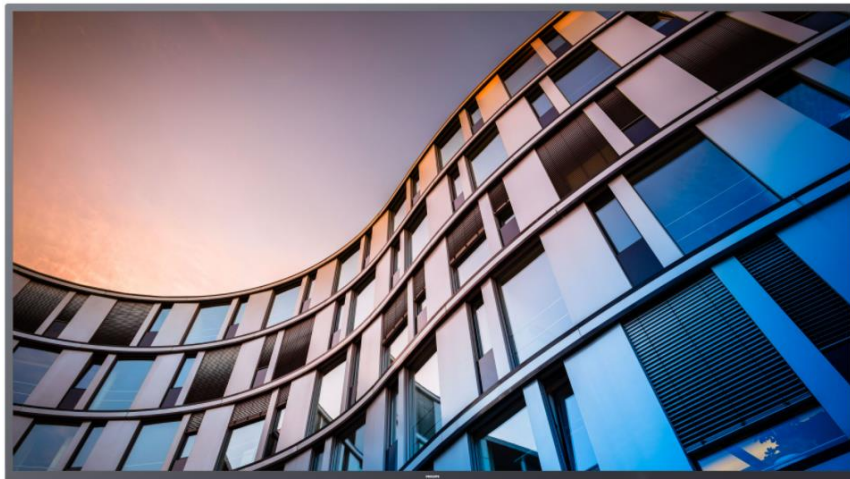


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Professional Installation Manual

xxBFL2114



Status:	approved
Version:	1.0
Date:	November 2020
Author:	Gerrit Weiden

Version history:

Version	Date	Author	Changes:
1.0	13/11/2020	Gerrit Weiden	First version Installation manual xxBFL2114

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1. General information

In this document, you can find information on how to install the Philips Professional TV's from the xxBFL2114 range. This document is intended for the System Integrator or the responsible technician of the location this device will be placed. You will find descriptions on what functions these platforms support and how to use them.

In this chapter, you can find some general information that is useful to know before reading the rest of the document.

1.1 Notice

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1.2 Help and support

Visit the Philips support website at <http://www.philips.com/support/> for:

- Leaflets and product documentation
- Download a printable PDF version of the user manual
- Contact details of the helpdesk
- Download the latest available software

Visit the Philips [support ticketing system](https://www.philips.com/pds/support) at <https://www.philips.com/pds/support> for:

- Allowing you to enter any after sales question for which you need support
- Easily follow up on any tickets submitted
- A knowledge base that will enable you to find answers to questions we receive on regular basis (FAQs)
- An NDA section for specific questions that require an NDA to be in place with your company to get the detailed feedback

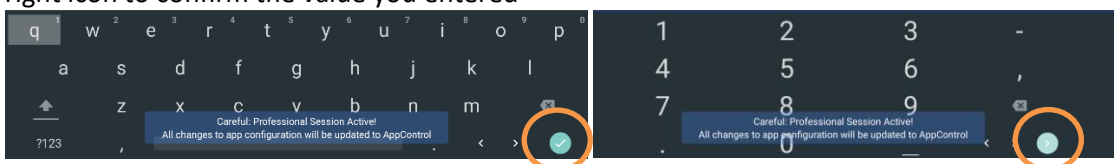
Visit the CMND website to download and find all info about CMND <http://cmdn.io/>

1.3 Definitions, Acronyms and Abbreviations

[]:	The values between brackets are referring to a TV menu item or a button on screen
“ ”:	The values between quotation marks are referring to a remote button
CDB:	CustomDashBoard
DVB-T:	Digital Video Broadcasting - Terrestrial
DVB-C:	Digital Video Broadcasting - Cable
HTTP:	Hyper Text Transfer Protocol
HTTPS:	Hyper Text Transfer Protocol Secure
IIC:	Instant Initial Cloning
IR:	Infrared
JAPIT:	'JSON API for TV' is the API specification to control the Philips TV
JEDI:	Java Enterprise Display Interface
LCN:	Logical Channel Number
MB:	MegaByte
MHz:	Megahertz
MRC:	Multi Remote Control
OSD:	On Screen Display
PTA:	Philips TV Application
RC:	Remote Control
SI:	System Integrator
STBY:	Standby
SW:	Software
TV:	Television
T&C:	Terms and Conditions
WIXP:	Web Internet eXpress

1.4 How to navigate, open menu's and make selections

- Navigating the menu can be done with the **“up”**, **“down”**, **“left”** and **“right”** arrow buttons on the remote control
- Opening a menu can be done with the **“OK”** button
- The **“OK”** button can also be used to activate buttons that can be seen on the screen like **[Done]**, **[Cancel]**, **[Close]**, **[Yes]**, **[No]**, ...
- In many places in the menu, you need to press the **“OK”** button after you selected an item to confirm your selection. Only navigating to this menu item and go back to the menu will not store your selection
- Changing the value of a slider can be done using the **“up”** and **“down”** arrow, your selection will be remembered without pressing the **“OK”** button
- When you have an on-screen keyboard, you need to navigate using the arrows to the bottom right icon to confirm the value you entered



2. Requirements before starting the installation of a TV

Before starting the installation, make sure that you have everything you need at hand. You need a USB device and a remote control.

2.1 Remote control

2.1.1 Master remote control 22AV9573A or 22AV9574A

It's best to use the green RC as it has specific functions for this product range but the orange RC can still be used as well.



22AV9573A



22AV9574A

2.1.2 User remote control 22AV1905A

22AV1905A





2.1.3 Accessory remote controls

22AV1604B
Healthcare RC



22AV1601B
Easy RC



22AV2005B
Digit RC



22AV2025B
Voice RC



*Note: previous RC's with digits will **NOT** work with the xxBDL2114 series as the code sent by the RC for some keys is different. If your customer needs digit keys on a remote, one of above remote controls is to be used and not any other previous RC. Digits in the menu can be enabled through the professional menu.*

22AV1604A is not the same RC as 22AV1604B while it looks identically.

22AV1601A is not the same RC as 22AV1601B while it looks identically.

Note: Both 22AV2005B and 22AV2025B have braille available on some keys.

2.1.4 Setup of the remote controls

2.1.4.1 How to setup the Master RC 22AV9574A

All codes are following RC6 standard

Note:

The RC has 4 modes:

- RC5 Guest mode
- RC5 Setup mode
- RC6 Guest Mode
- RC6 Setup Mode (default of RC)

The remote control will select RC5 Guest mode after pressing the respective button

The remote control will select RC5 Setup mode after pressing the respective button

The remote control will select RC6 Guest mode after pressing the respective button

The remote control will select RC6 Setup mode after pressing the respective button

For RC5 Guest and RC5 Setup mode, there are 2 submodes:

- RC5 Non Philips mode
- RC5 Philips mode

If the user selected RC5 Guest or RC5 Setup mode, the Non Philips mode will be selected by default

The user can change RC5 submode by pressing: '1' + 'A' at the same time for more than 4 seconds: RC5 Non Philips mode selected

The user can change RC5 submode by pressing: '1' + 'B' at the same time for more than 4 seconds: RC5 Philips mode selected

The selected RC5 submode will be stored until batteries are changed.

The key combination '1' + 'A' and '1' + 'B' have no effect if the RC is in RC6 guest or RC6 Setup mode.

2.1.4.2 How to set the multi RC for the user RC 22AV1905A

You can use the user RC for multi RC. More details can be found in the 'Professional settings' chapter. You can program this RC by pressing 2 buttons at the same time for 8 seconds.

Below you can find a table how to match the TV settings and the settings as they can be used in the user RC:

Mode: Buttons combination:

Blue (default)	"Home" and "Blue"
Yellow	"Home" and "Yellow"
Red	"Home" and "Red"
Green	"Home" and "Green"
0	"Home" and "Clock"
1	"Home" and "Channels"
2	"Home" and "Arrow up"
3	"Home" and "TV"
4	"Home" and "Arrow left"
5	"Home" and "OK"
6	"Home" and "Arrow right"
7	"Home" and "Back"
8	"Home" and "Arrow down"
9	"Home" and "Mute"

2.1.4.3 How to reset a user RC to the default settings

You can reset the user RC to the default settings by programming the MRC “Blue” as explained in the previous chapter.

2.1.4.4 How to setup the Healthcare RC (22AV1604B)

The RC can be used in both RC5 and RC6 mode, meaning that it can be used for all TV’s. By default, the RC is in RC6 mode (for xxBFL2114 monitors). You can change the RC to RC5 mode

- You can change the RC to RC5 mode by pressing 8 seconds “**Menu**” and “**Volume up**” at the same time.
- You can change it back to RC6 mode by pressing 8 seconds “**Mute**” and “**Channel up**” at the same time.

You can also use this RC for multi RC. More details can be found in the ‘Professional settings’ chapter. You can program this RC by pressing 2 buttons at the same time for 8 seconds following the combination from earlier chapter ‘How to set the multi RC for the user RC’.

2.1.4.5 How to setup the Easy RC (22AV1601B)

The RC can be used in both RC5 and RC6 mode, meaning that it can be used for all TV’s. By default, the RC is in RC6 mode (for xxBFL2114 monitors). You can change the RC to RC5 mode

- You can change the RC to RC5 mode by pressing 5 seconds “**Menu**” and “**Volume up**” at the same time.
- You can change it back to RC6 mode by pressing 5 seconds “**Mute**” and “**Channel up**” at the same time.

You can also use this RC for multi RC. More details can be found in the ‘Professional settings’ chapter. You can program this RC by pressing 2 buttons at the same time for 5 seconds following the combination from earlier chapter ‘How to set the multi RC for the user RC’.

Below you can find a table how to match the TV settings and the settings as they can be used in the user RC for **RC6**:

Mode: Buttons combination:

Blue (default)	"Home" and "Volume down"
Yellow	"Home" and "Channel down"
Red	"Back" and "Volume down"
Green	"Back" and "Channel down"
0	"Home" and "Clock"
1	"Home" and "Subtitle"
2	"Home" and "Arrow up"
3	"Home" and "TV"
4	"Home" and "Arrow left"
5	"Home" and "OK"
6	"Home" and "Arrow right"
7	"Home" and "Back"
8	"Home" and "Arrow down"
9	"Home" and "Mute"

Below you can find a table how to match the TV settings and the settings as they can be used in the user RC for **RC5**:

Mode: Buttons combination:

Blue (default)	"Home" and "Volume down"
Yellow	"Home" and "Channel down"
Red	"Back" and "Volume down"
Green	"Back" and "Channel down"

Also note that for the easy RC the multi RC setting is stored permanently, so it will remember the setting even if the batteries are removed from the RC.

2.2 Professional Settings menu

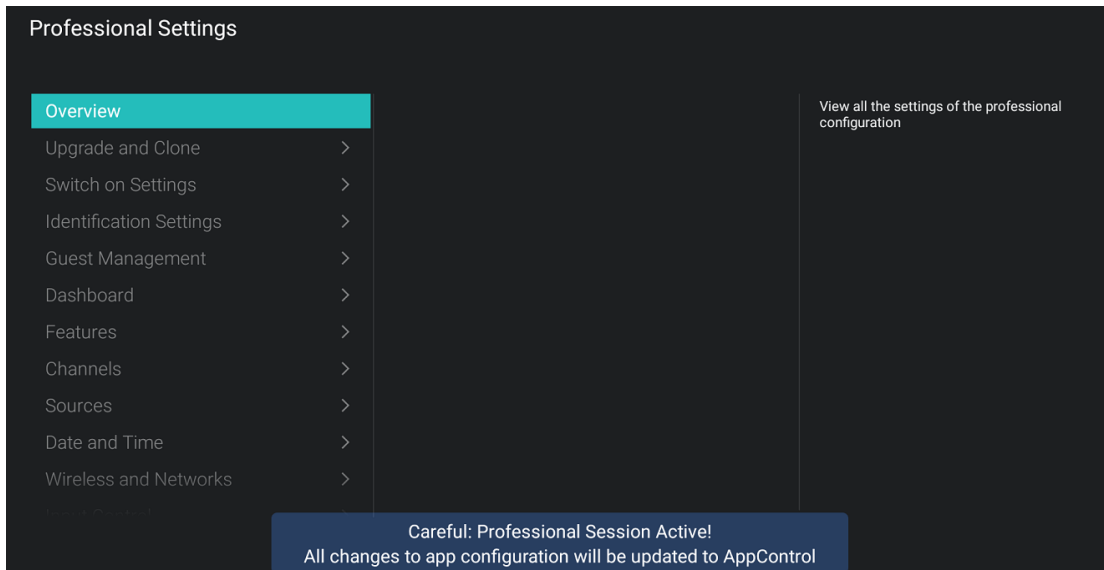
To access the [**Professional Settings**] menu you have 2 possibilities:

- Using the master remote control (green), press the **"RC 6 setup"** key and then press the **"Setup-icon"** button:



