, port or an IP address can be defined. Bypass proxy addresses can be configured. In Ethernet IP mode, you select if you want to use DHCP or Static IP connection
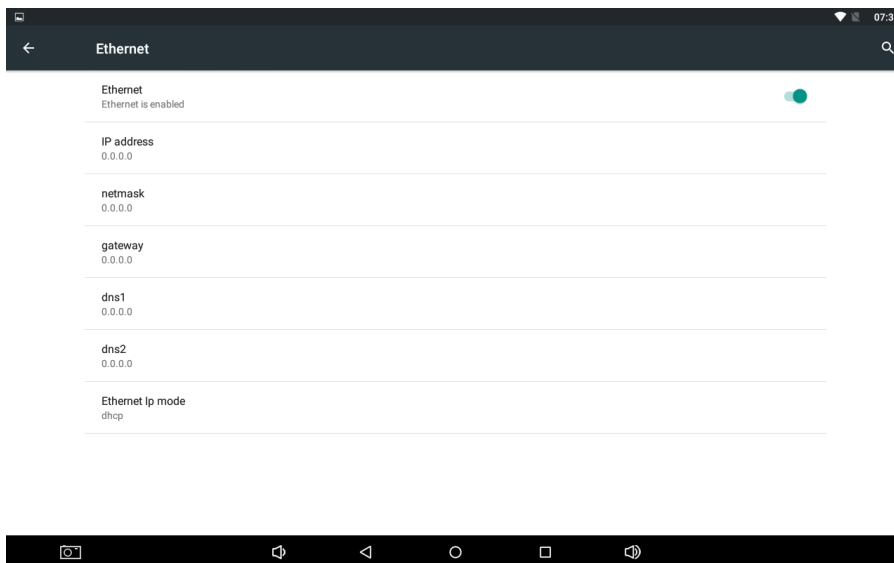

b) Advanced settings:
- Network status: detailed network status of the device and test internet connection
- Built in Wi-Fi: enable or disable Wi-Fi card
- IPv6: enable or disable IPv6
- WPS (PIN): generated WPS PIN code to add device in a router

It is recommended to disable IPv6 network when it is not used to decrease network communication linked with IPv6.

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2.8 Developer options

This section explains how to activate the developer options. Developer options and Android debugger are used by some applications such as TEOS, to provide deeper controls of the tablets. Since the December 2018 firmware release, this option Is activated by default. Please follow the procedure below if you have an older version.
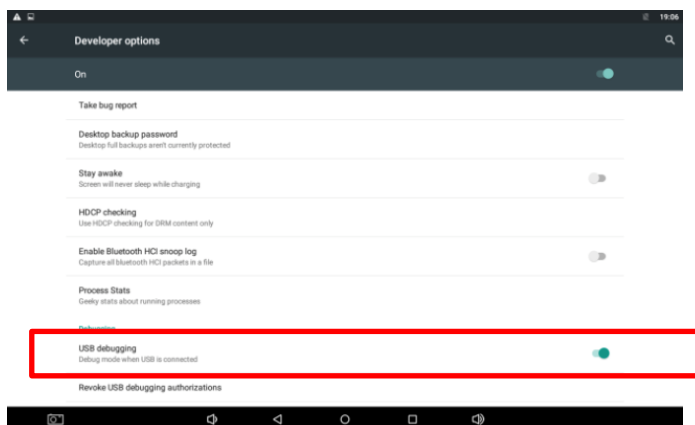
1.   Go into the tablet >settings>About device
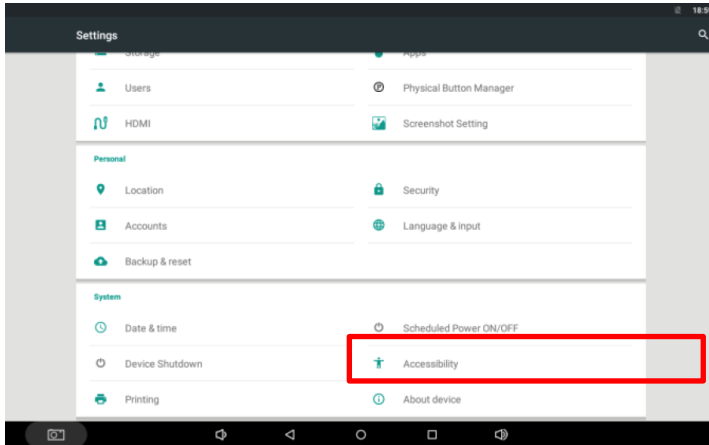
2.   About device>Build (last option in the list)
   •   Click 5 times in build until it activates the developer mode
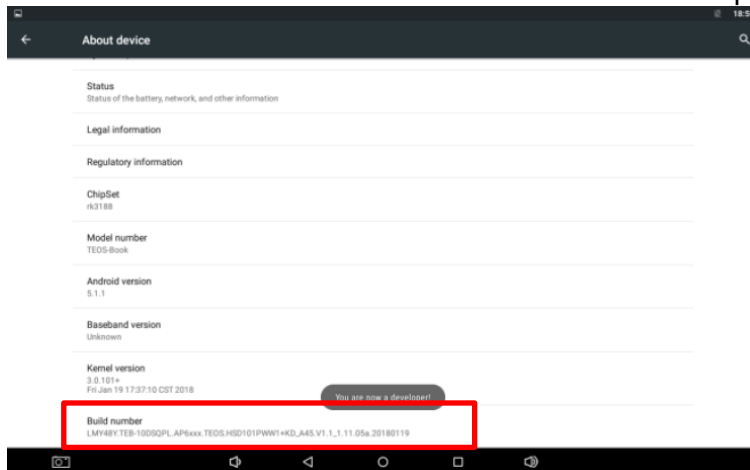
3.   Go to Settings > developer mode and set it to active. Activate USB debugging option

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4. Next connect the tablet with the micro usb port to the PC which will get the logs
   - Get logs of tablet operation
   - Change adb configuration from USB to TCP (IP)