- Using the user remote control, press the following keys sequentially: **"3 1 9 7 5 3 mute"** or **"mute left right up down ok"**

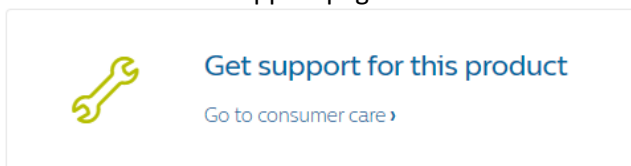
*Note: The sequence: **"3 1 9 7 5 3 mute"** will not show the [**Professional Settings**] if [**High Security**] option is enabled, it will only work using the 'master RC'*



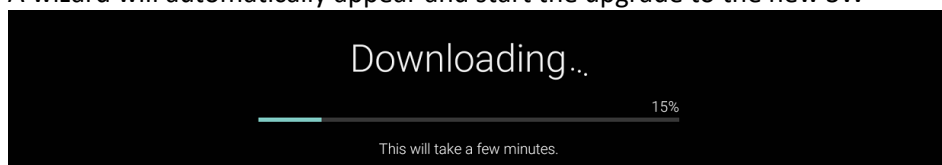
2.3 Software upgrade

For the best user experience, it is highly recommended to use the latest software version available. Go to: <http://www.philips.com/support/>

- Select your country, enter the model number and download the latest software version available from the support page



- Unzip the software and follow the instructions how to upgrade the software on the TV
- The USB flash drive used for software upgrade must be formatted as FAT32 and preferably empty to avoid an accidental upload of a wrong setting or software
- **Preparation:**
 - Copy the software (autorun.upg) on the root of the USB stick (FA32 formatted) and do not change the name
- **Procedure:**
 - Start up the TV and wait until it is fully booted up, should take a max of 2min
 - Insert the USB stick
 - A wizard will automatically appear and start the upgrade to the new SW



- Wait until the process finishes, don't send any RC command to the TV and do not unplug the power cord
 - After the update is done and the USB stick can be extracted
- It's required to first upgrade the TV and afterwards to perform the installation

The latest software version and cloning data can be stored on the same USB drive for a 2 in 1 action: software upgrade and cloning during the instant initial cloning. See chapter 'Instant Initial Cloning (IIC)' for more information.

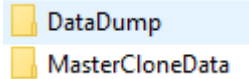
2.4 Clone folder structure

Below you can find the menu structure of a clone file.

Following is the folder name used in the root of the USB device containing the clone data:

- TPM181HE_CloneData/MasterCloneData/

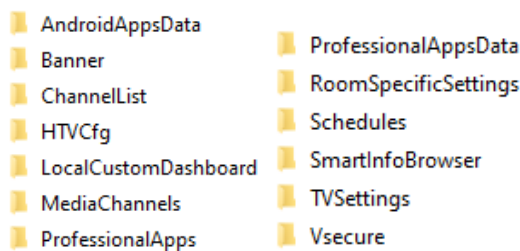
In the folder 'TPM181HE_CloneData', there can be multiple folders (so not only 'MasterCloneData'):



- The MasterCloneData is the main master clone file containing all clone data.
- The DataDump contains information for debugging in case of reported problems. It also contains the CSM.txt file containing all details about the TV.
- You can also have a folder called "xxxxxCloneData" where xxxxx is the 5 digits of the room number. If the room number matched the roomID set in TV, the TV will use this clone file to program the TV when cloning from USB to TV.

It is advised to use CMND or the TV menu to make changes to the MasterCloneData and not to do this manually.

Just for your information, the menu structure inside the MasterCloneData folder is as follows (some of the folders might not be seen depending on your settings):



If you want to clone some specific part in your TV you can do so by only putting the specific folder in the MasterCloneData folder before cloning it in the TV.

Note: The folder names are case sensitive

3. Find out the state of the TV

It is important to know if a TV is in Virgin mode (out of the box) or installed before. When installing a newly bought TV, it will be in virgin mode.

3.1 Virgin mode

If you can see below screen, you know that the TV is in 'out of the box' state and you can install the set by using procedure described in chapter 'Virgin installation wizard' of this manual.



3.2 Professional Mode ON/OFF

If your set is not in virgin mode, you can check if the professional settings are ON or OFF. This can be done by going to the professional menu and navigate to **[Advanced] [Professional Mode]** and turn this option back to **[On]** in case it would be **[Off]**. You will need to do a virgin installation after you have enabled Professional Mode by reinstalling the TV.

This TV is only to be used having professional mode set to **[On]**, you are able to turn it **[Off]** in case your TV is out of warranty and you still want to use it as a consumer TV.

*Note: no support will be given in case of **[Professional Mode] = [Off]**.*

3.3 CSM (Customer Service Menu)

The CSM contains data about the TV software, serial number and other details. The menu can be accessed using a standard remote control or using the master remote control.

- Using a RC with digits: **"1 2 3 6 5 4"**
- Using the user RC: **"Mute Right Left Down Up OK"**
- Using the master RC **"Recall/Info"** or **"Info/CSM"** depending on the model

Note: When you enter the CSM menu using the key code a text file (CMS.txt) will be written to your USB memory device if it's connected to your TV in order to have a copy of the CSM data.

You can navigate between the 9 CMS pages using **"Up/Down"**.

CSM 2

2.1 Current main software	:	TPM181HE_R.105.000.239.000
2.2 Standby software	:	6
2.3 Strings database version	:	2020/August/5
2.7 FRC-V software	:	No version
2.10 TV's Release Status	:	user
2.11 NVM-version	:	0.42
2.12 Channel Logo Database Version	:	07/09/2020 12:40:19

4. Reinstall TV

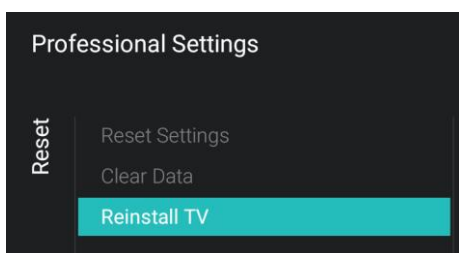
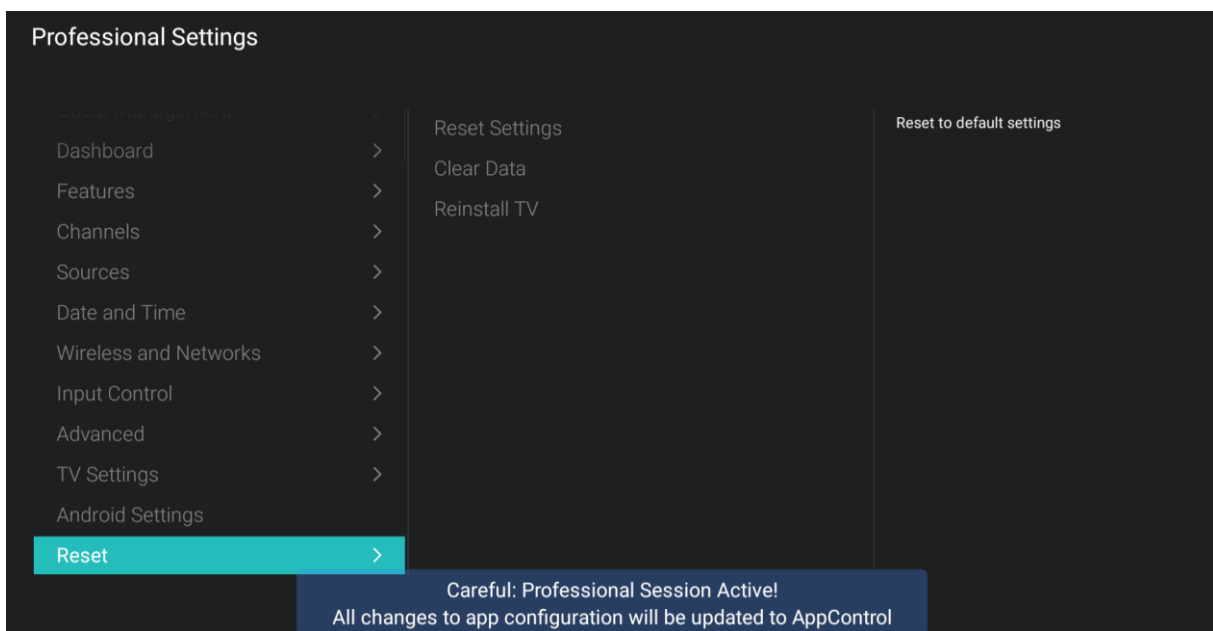
4.1 Reinstall the TV manually

If you want to start an installation from scratch you can always reinstall the TV. All settings will be reset to the default values and channel list will be cleared.

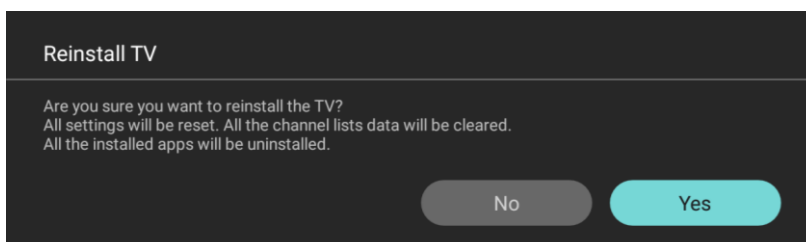
***Note:** Some settings like webservice url, roomID, manual date and time, professional mode, professional menu pin lock and logging url will not be reset, If you want these settings to be changed you will need to do this after the reinstallation has finished.*

Open the [**Professional Settings**] menu.

Navigate to the [**Reset**] menu. Navigate to the [**Reinstall TV**] menu.



Press the “**OK**” button on the [**Reinstall TV**] menu, you should get below screen.



***Note:** Depending on your country and settings, a PIN code can be requested.*

Select **[Yes]** and press the “**OK**” button to reinstall the TV. You will see that the TV will apply a reset and restart into IIC mode.

4.2 Reinstall via a script in the clone file

To automatically reinstall the TV, load a new clone file and load new SW you can use this script. In the ‘MasterCloneData’ folder you can add a folder called ‘Script’. In this folder you have to put a script called ‘Script.xml’.

This xml file has as content below:

```
<?xml version='1.0' encoding='UTF-8' ?>
<Script>
  <SchemaVersion MajorVerNo="1" MinorVerNo="0" />
  <Activity>
    <Action>ReinstallTV</Action>
  </Activity>
</Script>
```

If you have this file in the correct location and you Clone USB to TV then in the beginning of the cloning process the TV will give a notification ‘Reinstall TV’ and the TV will be reinstalled.

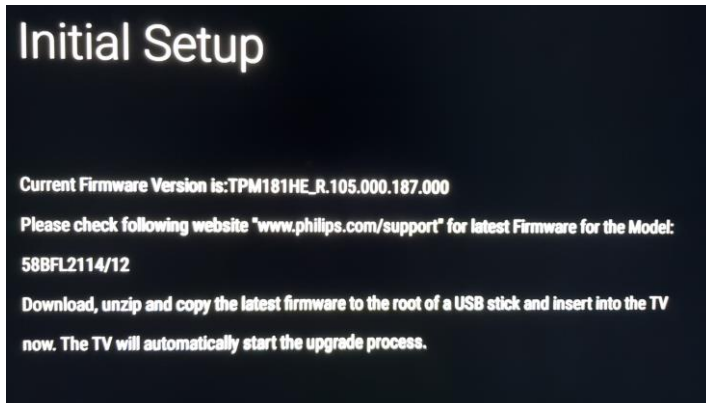
After the reinstallation the TV will be in IIC mode, if you have new SW on the USB device the TV will be upgraded, after this the new clone file will be loaded to the TV.

5. Virgin installation wizard

Out of the box a new TV will be in virgin mode. This means that you will have to go through the virgin installation wizard to apply the first settings of the TV.
You might need to wake up the TV from standby.

5.1.1 Initial Setup installation

When starting up the TV in virgin mode you will see the first screen indicating Initial Setup.



The TV is now searching in the background on USB, Network and RF for a new clone file containing all new settings for the TV and/or a new software update.

Note: Only, if new clone file or software is recognized in the background the monitor will reach out to the Instant Initial Cloning (IIC) wizard.

You can also see the model name and SW version of the TV.

If there is no need to load a clone file in this TV (for example if you want to make a new installation to create a master clone file) then you need to press “OK” to activate the skip button.


5.1.2 Instant initial cloning and software upgrade


If you want to upgrade the TV software and load a new clone file in the TV via USB you have to do following steps:

- Disconnect the TV from the mains power
- Insert a USB device with both the new SW (See chapter “Software upgrade”) and the clone file you want to load in the TV

You must see following 2 files in the root of your USB device (remove all other files and folders)

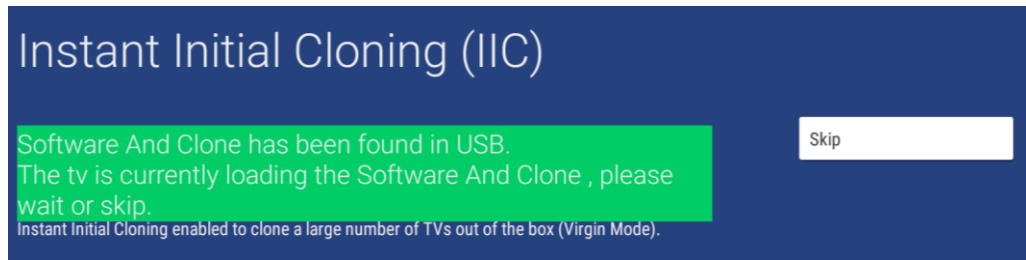
Note: Both folder name and the upg file are case sensitive. If multiple clone files are on a USB device, the “MasterCloneData” will be used for cloning

 TPM181HE_CloneData

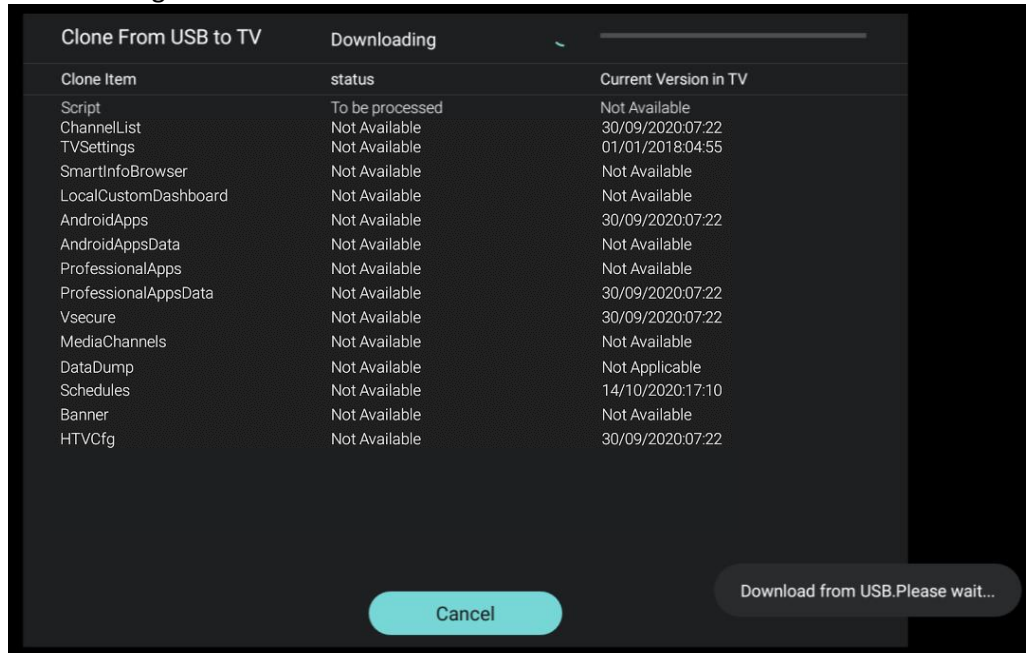
 autorun.upg

- Connect the mains power to the TV
- Wake up the TV from STBY if required

- The TV will automatically detect the new SW version and the clone file and upgrade both
- During this process you will see following (no user interaction needed):
 - Detection of the Software and Clone file

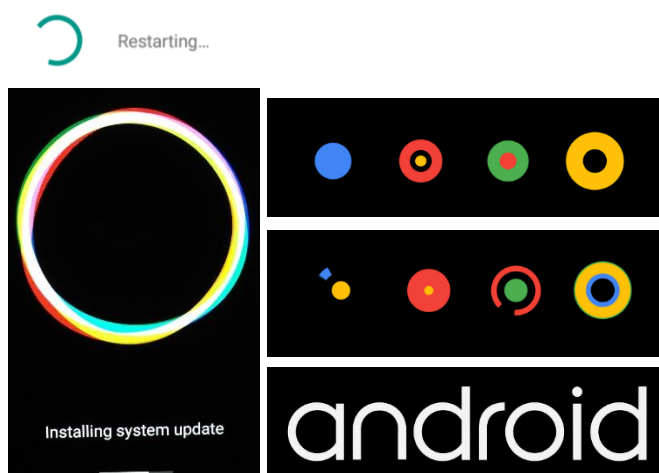


- Downloading the SW from USB to TV will start

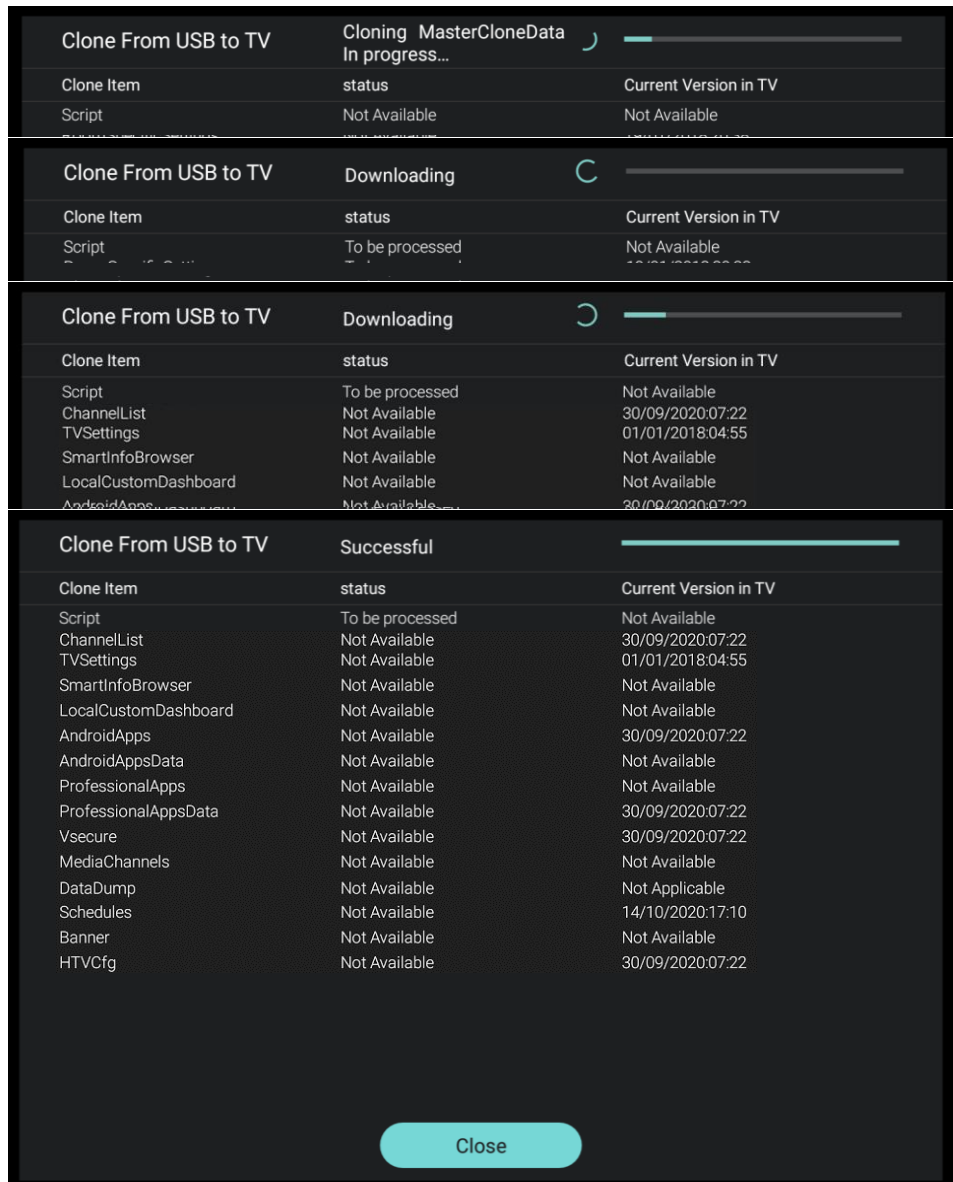


- After the downloading phase, you will see that the SW upgrade will start. During this process, you will see that android is installing the system update and some other waiting animations. The SW upgrade can take several minutes.

Android system update



- After the software upgrade, the TV will reboot and will go again to the cloning screen where the clone file from the USB stick will be loaded in TV



Note: First, you will see "Downloading"; once downloaded you will see a message that you can remove the USB stick:

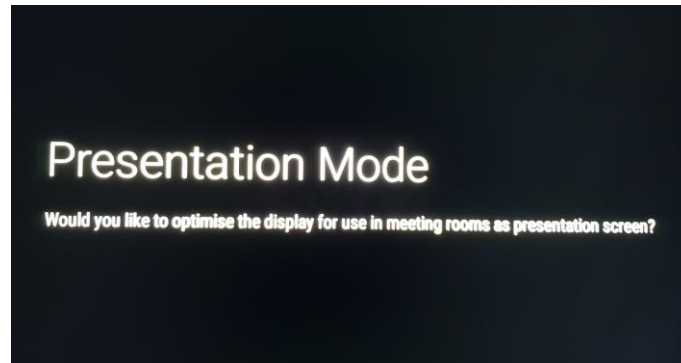
Firmware / Clone Data have been downloaded. USB device can be removed. Upgrading /

- If you don't press "OK" once processing is done, the TV will go to standby after 30 minutes. You can press "OK" to close the overview screen, the installation is done and you can start using the TV.

If a clone file and/or software is sent out over IP or RF the same process will happen automatically.

5.2 Settings during virgin installation

When you follow the Initial Setup wizard, you will be able to set the monitor to PRESENTATION MODE with “YES” or “NO”.



The differences of the setting PRESENTATION MODE “YES” or “NO” are:

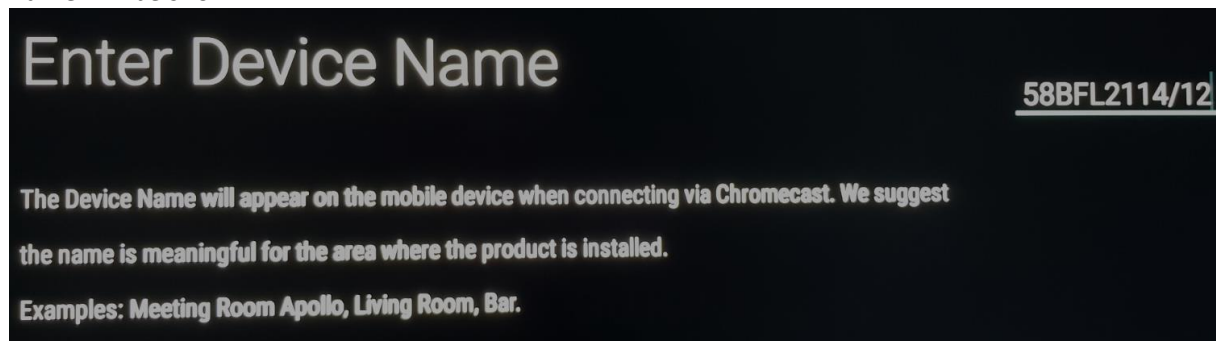
<p>Select [NO]: keep default settings:</p> <ul style="list-style-type: none"> - Set [Auto Standby] to [240] minutes - Set [Standby Mode] to [Green] - Set [Switch On Feature] to [None] - Set [Force Custom Name] to [Off] - Set [Secure Sharing] to [On] - Set [Picture Format Overscan] to [On] - Set [Power On] to [Standby] 	<p>Select [YES]: changes default settings automatically to „Presentation Mode“ settings in PBS:</p> <ul style="list-style-type: none"> - Set [Auto Standby] to [0] minutes - Set [Standby Mode] to [Fast] - Set [Switch On Feature] to [Google Cast] - Set [Force Custom Name] to [On] - Set [Secure Sharing] to [Off] - Set [Picture Format Overscan] to [Off] - Set [Power On] to [On]
--	---

Note: all settings, independent from the selection made during Initial Setup, can be changed later at any time manually in the Professional Menu.

Disclaimer: Settings for PRESENTATION MODE “YES” or “NO”, as mentioned above, can be changed without further notice!