   1. Download adb here and extract the folder into your PC (procedure using Windows 7, 8, 10 machine). This can be found in the https://bit.ly/sonypsetech under 7-Tools
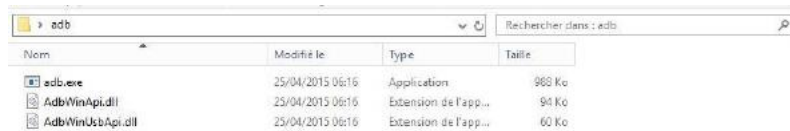
   2. Open a command prompt in your windows and go the the adb folder: for example cd c:\users\username\desktop\adb
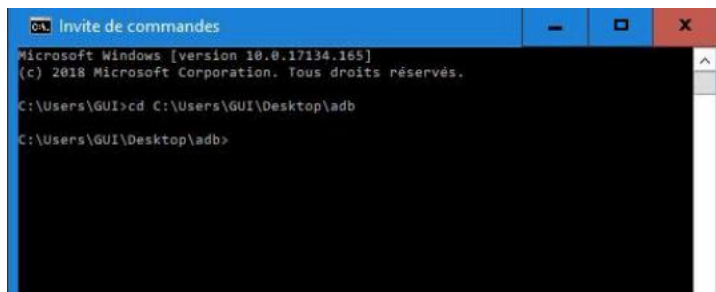
   3. Now connect to the tablet using the command: adb.exe connect
   On the tablet side, a message to allow debugging will appear, click on "Always allow from this computer" and click on ok to validate the access with the PC.

   By validating this, the tablet will always allow a USB connection with the same PC/Server. If another PC is used to validate the connection, the tablet will ask for confirmation to confirm the remote debug connection
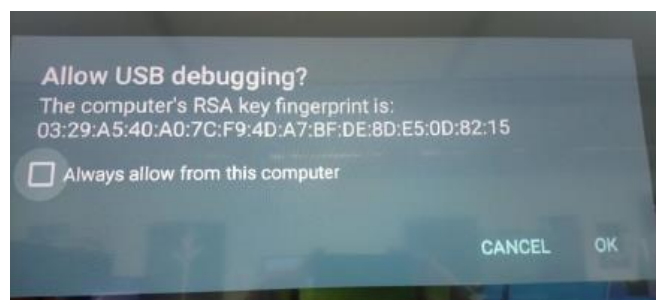
Change adb USB to adb TCP (IP)

   1. When adb is allowed in the tablet just put the command:
      Adb shell setprop persist.adb.tcp.port 5555
   Disconnect the USB cable. You can test it by giving the command: adb.exe connect <IpaddressOfTheDevice>

   Interface should show: connected to <IpAddressOfTablet>:5555

   The tablet will show the same interface to authorize the access.

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2.9 Configure LEDs on tablet

To control the LED on our 10" tablet within your application, we can provide you code sample and details. With this information, a software engineer should be able to implement the LED control within your application. Our TEOS platform and TEOS app are also able to control the LED.

If you need for demo purpose or other purpose, you can install the app HERE for the TEB-10SLB and 10XPL version. It can be found in https://bit.
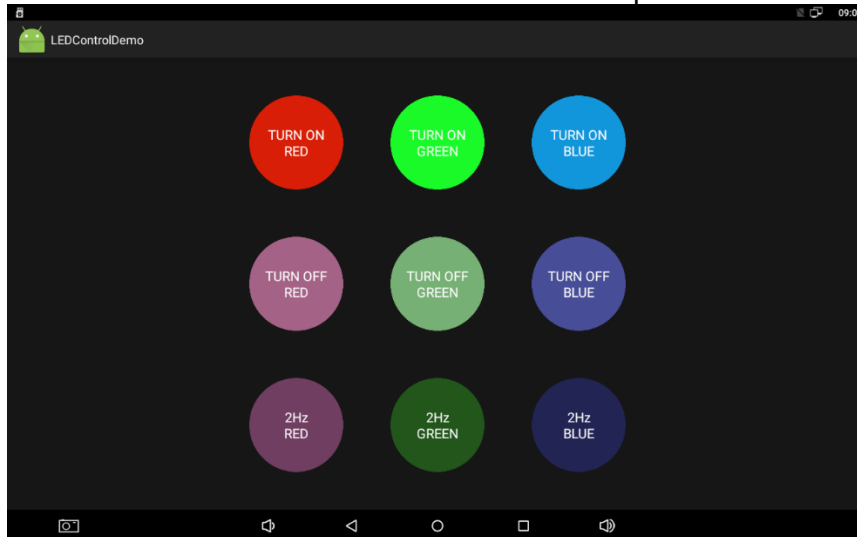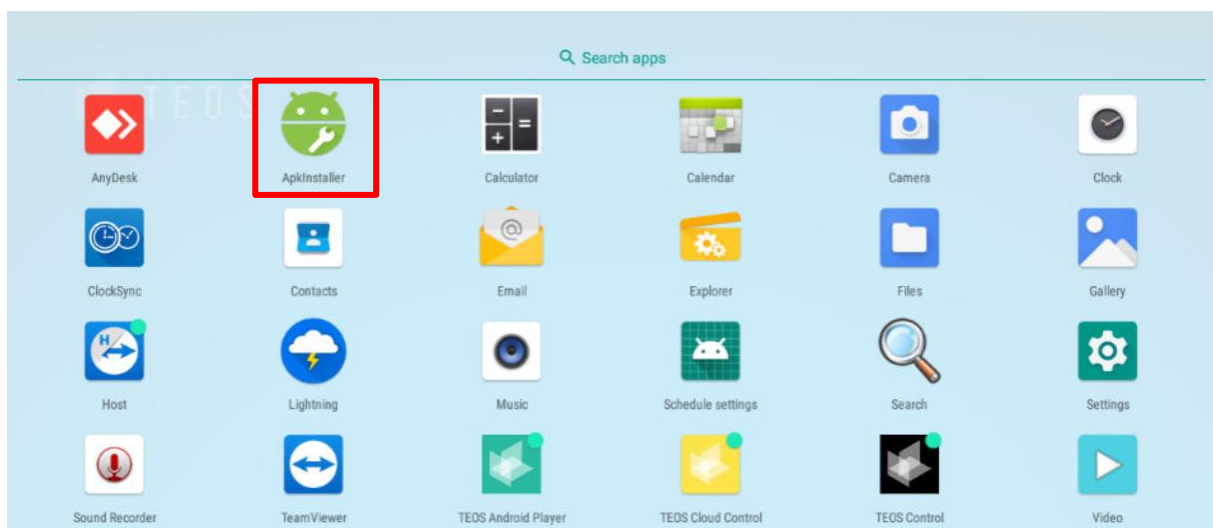