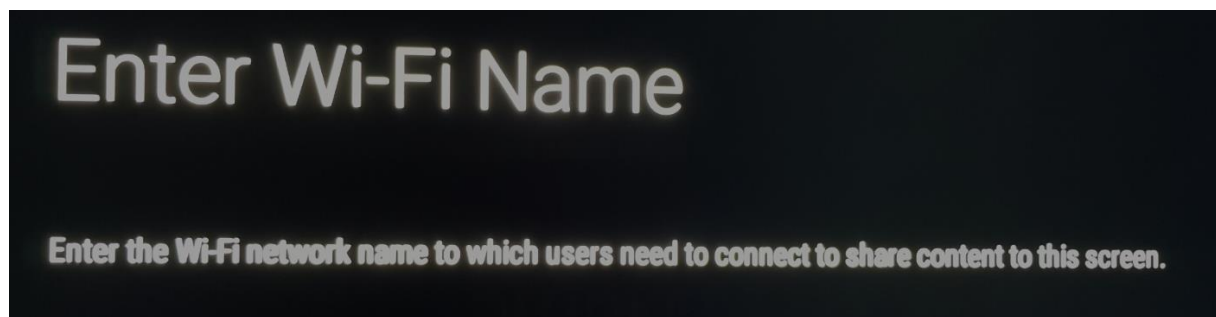
Example:

In such case, that “YES” of PRESENTATION MODE has been selected the next page to enter the device name will be shown:



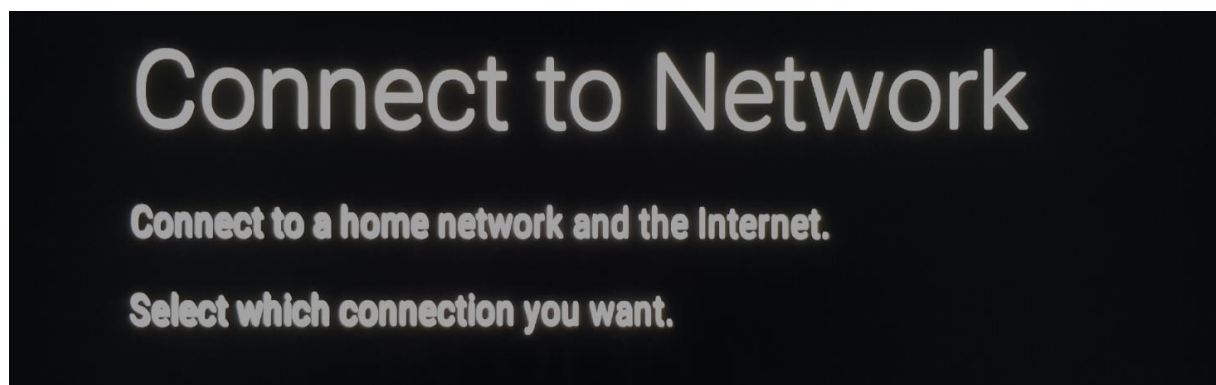
Note: We suggest the name of the device is meaningful for the area where the device is installed.

Next step of the wizard, is, to enter the Wi-Fi name:



Note: Enter the Wi-Fi network name to which users need to connect to share content to this screen making use of Google cast. Important: The Wi-Fi network name which will be entered here won't connect automatically to this specific network. Such connection needs to be made manually during next steps of the Initial Setup.

After entering the Wi-Fi name, the device needs to be connected to an existing network:



Note: First, choose between a wired, wireless, WPS or WPS with pin code connection.

Next, to select a Wi-Fi network from the list the device recognizes (only if “wireless” has been chosen in previous step)



Select or add a Wi-Fi network

The device will be connected to the chosen Wi-Fi network:



Connecting..

The connection will be confirmed:



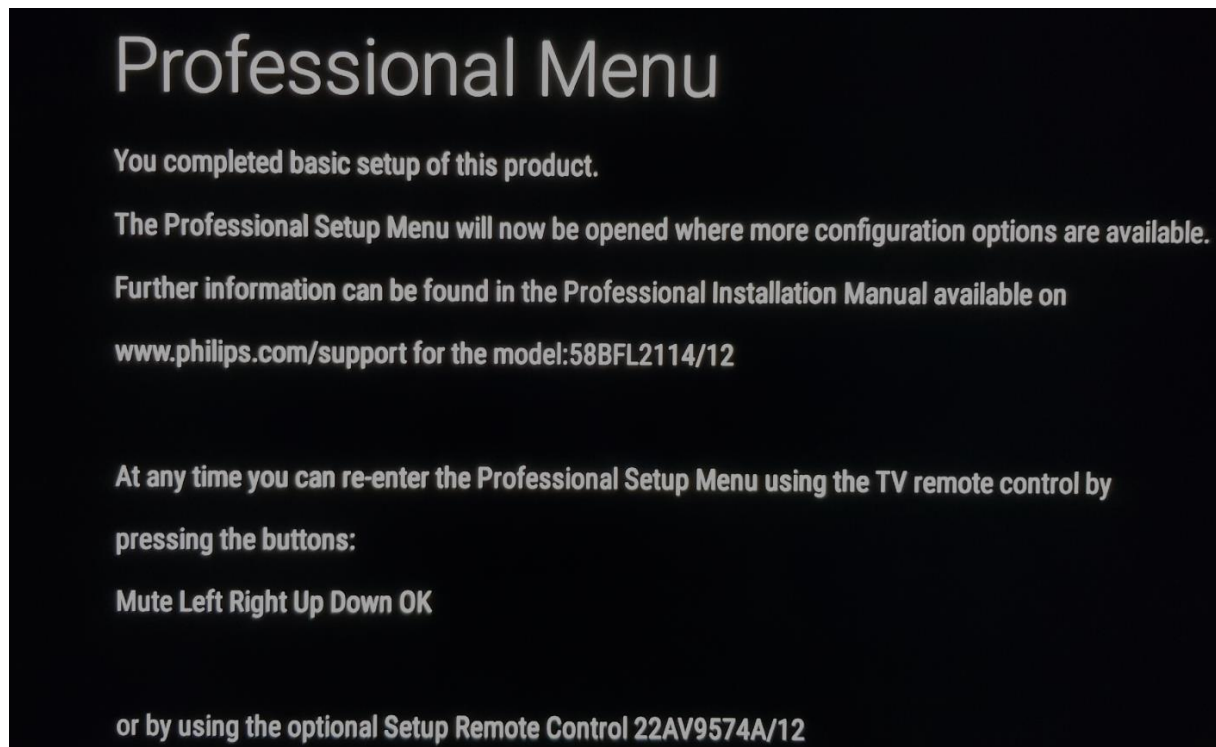
Connected

The wireless network is connected. WLAN-PUB

Encryption: NONE

Note: WLAN-PUB without Encryption shown here, is an example.

As a last step, the Initial setup is completed and the device will display a confirmation:



*Note: By confirming this page with **[OK]** on the remote control, the Professional Menu will appear.*

6. Professional Settings

6.1 General information

In this chapter, you can find information about all professional settings that can be changed. To start you have to open the **[Professional Settings]** menu. Using the user remote control, press the following keys sequentially: **“3 1 9 7 5 3 mute”** or **“mute left right up down ok”**.

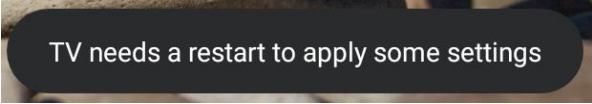
6.1.1 Store settings in the Professional Settings menu

When you exit the professional menu, you will see a message that all your settings are stored and applied. There is no need to reboot the TV.



All settings stored and applied

If a reboot is needed you will see below message. You need to perform a reboot to see the behavior after changing the settings.



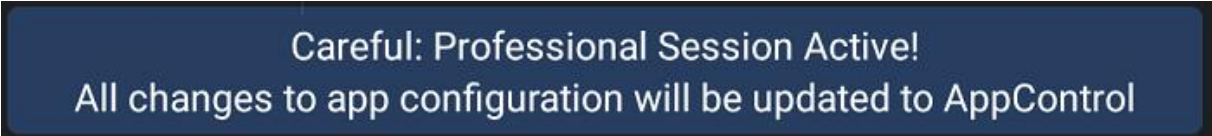
TV needs a restart to apply some settings

6.1.2 Professional session

This professional session is a session where the Professionals such as SI or Owner of the Device, can make changes persistent (to TV or Server depending on features and functions).

When you enter the professional menu a “Professional Session” will be active. As long as this session is active, you will see below notification onscreen.

Professional Apps may have professional settings, which can only be accessed via the professional menu. Once the professional app is launched via the professional menu, you can see through this message if you are in professional or user mode, the below message is displayed. The settings will only be stored if you are in a professional session.



Careful: Professional Session Active!
All changes to app configuration will be updated to AppControl

If you do not see this session message, it means you are in User mode and all changes done will be reset/cleared/deleted after the TV is put in standby or rebooted.

6.1.3 Exit Professional menu after installing apps

You will need to login to the Play Store with a valid google account to install apps (See more details in chapter ‘Manage Apps’). When you exit you will see the below message. You need to ensure downloads and updates are complete, or your installation may not be as expected.

You can check by going to the Play Store again or exit if you are sure all updates have been finished.



Exit Professional Session

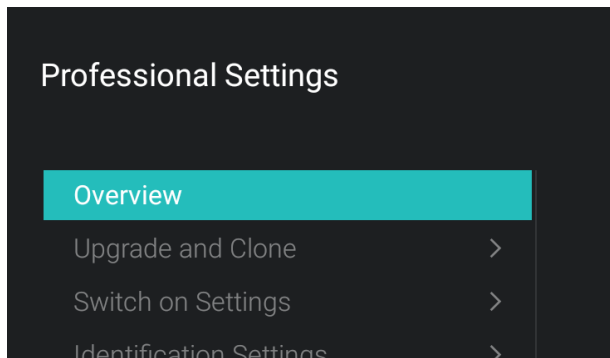
You are attempting to exit the Professional Session. Your credentials will be cleared and download of apps from Playstore will be cancelled. In case you have installed new apps in this session, please check that all apps have finished downloading and installing.

Google PlayStore

Exit Professional Session

More details in chapter 7.2 [Manage Apps]

6.2 Overview

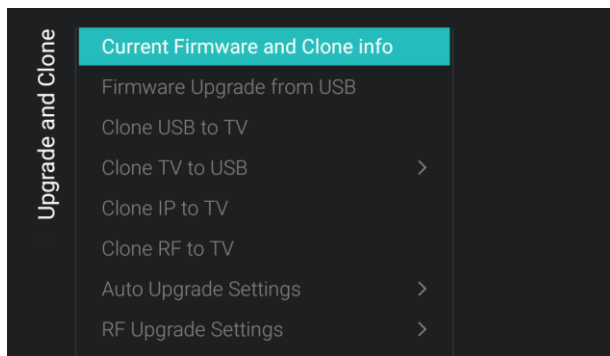


- Navigate to the [**Overview**] menu
- Open this menu item



- You will get an overview screen with all the settings that are set in the TV, this overview can be used to see the settings without having to navigate to all menu's separately
- Using the "arrow up/down" buttons you can go to the other overview pages
Note: No value can be changed in these screens
- Pressing "back" will exit this screen again

6.3 Upgrade and Clone

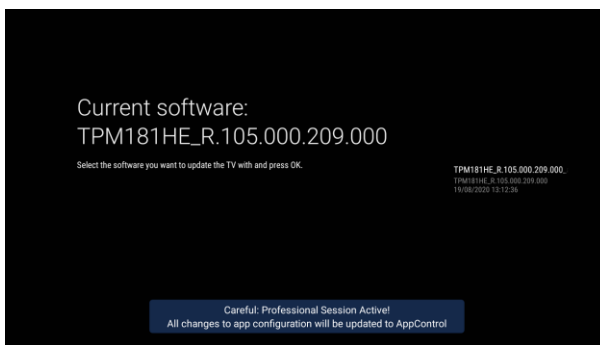


- Navigate to the [**Upgrade and Clone**] menu
- You will see the screen on the left
*Note: Cloning and upgrading over IP or RF will happen automatically after the TV is in standby for 5 minutes if [**Auto Upgrade and Clone**] in the professional menu is set to [On]. The cloning over IP will happen depending on the polling frequency set in CMND. It can also take longer depending on some other settings*

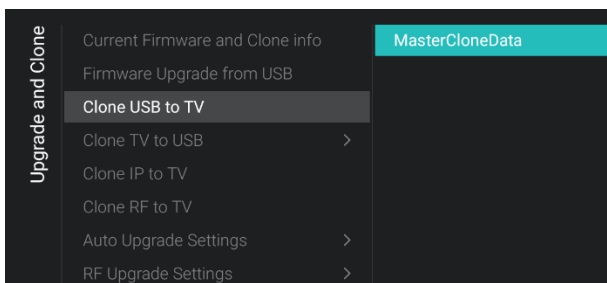
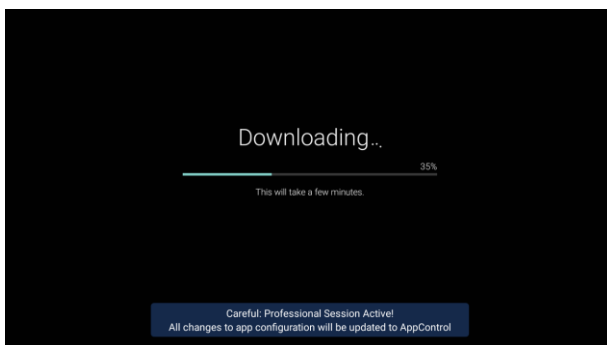
Current Firmware and Clone		
Clone Item	Last Clone Status	Current Version in TV
MainFirmware	Not Available	TPM181HE_R.105.000.239.001
Script	Not Available	Not Available
RoomSpecificSettings	Not Available	30/09/2020:07:22
ChannelList	Not Available	30/09/2020:07:22
TVSettings	Not Available	01/01/2018:04:55
SmartInfoBrowser	Not Available	Not Available
LocalCustomDashboard	Not Available	Not Available
AndroidApps	Not Available	30/09/2020:07:22
AndroidAppsData	Not Available	Not Available
ProfessionalApps	Not Available	Not Available
ProfessionalAppsData	Not Available	30/09/2020:07:22
Vsecure	Not Available	30/09/2020:07:22
MediaChannels	Not Available	Not Available
WeatherForecast	Not Available	Not Available
DataDump	Not Available	Not Applicable
Schedules	Not Available	14/10/2020:17:10
Banner	Not Available	Not Available
HTVCfg	Not Available	30/09/2020:07:22

Careful: Professional Session Active!
All changes to app configuration will be updated to AppControl

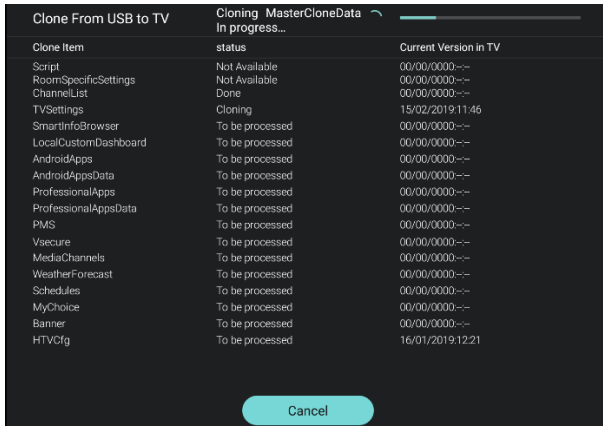
- Select the [**Current Firmware and Clone info**] menu
- You can see the SW version and the dates when the last cloning actions were done
- Select [**Next**] and press “OK” to see the second page
- Select [**Previous**] and press “OK” to see the first page
- Select [**Close**] and press “OK” to go back to the previous page



- Select the [**Firmware Upgrade from USB**] menu and open it to go to the Software Update Wizard
- If you are using an “autorun.upg” in the root of your USB the TV will automatically program the SW if it’s newer than the currently installed TV SW
- Using the Software Update Wizard, you will be able to load new SW in the TV. You will see the “autorun.upg” if it’s on the USB, you will also see a list of SW versions that are available in the ‘**upgrades**’ folder in the root of the USB device connected to the TV if they are applicable for this product
- Select the SW you want to install and press “OK”, you will see that the TV starts with the downloading from USB to TV
- Once the downloading is done, you will see that TV is restarting and installing the system update. This can take several minutes. Once installing is complete, the TV will reboot

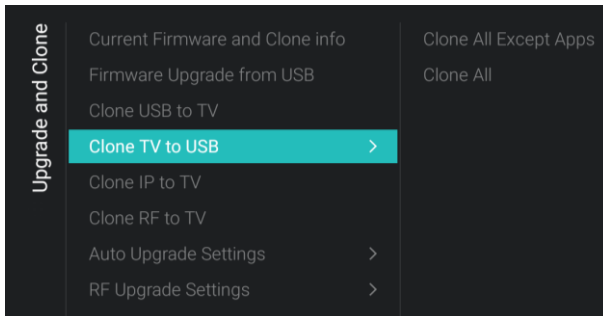


- Select the [**Clone USB to TV**] menu
 - Using this you will be able to clone from the USB device to the TV by selecting the [**MasterCloneData**] and press “OK” to start the cloning
- Note: If you want to have multiple clone files on your USB key, you can add extra folders called “xxxxxCloneData” where xxxxx represent 5 digits in the same location where you see the “MasterCloneData” and containing the same structure as in your “MasterCloneData” folder*



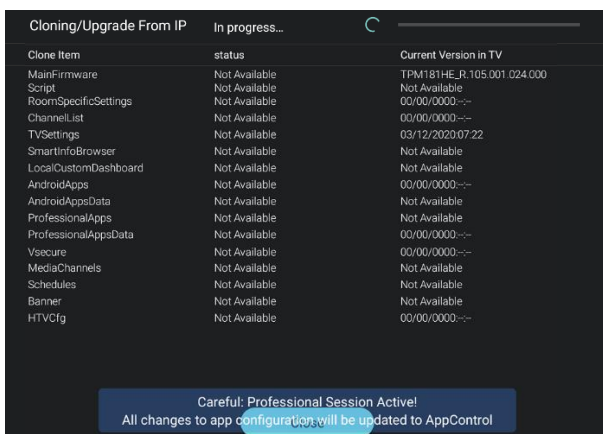
- MasterCloneData
- 00000CloneData
- 00001CloneData
- 99999CloneData

- On the top of the page you will see a **waiting animation** while cloning is ongoing, once finished it will change to **Successful**
- During the cloning process there will be a **[Cancel]** button available on the bottom of the page, press **“OK”** to cancel the cloning process
- Once cloning is complete, **[Cancel]** will change to **[Close]**, press **“OK”** to return back to TV state
- If **no USB stick** is inserted you will see **USB not found** on top of the page



- Select the **[Clone TV to USB]** menu
- Using this you will be able to clone from the TV to the USB device
- There are 2 submenus **[Clone All except Apps]** and **[Clone All]**
- When opening these menu's, you will have the same screen as shown when selecting the **[Clone USB to TV]** menu
- **[Clone All except Apps]** menu will clone everything except the Apps
- **[Clone All]** menu will clone everything but will take a bit longer

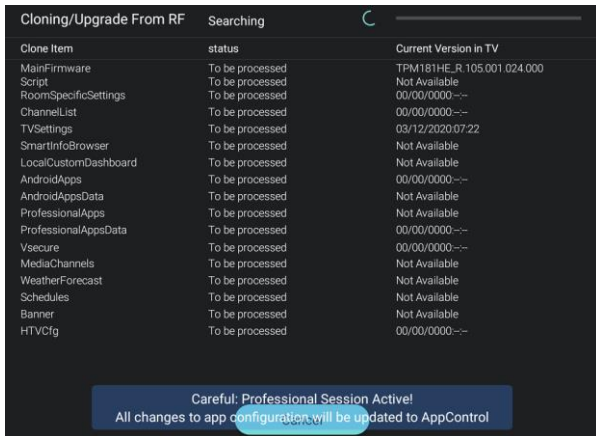
Note: Default channel logos are part of the SW and will not be cloned out



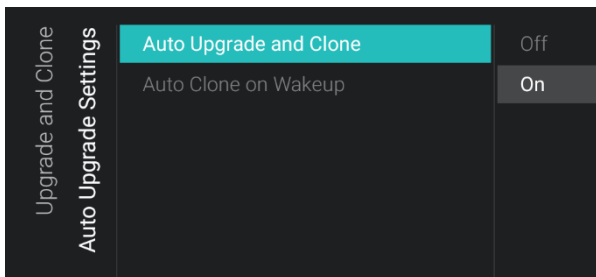
- Select the **[Clone IP to TV]** menu
- Using this you will be able to clone to the TV over IP, this happens automatically when a clone has been assigned to the TV in CMND. Via this menu you can manually force an upgrade to happen
- On the top of the page you will see a **waiting animation** while cloning is ongoing, once finished it will change to **Done**
- During the cloning process there will be a **[Cancel]** button available, press **“OK”** to cancel the cloning process
- Once cloning is complete, **[Cancel]** will change to **[Close]**, press **“OK”** to return back to TV state

Note: This menu is only accessible when [On] is selected in the [Wireless and

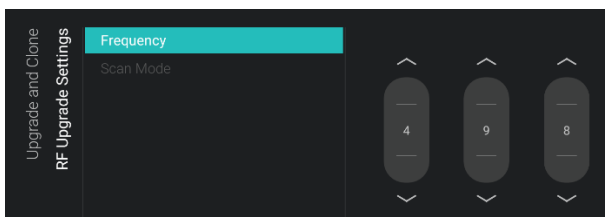
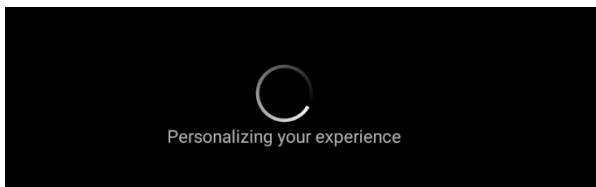
**Networks] [Control TV Over IP]
[WebServices] [IPUpgradeService] menu**



- Select the **[Clone RF to TV]** menu
- Using this you will be able to clone to the TV over RF, this happens automatically when a clone is being played out on RF by CMND. Via this menu you can manually force an upgrade to happen
- On the top of the page you will see a **waiting animation** while cloning is ongoing, once finished it will change to **Done**
- During the cloning process there will be a **[Cancel]** button available, press **“OK”** to cancel the cloning process
- Once cloning is complete, **[Cancel]** will change to **[Close]**, press **“OK”** to return back to TV state

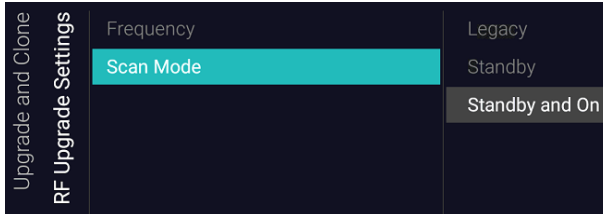


- Navigate to the **[Auto Upgrade Settings]** menu
- You will see below items:
 - **[Auto Upgrade and Clone]**: RF upgrade and Clone upgrade will be enabled automatically at 4 AM and 1PM if the TV is in standby and 5 minutes after the TV is put in STBY if **[On]** is selected, no upgrade will happen if **[Off]** is selected
 - **[Auto Clone on Wakeup]**: Nothing will happen when **[Off]** but when **[On]** the TV shall search for a new clone when waking up from standby. You will see a message “Personalizing your experience” when starting up the TV
Note: TVSettings, ChannelList, WeatherForecast and SmartInfoBrowser, will be cloned on wakeup. Depending on SW updates and feature updates this list might change overtime



- Navigate to the **[RF Upgrade Settings]** menu
- You will see below items:
 - **[Frequency]**: The frequency for CMND payout can be modified in this menu
Note: Default this should be set to 498 MHz. When an RF upgrade happens, the TV will first do a scan on the frequency set here. If nothing is found it will scan between 44 MHz and 887

MHz. So, if you do a playout on another frequency as set in the TV, the TV will do a fallback scan in order to find it. Make sure the frequency is not used by any other tv-, radio- or data mux.