2.10 Install an Android App Into tablet
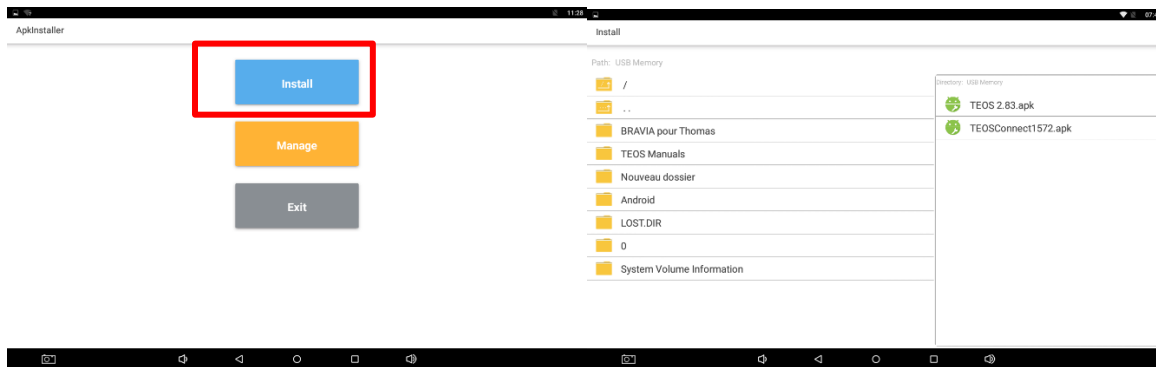
You can install you own Android apps into the tablets. Please check the app compatibility with us to test in order to ensure the app is compatible with the tablet.

Apps can be instaledl using adb mode, or manually using the Android platform

1. Go to menu> Apkinstaller

2. Click install and select the app you want to Install

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3   QBIC Tablet configuration for TEOS

From Factory, the QBIC tablets can arrive with a configuration which requires adjustments to be able to use it with TEOS. Make sure to use a firmware version which is rooted

Make sure the tablets are connected to the network. You have 2 methods of configuration with the tablets:

1) Complete remote configuration via the following URL and being in the same network:
http://share.qbictechnology.com/external_share/qrc/
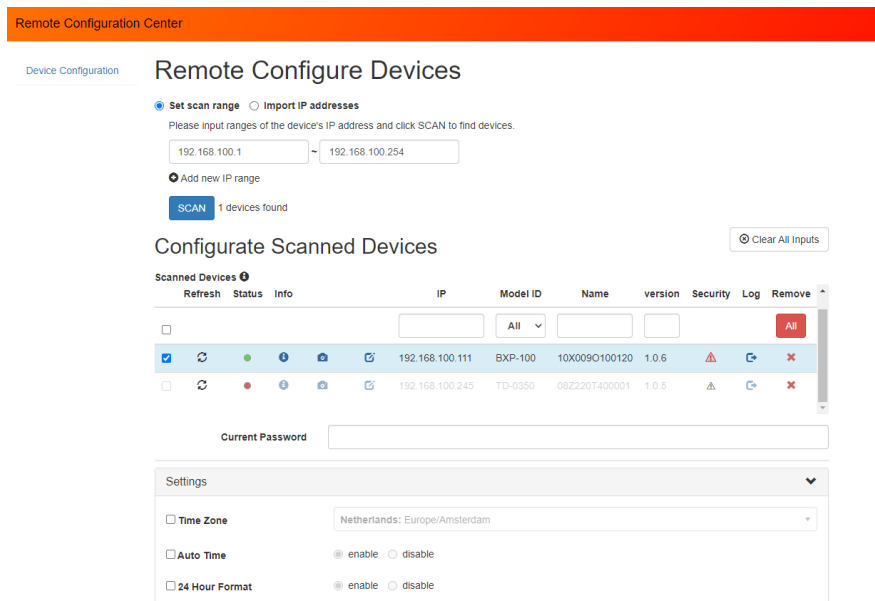
1)   Using the GUI on the player, which will be explained under this documentation.
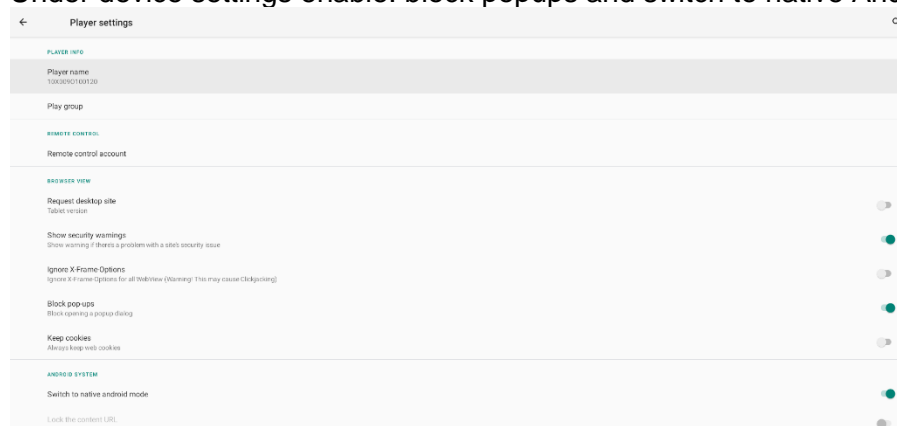
For the configuration start by connecting a keyboard and mouse to the player and press on settings

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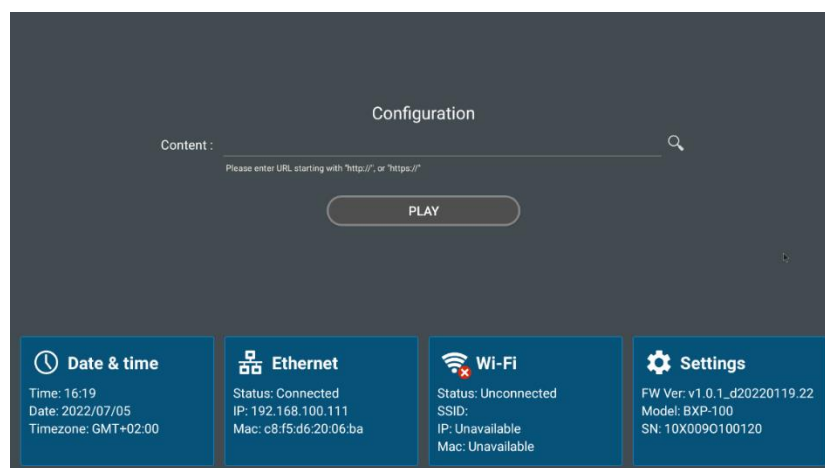
Go to tablet settings
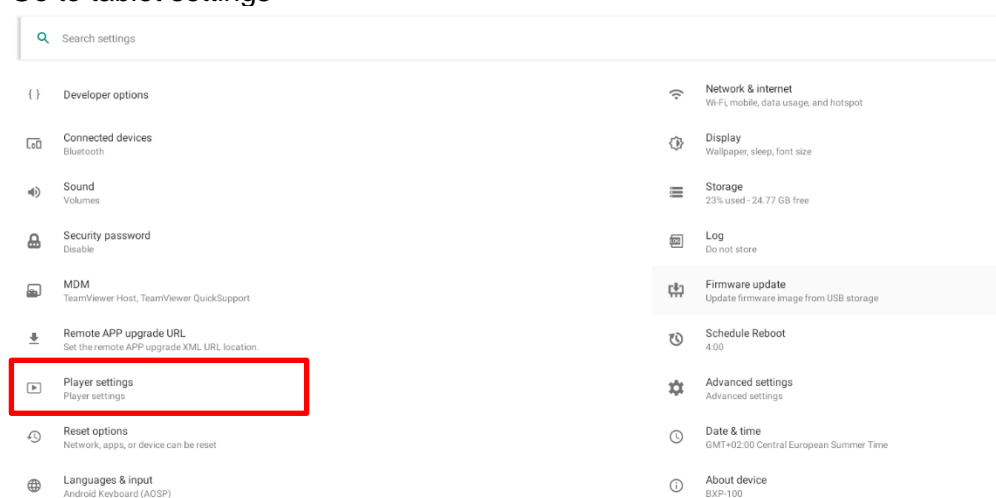
Under device settings enable: block popups and switch to native Android mode

Go back to settings and go to about device > build and press 7 times into the build number you will have developer options visible into the settings

SONY
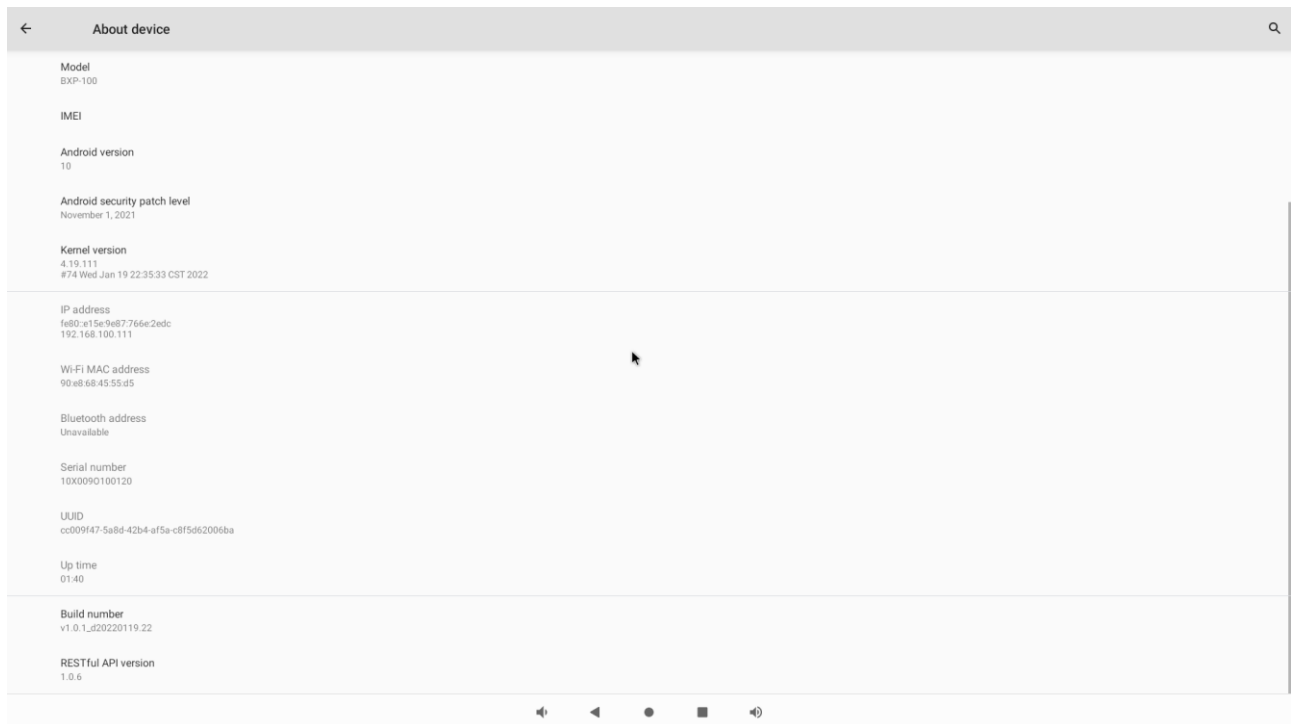
Go back to settings and developer options and enable stay awake and enable ADB and ADB over TCP-IP (port 5555)

Go to home > menu > file explorer and install the TEOS applications via USB

When all the applications are installed go to settings > advanced settings > security and under device admin apps allow TEOS Control (this for TEOS to be able to switch off the device)