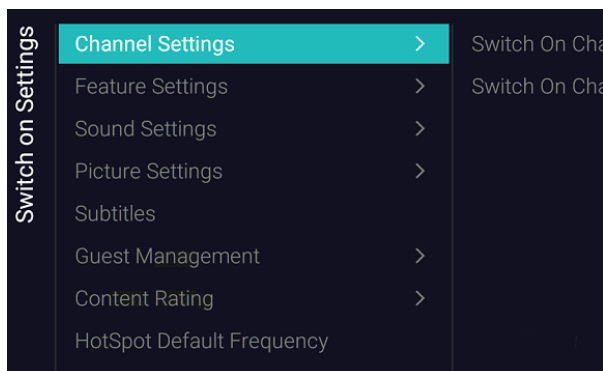


- **[Scan Mode]**: Define when the TV shall scan the RF stream for updates
 - When **[Legacy]** is selected, then the RF scan for upgrades will happen 5 minutes after the TV is set to STBY, 1PM and at 4AM when the TV is not in use
 - When **[Standby]** is selected, the TV will scan continuously when the TV is in standby and **[Standby Mode]** set to **[Fast]**
 - When **[Standby and On]** is selected, the TV will scan continuously when the TV is in standby and also when in on state. When in on state, in order to be able to upgrade, the tv needs to be tuned to the RF playout frequency, for example when an AV stream is being used in CMND and the tv is tuned to it

*Note: in order to set the **[Scan Mode]**, the TV must be in **[Fast]** mode. In Green mode, the TV will always follow the **[Legacy]** scanning*

Note: TV will stop the upgrade if TV would be woken up by the user during the upgrade

6.4 Switch on settings



- Navigate to the **[Switch on Settings]** menu, you will see the screen on the left
- In this menu you will be able to set all Switch on settings, these are the menu items that a user can change, the values you set here are the settings applied when the user wakes up the TV

6.4.1 Channel Settings

Switch on Settings Channel Settings	Switch On Channel Filter	All Channels
	Switch On Channel	TV Channels
		Source
		Google Play Movies & TV

- Navigate to the [**Channel Settings**] [**Switch On Channel Filter**] menu
- You will see a list of channel filters, your selection will be the default selected channel filter when opening the channel list
- This list also contains the theme's
- The channel list you have selected will also be shown in the recommended screen in the dashboard

Note: The list you see in the screenshot is depending on the installed content

Switch on Settings Channel Settings	Switch On Channel Filter	None
	Switch On Channel	1 vtm HD
		2 één HD
		3 VIER HD
		4 Canvas HD
		5 Q2 HD

- Navigate to the [**Channel Settings**] [**Switch On Channel**] menu
- You will see a list of channels followed by the external sources
- *Note: The list you see in the screenshot is depending on the installed channels*
- Select the channel or source you would like to set as Switch On Channel

6.4.2 Feature Settings

Switch on Settings Feature Settings	Switch On Feature	None
	Apps	Dashboard
		SmartInfo
		Apps
		Google Cast

- Navigate to the [**Feature Settings**] [**Switch On Feature**] menu
- You will see below items:
 - [**None**]: The dashboard or apps will NOT be opened when starting up the TV
 - [**Dashboard**]: The dashboard will be opened when starting up the TV
 - [**SmartInfo**]: SmartInfo will be opened when starting up the TV
 - [**Apps**]: An app will be opened when starting up the TV
 - [**Google Cast**]: When Google Cast is selected, the Chromecast application will be launched as startup feature

Note: SmartInfo will only be visible in this list when they are enabled in [Features] menu

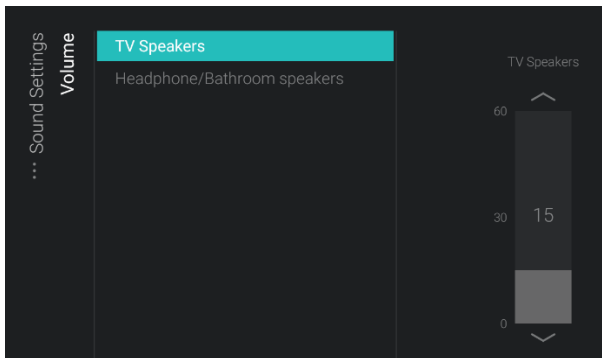
Switch on Settings Feature Settings	Switch On Feature	YouTube
	Apps	Play Movies & TV
		Play Music
		Play Games
		Play Store

- Navigate to the [**Feature Settings**] [**Apps**] menu
- You will see a list of the installed apps and you can select an app you want to show as switch on application

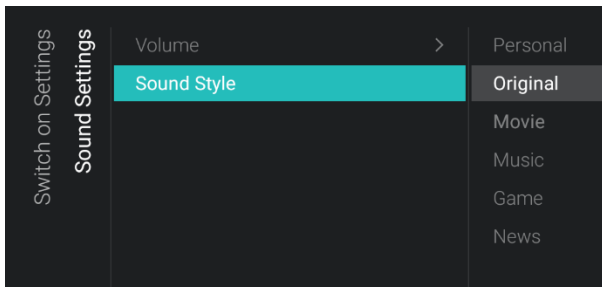
Note: This menu is only accessible when [Apps] is selected in the [Switch On

Feature] menu. The content of **[Apps]** depends on the installed apps

6.4.3 Sound Settings



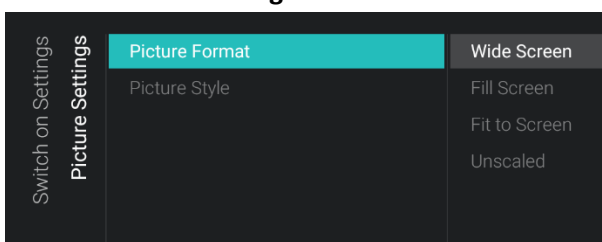
- Navigate to the **[Sound Settings]** **[Volume]** menu
- You will see below items:
 - **[TV Speakers]**: Change the default volume setting for the TV speakers
 - **[Headphone/Bathroom speakers]**: Change the default volume setting for the headphone and bathroom speakers
- Open these menu items and change the default volume using the “**arrow up/down**” in the volume sliders



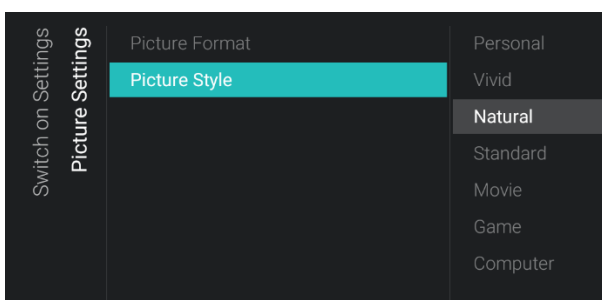
- Navigate to the **[Sound Settings]** **[Sound Style]** menu
- You will see following options in this menu: Personal, Original, Movie, Music, Game and News

*Note: When selecting **[Personal]**, you can change the setting under **[TV Settings][Sound][Advanced][Surround Mode]** to set change the settings for **[Personal]***
- Switching between the sound styles will change the sound style depending on your selection after pressing “**OK**”

6.4.4 Picture Settings

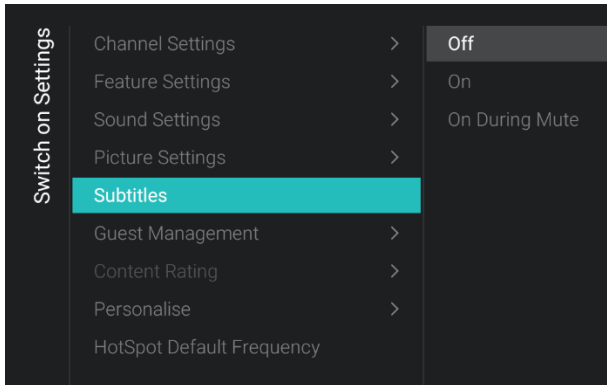


- Navigate to the **[Picture Settings]** **[Picture Format]** menu
- Change the default Picture Format to your preference and press “**OK**” to store the value



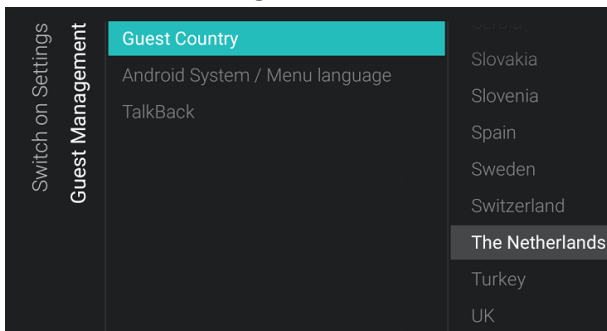
- Navigate to the **[Picture Settings]** **[Picture Style]** menu
- Change the default Picture Style to your preference, **[Natural]** gives the best picture settings

6.4.5 Subtitles

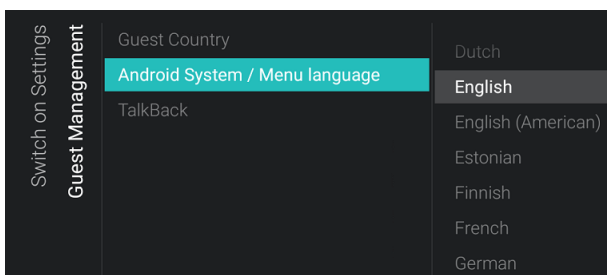


- Navigate to the [Subtitles] menu
- You will see below items:
 - [Off]: Change the default subtitles setting to Off
 - [On]: Change the default subtitles setting to On
 - [On During Mute]: Change the default subtitles setting to On During Mute, this means that the subtitles will be shown if the TV is muted and if subtitles are available

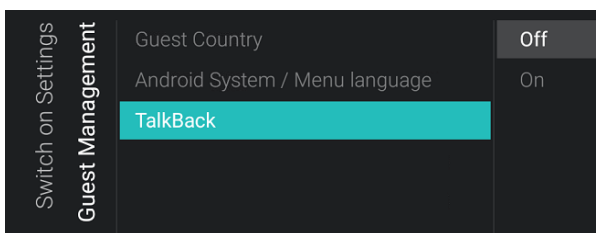
6.4.6 Guest Management



- Navigate to the [Guest Management] [Guest Country] menu
- Note: If you select a language where text is from right to left, also the menu will be shown on the right side*
- You will see a list of countries. You need to select the country where most of the users are coming from. This will have impact on the apps

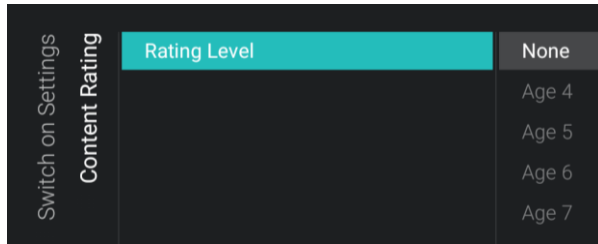


- Navigate to the [Guest Management] [Android System / Menu language] menu
- You will see a list of languages. This is to select the default language for the menu



- Navigate to the [TalkBack] menu
- You will see below items:
 - [Off]: Disable talkback function by default
 - [On]: You can enable talkback by default to help visual-impaired users interact with the TV by using spoken words to let them know what is onscreen

6.4.7 Content Rating

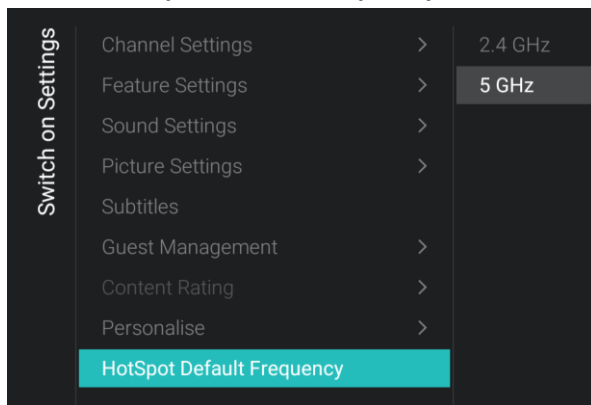


- Navigate to the [**Content Rating**] menu
- You will see below item:
 - [**Rating Level**]: In the rating level you can set a minimum rating level to watch rated programs

Note: The list of rating levels depends on your country

Note: [Rating Level] is only accessible when [Features] [Content Rating] [Enable] is set to [Yes]

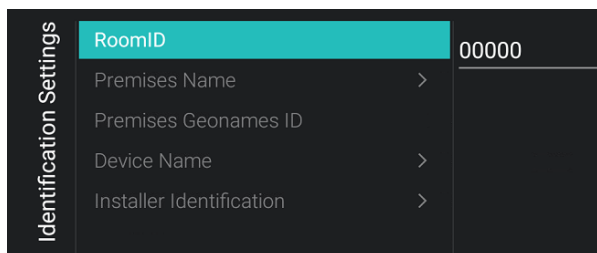
6.4.8 HotSpot Default Frequency



- Navigate to the [**HotSpot Default Frequency**] menu
- You will see below items:
 - [**2.4 GHz**]: Set the default Hotspot frequency to 2.4 GHz
 - [**5 GHz**]: Set the default Hotspot frequency to 5 GHz

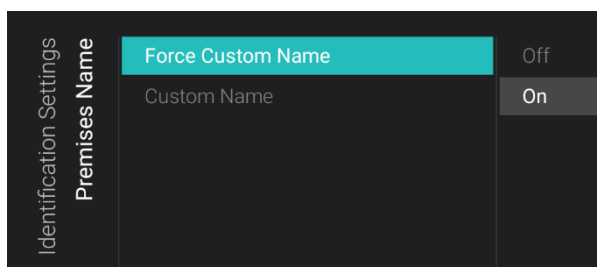
6.5 Identification Settings

6.5.1 RoomID

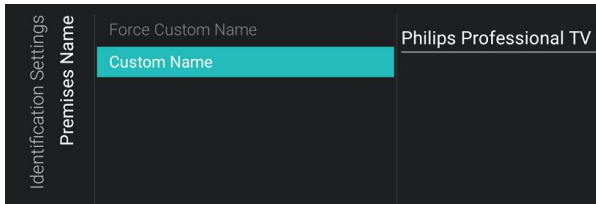


- Navigate to the [**Identification Settings**] [**RoomID**] menu
- This is a (maximum) 5 digits number that can be used to distinguish between different floors/rooms/setups when using CMND
Intention is to fill in the room number in this field