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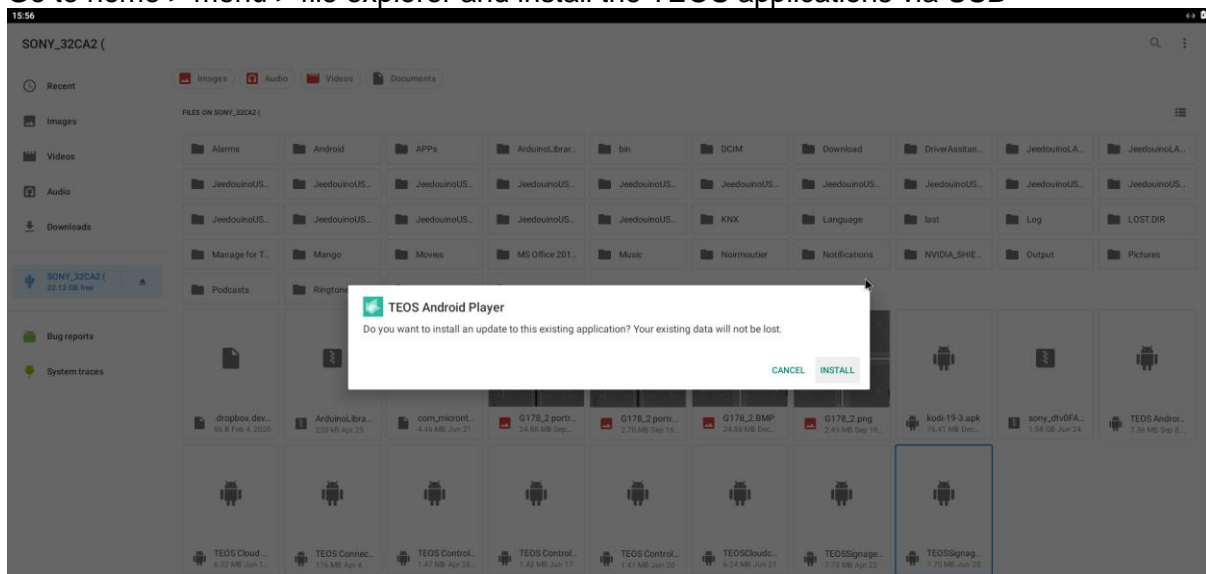
Go back to settings > advanced settings > Apps & Notification and allow in each TEOS application the permission to display over app and the storage, camera and other permissions.

4 Yealink tablet configuration for TEOS

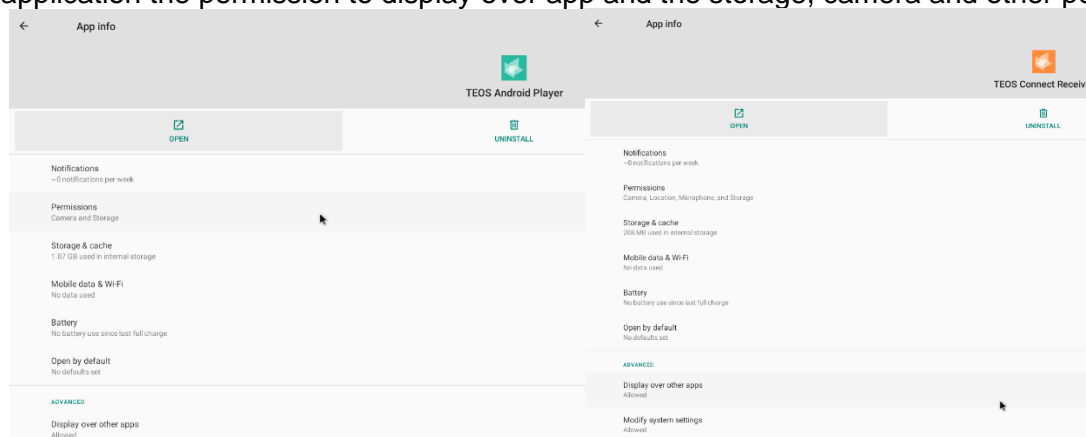When installing a tablet, it is recommended to check and update the device to the latest firmware version. Checking the current firmware version can be done using the tablet or using the web user interface.

To check the current firmware version using the tablet, from the top, swipe down to enter the device settings using the gear icon on the top right.

Using the side menu bar, navigate to 'About' to view the current firmware version.

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To check the current firmware version using the web user interface, go to the web user interface using your browser and enter 'https://IP' (using the IP of the device). The default user name is 'admin' and the default password is '0000'.
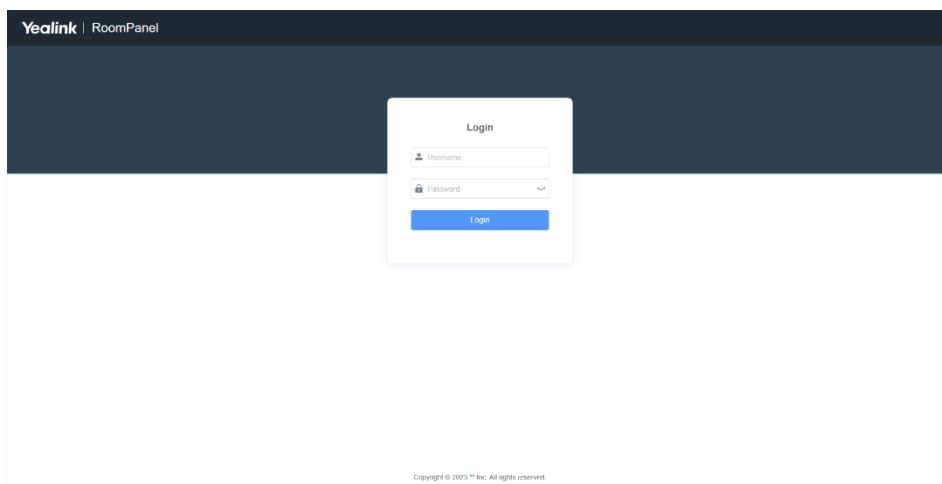
Using the side menu bar, navigate to 'System' to view the current firmware version.

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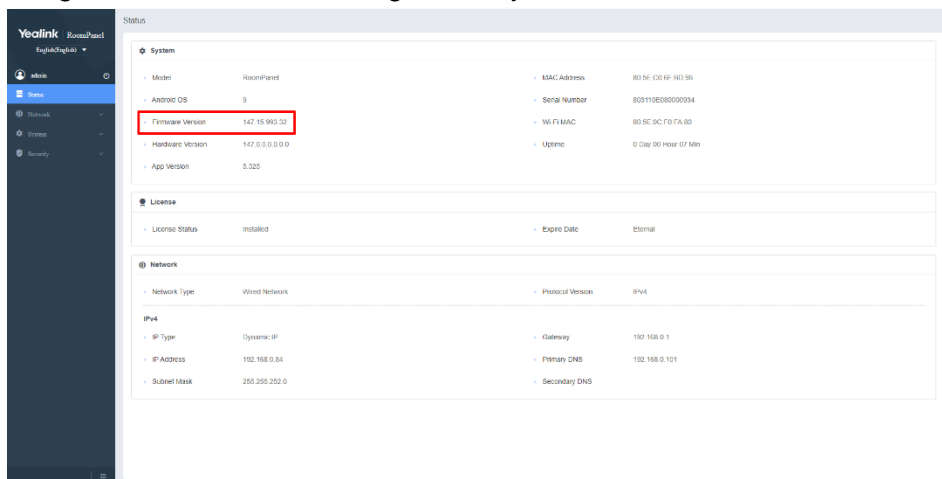
1. Firmware update

To update the firmware of the Yealink RoomPanel tablet, go to the web user interface using your browser and enter 'https://IP' (using the IP address of the device). The default user name is 'admin' and the default password is '0000'.
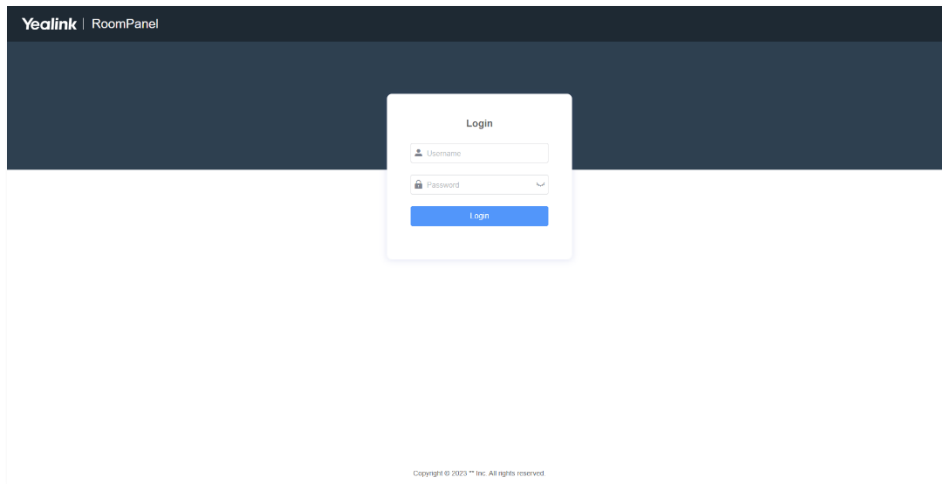
Using the side menu bar, navigate to 'System > Update' to manually update the firmware. Select the firmware file (RoomPanel-147.15.993.32.rom) and click 'Update' to start the process.
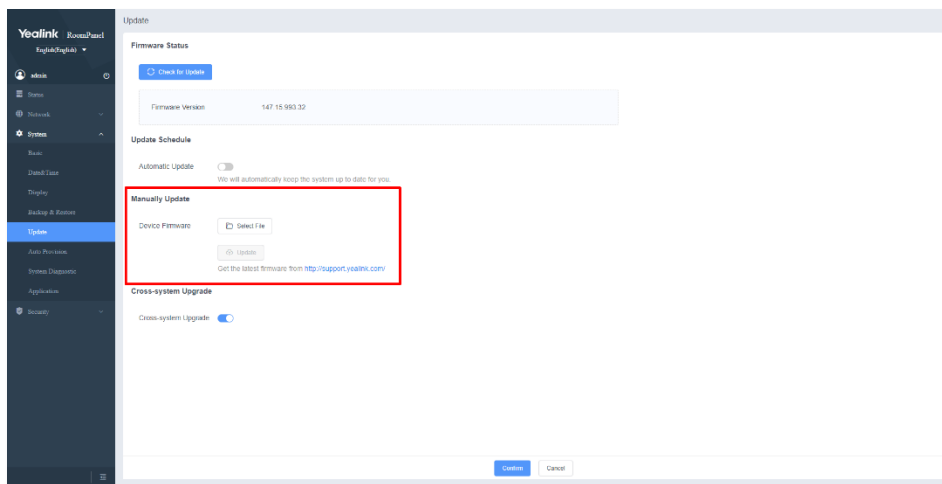
After the updating of the firmware has successfully been completed, set the language and time zone on the tablet and then set the Kiosk App to 'TEOS Android Player'. After a while the 'TEOS Android Player' app will show it is waiting for content.

5 Using another tablet configuration for TEOS

Go to home > menu > file explorer and install the TEOS applications via USB

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When all the applications are installed go to settings > advanced settings > security and under device admin apps allow TEOS Control (this for TEOS to be able to switch off the device).

If you have a tablet from the list in page 3 which is lower than Androdi 10 the steps below is not requires
Go back to settings > advanced settings > Apps & Notification and allow in each TEOS application the permission to display over app and the storage, camera, and other permissions.

6 Using TEOS in a tablet

This section explains how to add a tablet into TEOS and use it with the different add-ons.

When using TEOS on premise

Go to Manage for TEOS Interface > Administration > Device management. You have different methods to add devices: from an excel Import, from auto discovery option or adding It manually.

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We will add in this case manually a new device, for that press on "add device"

a) Insert the room or device name
b) Select "display" as device type
c) Select Sony as device brand
d) Model will be automatically field
e) **Insert the IP address of the device**
f) Select the license type
g) Add the device into a device group (create before a group in site configuration)
h) Press **save**

Make sure your device is linked to the device group (meeting room type).

Note: If the device Is not reachable via network, or you don't have license for It, you will get a message on top of this tab. If the device Is connected and the configuration done, you must be able to see It in green in both power status and behavior status.


By pressing to the virtual remote, TEOS will do a first adb request to your device. **Device will after ask to allow the connection (debugging), for a security measure** which needs to be done when the ADB connection is setup for the first time, you need to authorize the RSA key from the TEOS server, once this is accepted and saved into the local configuration file the connection can be setup at any time when the display is online.
You will have to accept the connection by Manage for TEOS to be able to see the snapshot

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from the screen.