6.5.2 Premises Name

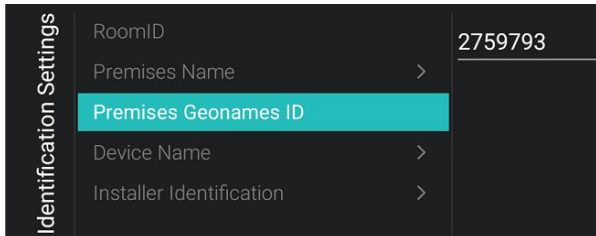


- Navigate to the [**Identification Settings**] [**Premises Name**] menu
- You will see below items:
 - [**Force Customer Name**]: Change to [**On**] to define your custom name, if [**Off**] then the name will be retrieved from the weather service using the Geonames ID

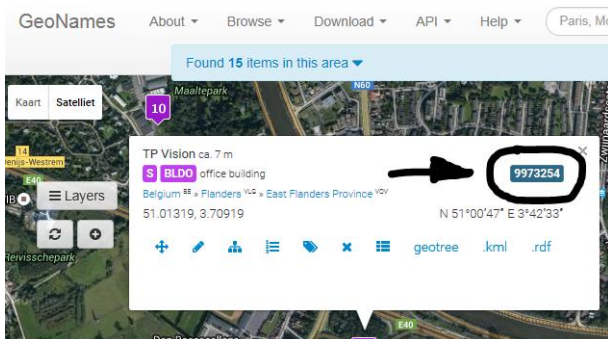


- **[Custom Name]**: Define the custom name for the premises
Note: The Premises Name can be seen in the default dashboard

6.5.3 Premises Geonames ID

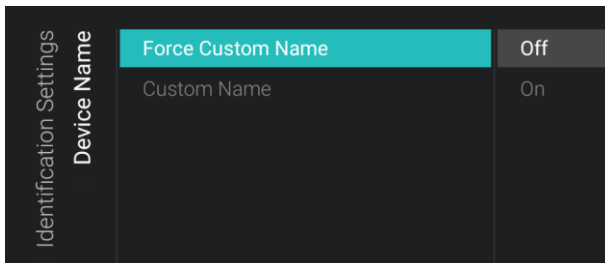


- Navigate to the **[Identification Settings]** **[Premises Geonames ID]** menu
- You can set the ID of the Geonames location. This is used for the weather service



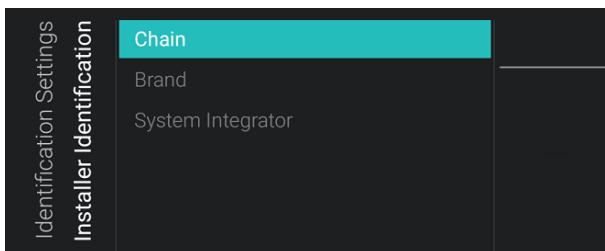
You can find the ID on www.geonames.org, search for your location, open it and check the location ID as marked in the screenshot on the left

6.5.4 Device Name



- Navigate to the **[Identification Settings]** **[Device Name]** menu
- You will see below items:
 - **[Force Custom Name]**: When **[On]** the custom defined name will be used, when **[Off]** the RoomID will be used (RoomXXXXX)
 - **[Custom Name]**: Define the TV name to show on mobile devices for casting

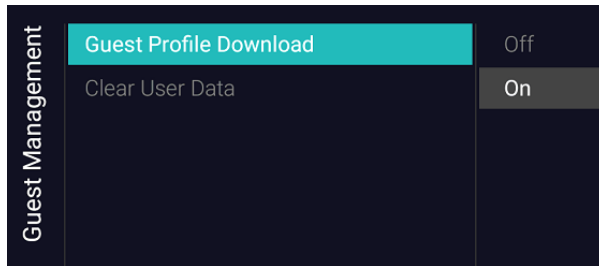
6.5.5 Installer Identification



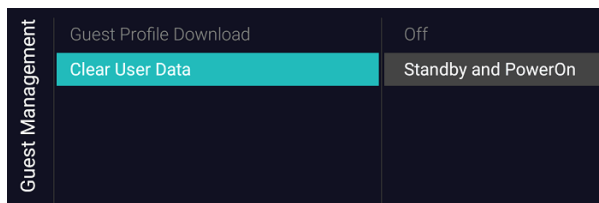
- Navigate to the **[Identification Settings]** **[Installer Identification]** menu
- You will see below items:
 - **[Chain]**: Fill in the hotel chain name
 - **[Brand]**: Fill in the hotel Brand name
 - **[System Integrator]**: Fill in the system integrator name

Note: This data might be used in feature for analytics information (GDPR compliant)

6.6 Guest Management

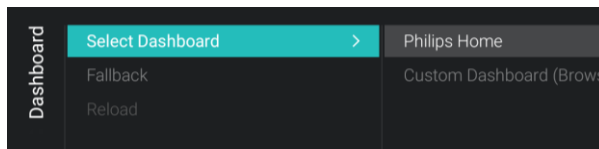


- Navigate to the [Guest Management] [Guest Profile Download] menu
- If set to [On] the user name and profile image will be downloaded from the Google account when he logs in, if [Off] this will not be downloaded

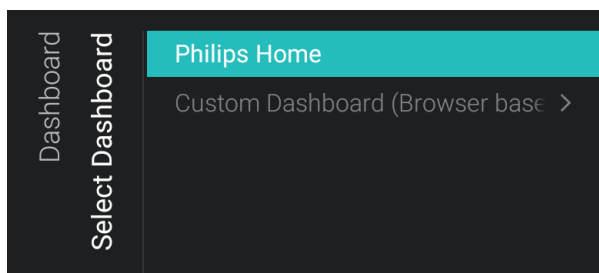


- Navigate to the [Guest Management] [Clear User Data] menu
- This is to clear the user data, including all app data, passwords as well as user browsing history
- You will see below items:
 - [Off]: Disable the clearing
 - [Standby and PowerOn]: Clearing will happen when set goes to Standby and when set is turned on

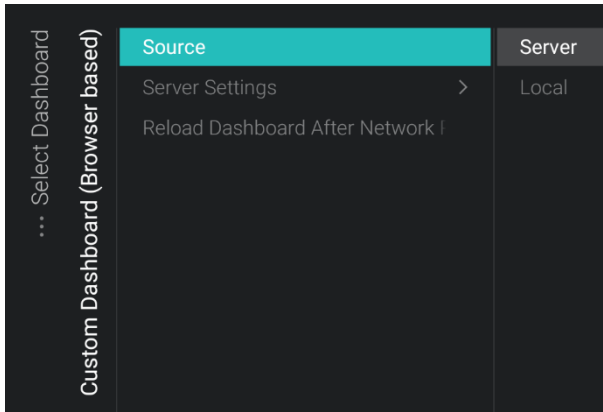
6.7 Dashboard



- Navigate to the [Dashboard] menu
- You will see the screen on the left

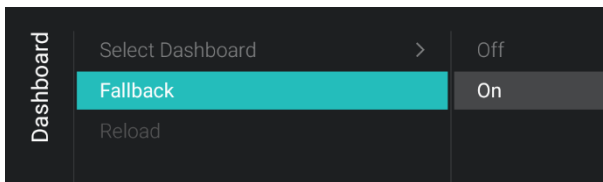


- Navigate to the [Dashboard] [Select Dashboard] menu
- You will see below items:
 - [Philips Home]: You need to press "OK" to access and change the Philips Default Dashboard configuration
Note: How to do this is explained in the chapter "Philips Home Dashboard configuration"
 - [Custom Dashboard (Browser based)]: This menu is to configure the custom browser based dashboard
Note: You can have more items in this list depending on Dashboard apps loaded in TV
Note: All details are explained in the CDB documentation that can be obtained after signing an NDA through a salesperson.

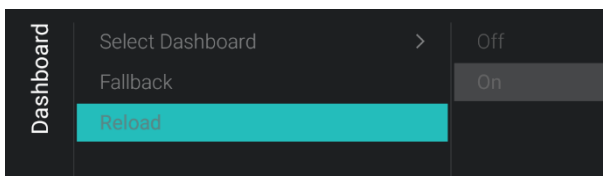


- Navigate to the [Dashboard] [Select Dashboard] [Custom Dashboard (Browser based)] menu
- You will see below items:
 - [Source]: You can select [Server] or [Local] as source for the custom dashboard
 - [Server Settings]: You will see a menu [Server URL] where you can enter the Server URL

Note: This menu is only accessible when [Server] is selected in the [Source] menu
 - [Reload Dashboard After Network Restore]: If the network connection was lost and it is restored the custom dashboard will be reloaded if [Yes] or will not reloaded when [No] is selected



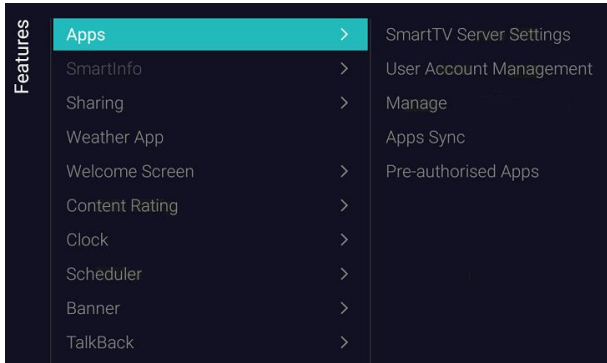
- Navigate to the [Dashboard] [Fallback] menu
- Fallback will happen to a locally stored version of the Dashboard when no connection can be made to the server when set to [On], when [Off] the Default Dashboard will be launched when no connection can be made



- Navigate to the [Dashboard] [Reload] menu
- When CDB is connected and connection drops, the SI is free to choose to either stay on CDB or switch to Local CDB. However, if connection restores, the server CDB can be reloaded automatically when [Reload] is switched [On] (for example to show updated information). If set to [Off], the SI needs to have the logic in his Local CDB or CDB page to react on network changes

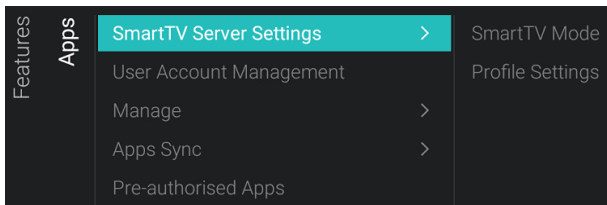
Note: You can only access this menu if you have loaded a Dashboard App in TV and if you have selected it in the [Select Dashboard] list

6.8 Features

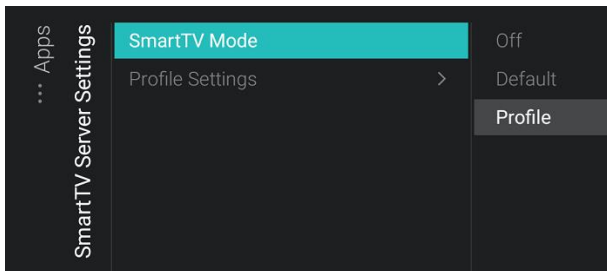


- Navigate to the [**Features**] menu
- You will see the screen on the left

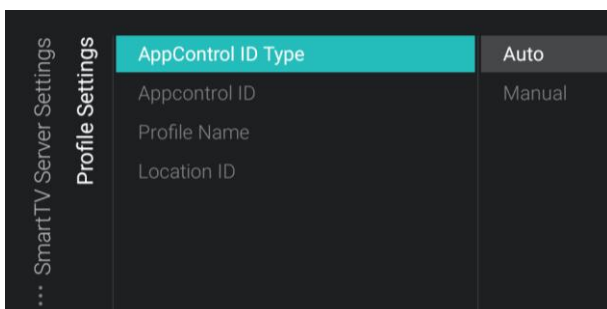
6.8.1 Apps



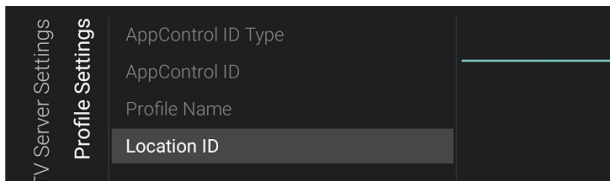
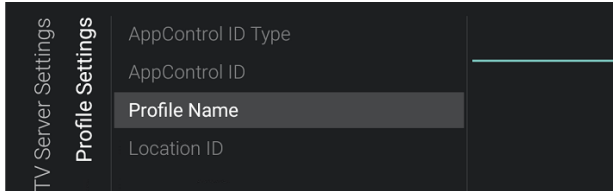
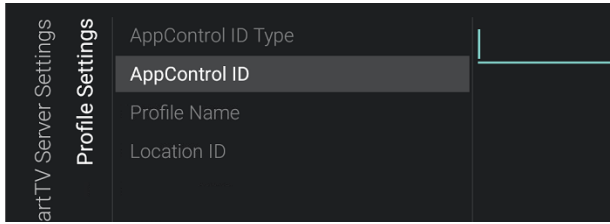
- Navigate to the [**Apps**] menu
- You will see the screen on the left
- To start configuring your Apps you need to do the configuration wizard under [**Features**] [**Apps**] [**Manage**]