 Edit   Delete   **Execute command**   Update screen

When trying to install a new App in TEOS via Site Management > Service management, and in the device press test ADB, TEOS is doing the same request to the device.
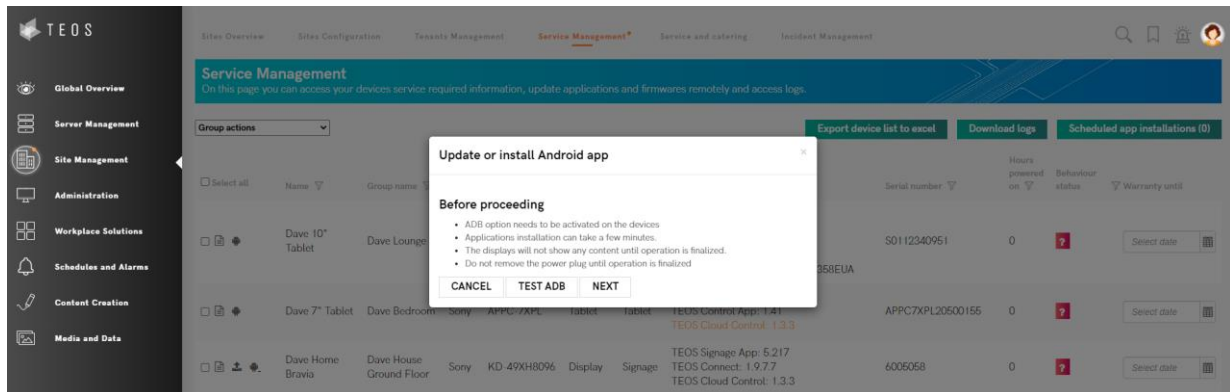
When using TEOS on Cloud (from version 3.0)

Go to your Manage for **TEOS CLOUD Interface** > Administration > Device management. We will add in this case manually a device to the cloud, for that press on the drop-down button on "Connecting cloud-controlled devices" to see the password **automatically regenerated every 1 hour** to insert in the device
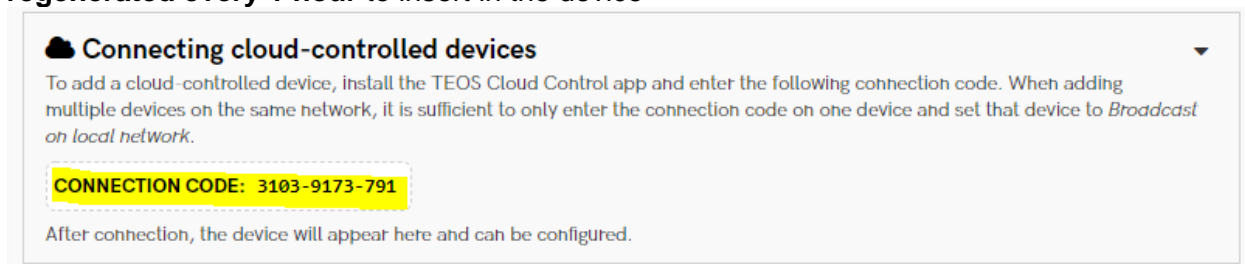
Now from the device, make sure it is connected to the internet. Open the app Cloud Control for TEOS (version 1.4.2 minimum) and insert the password, press connect.
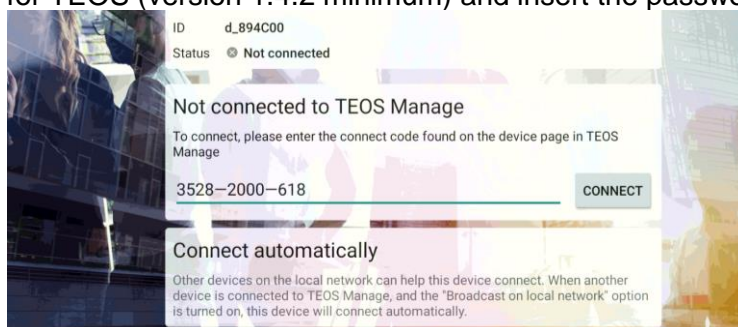
The device will then connect automatically to your cloud account without any additional action.

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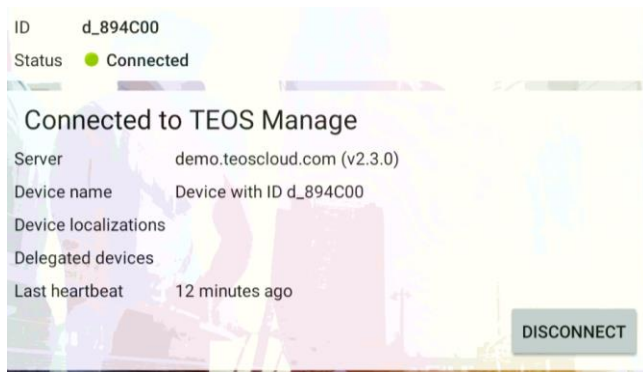
The ID shown in the device will appear in the AV device list after a refresh of the page and will be shown and this end of it.

You can then setup it by clicking on the edit button:

- i) Insert the room or device name
- j) Select "tablet" as device type
- k) Select Sony as device brand
- **l)** Model will be automatically field
- m) Select the license type
- n) Add the device into a device group (create before a group in site configuration)
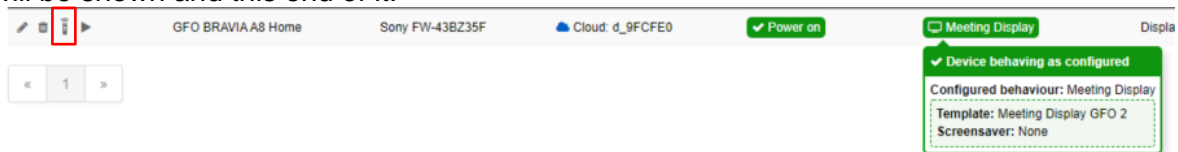- o) Press **save**

7 Tablet with Reception for TEOS usage

To show a reception interface on a tablet, first go into Workplace Solutions and go to the reception add-on. Click on create new, add a name and select the template you want to start with. This template can be modified afterwards.
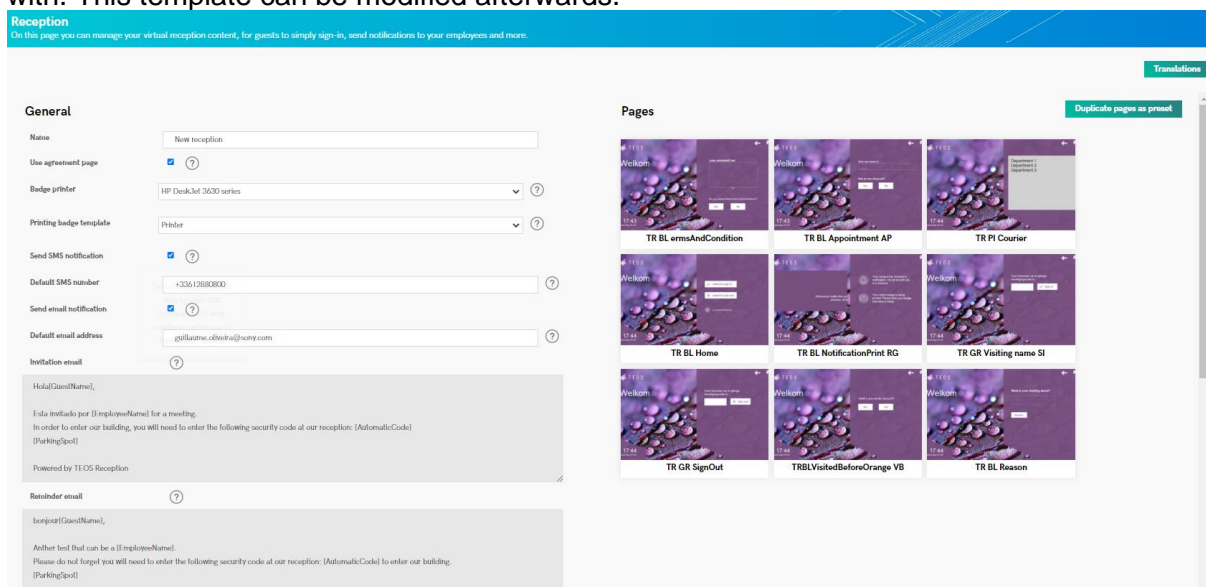
After creating the Reception interface, go to Administration > Device Management and click

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on edit in the tablet you want to use with Reception. In the General tab, the meeting room device type must be in "None". Go to Signage settings, select always in from and in default presentation the Reception Name just create before.

Click on save button and push on update screen button ⟳ Update screen. The tablet should close and open again TEOS Android App with the Reception Interface
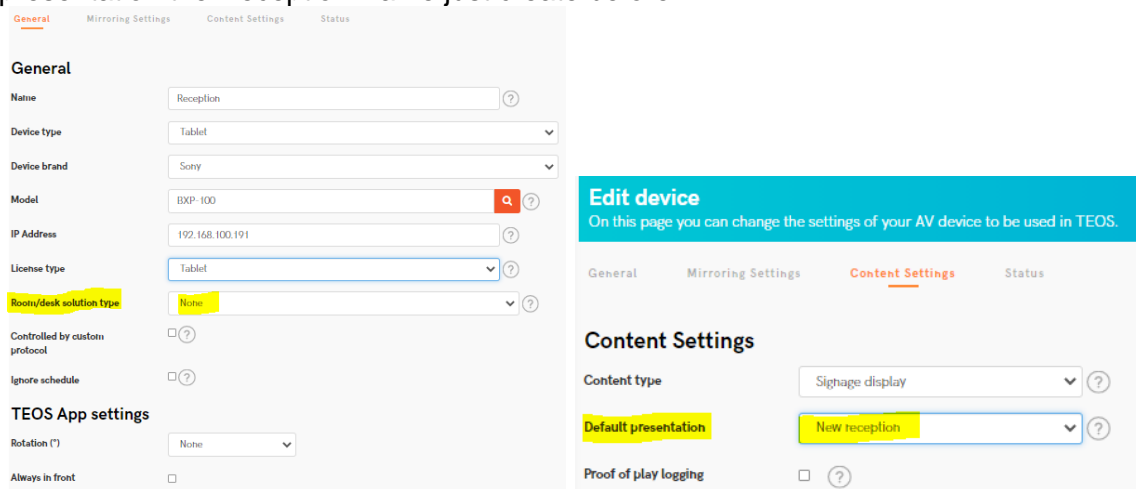
8   Unlock tablet when using TEOS Android App

When the tablet Is configured with all the apps and the physical buttons and status bar and disable, content (Room booking, Reception, Survey, Signage) Is displayed and there Is no possibility to go out of this Interface. The only way Is by doing touch sequence In TEOS app Interface to be able to go back In the app and go to desktop menu or other menus. The sequence Is:

Press on the bottom Right side of your Tablet for around 12s When releasing, the TEOS Android Player App will show the menu With an exit option.

You can also press home on your virtual remote from TEOS to go to the tablet desktop
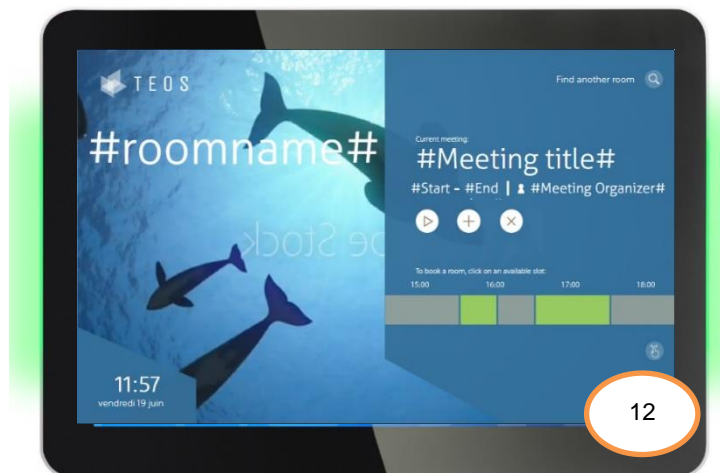
Make sure as much as possible that there is no element in the bottom right side to not disturb the unlock method.

After doing the sequence you will go back into TEOS Android App settings where you can exist it app. If you click on "exit app" button, you will be able to go to the desktop of the tablet. If you have enabled "always in front" option under Manage for TEOS on the device administration, the app will open automatically after 30 seconds.

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9 Quick content test and troubleshooting

To finalize the Installation of the tablet we recommend to and it into TEOS and send content Into It.

First, make sure that network tablet Is configured. Check that network port from TEOS Server to the tablet are open:

Server listening ports
•TCP -Port 80 (Web server)
•TCP -Port 443 (Web server)
•UDP –Port 123 (NTP)

The tablet needs to be able to contact TEOS Server using DNS approach, please make sure that the tablet Is able to resolve your TEOS domain name.

Tablet listening ports
•Type 8 and 0 (icmp ping for auto discovery)
•TCP –6541 (TEOS Player Signage app)
•TCP –5544 and 5545 (Control for TEOS)
•TCP –5555

All details can be found in https://pro.sony/teos partner portal, under How to software section

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10 product Compliance

Federal Communications Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

FCC RF Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
This transmitter must not be co-located operating in conjunction with any other antenna or transmitter.
Operations in the 5.15-5.25GHz band are restricted to indoor usage only.
This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

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