- Navigate to the [**SmartTV Server Settings**] menu
- You can configure your apps using a wizard under [**Features**][**Apps**][**Manage**]. Once you have done this wizard you will be able to change your settings in this menu.
- You will see below items:
 - [**SmartTV Mode**]: You can set the SmartTV Mode to [**Off**] to disable or to [**Default**] to use predefined apps or use [**Profile**] to use your custom configuration.
Note: By default, there will be almost no apps available
 - [**Profile Settings**]: When creating a custom profile, you can add/remove apps other than present in the default profile



- Navigate to the [**Profile Settings**] menu
- After doing the configuration using the wizard under [**Features**][**Apps**][**Manage**] you will have an auto generated profile. You can overwrite the settings with your own profile.
- You will see below items:
 - [**AppControl ID Type**]: This can be set to [**Auto**] in case you used the wizard to

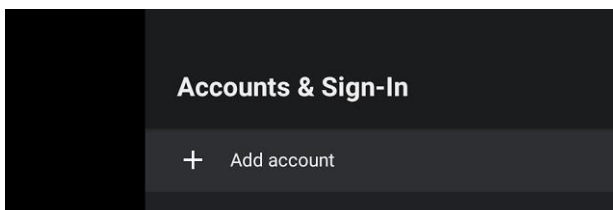
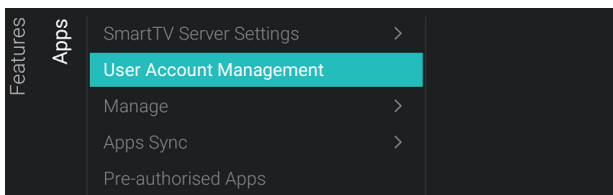


create an AutoProfile for you. You will not be able to modify the AutoProfile on the online portal with your AppControl account. You can also set it to **[Manual]** in order to use a configuration that is stored in your own AppControl account

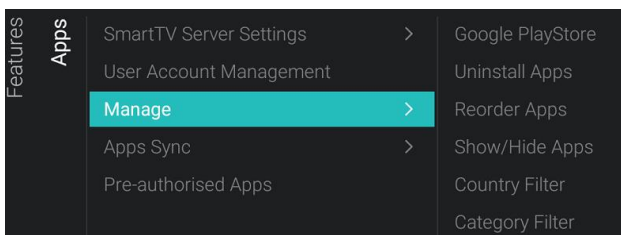
- **[AppControl ID]:** In this text field, you will see “Auto” as a value in case you are using an AutoProfile. If you want to use your own profile you can set your own profile ID in this field
- **[Profile Name]:** In this text field, you will see “AutoProfile_YYYYMMDD_xxxx” as a value in case you are using an AutoProfile. This is the AutoProfile name you have created using the configuration wizard. If you want to use your own profile you can set your own profile name in this field
- **[Location ID]:** This field is to set a location ID. This is only for future use or might be removed

Note: See chapter “Manage Apps” to see how you can use the website to configure your personal profile

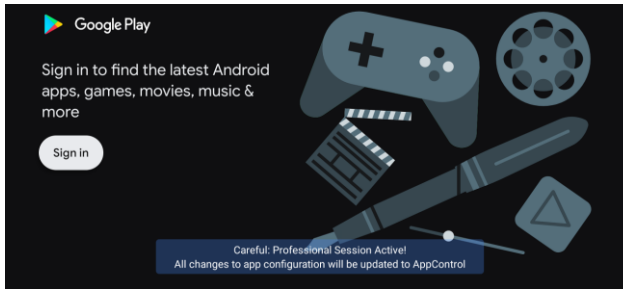
Note: Apps will only be synchronized to the server when you have exited the Professional Session. After exiting the Professional Session, you will see the app list appear in your personal profile



- Navigate to the **[User Account Management]** menu
- When opening this menu an Android menu will open on the right side of the screen. Using this menu, you will be able to login (Add account) or logout after you have logged in



- Navigate to the **[Manage]** menu
- If you enter this menu, a configuration wizard will start. See more details in the chapter “Manage Apps configuration wizard”



- After you have gone through the wizard you will be able to access the menu and access below menu items:

- **[Google PlayStore]:** You can open the Google Play Store, you need to login with your personal Google account and install all the apps you want to have default installed in the TV

Before exiting the Google Play Store, make sure that all downloads have finished

You will also see the notification onscreen that you are in the Professional Session, only when you see this message your settings will be stored

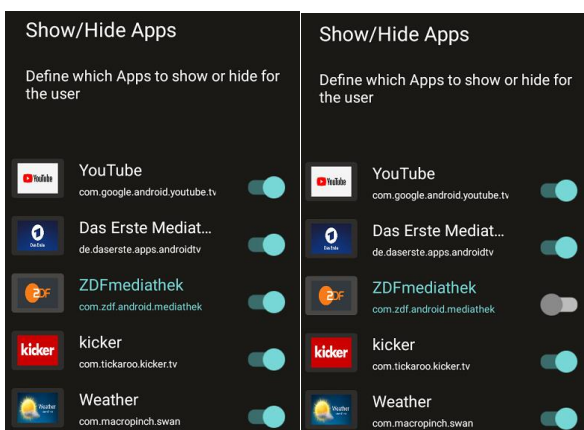
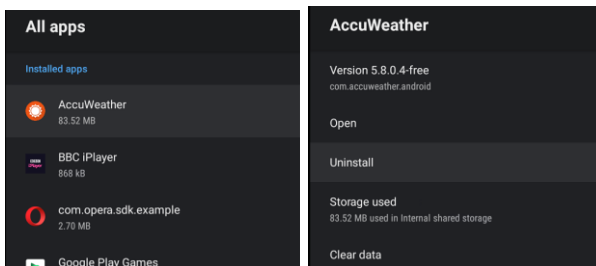
More details on how to do this can be found in the “Installing Apps using Google Play Store” chapter

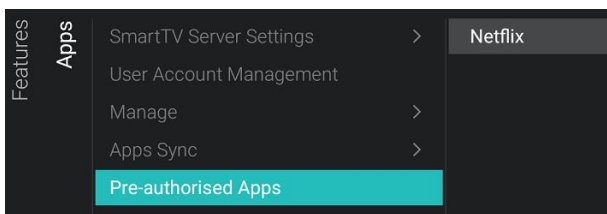
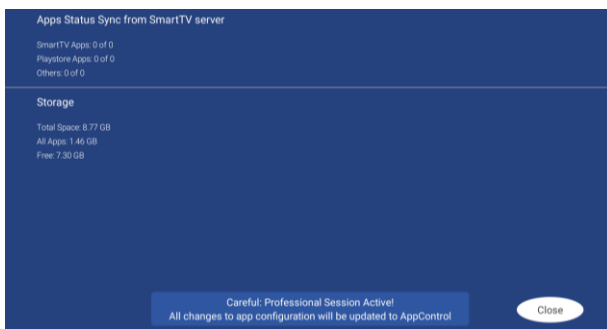
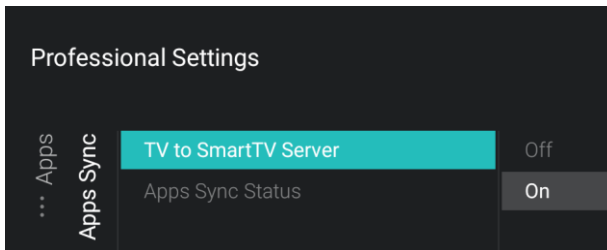
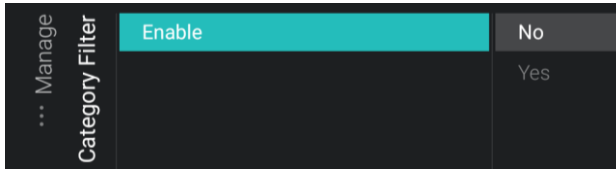
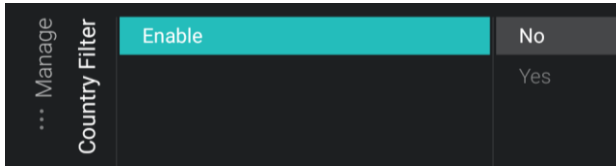
Note: In the end you will log out again and no data from your personal account will be linked to the configuration you made, you only need to login in order to install the apps

- **[Uninstall apps]:** You can open this menu to uninstall apps. When opening this menu, you will see a list of “Recently opened apps” and “See all apps”. When opening “See all apps”, you can open the app you want to uninstall and select “uninstall” and press “OK”. You will get a new screen where you can activate the **[Uninstall]** action

- **[Reorder Apps]:** You can open this menu to reorder apps, you will see a list of installed apps. You can select the app you want to reorder and press “OK”, you will see the app moving out of the list. Now you can navigate using the “**arrow up/down**” to move the app to the position you want and press “OK” again to reorder the app

- **[Show/Hide Apps]:** You can show or hide apps by toggling the button





- **[Country Filter]:** You can enable the country filter using **[Yes]** or disable it using **[No]**

In the user menu under Apps this will enable/disable that you can select a country flag to only show the apps linked to this country

- **[Category Filter]:** You can enable the category filter using **[Yes]** or disable it using **[No]**

In the user menu under Apps this will split up the installed apps per category or show all apps

- Navigate to the **[App Sync]** menu

- You will see below items:

- **[TV to SmartTV Server]:** You can select **[On]** to upload apps to the Philips servers so they can be synced again to other TV's or **[Off]** to disable this function when you are developing your own application

- **[Apps Sync Status]:** By opening this screen you can see the current status of the apps synchronization

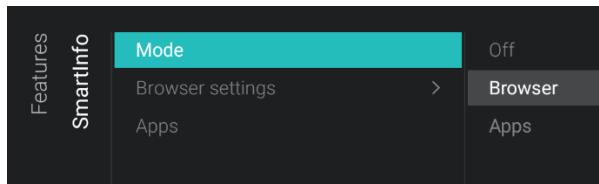
***Note:** The synchronization of apps will happen while the TV is in STBY*


- Navigate to the **[Pre-authorized Apps]** menu

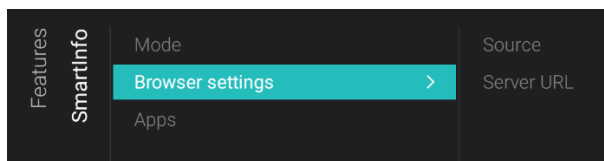
***Note:** Netflix is listed here, but can't be activated with this B-line monitor. Only suitable for HFL5014 or HFL6014U. More apps might be added later on*

6.8.2 SmartInfo

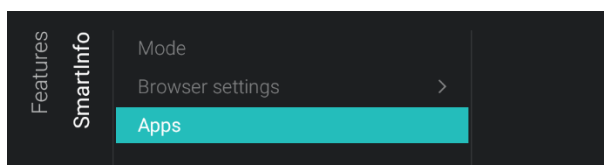
See also more details in the chapter “Guest Menu - SmartInfo”



- Navigate to the [**SmartInfo**] [**Mode**] menu
Note: [SmartInfo] is only accessible when [Dashboard] [Select Dashboard] is set to [Philips Home]
- The SmartInfo feature can be used in two ways, as interactive pages (Browser) or using an app. The two ways of using SmartInfo are mutually exclusive so they cannot be used both at the same time. SmartInfo can be opened by pressing “Info” 
- You will see below items:
 - [**Off**]: Disable Smart Info feature
 - [**Browser**]: Use the SmartInfo browser, usually this is created in CMND
 - [**Apps**]: Use a SmartInfo app you have loaded in TV
Note: By default, Apps and browser are empty



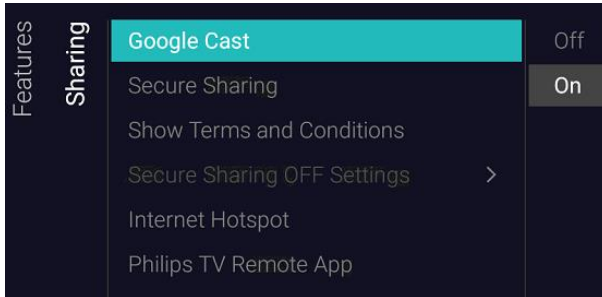
- Navigate to the [**SmartInfo**] [**Browser settings**] menu
Note: [Browser settings] is only accessible when [Mode] is set to [Browser]
- You will see below items:
 - [**Source**]: You can set the source of the browser to [**USB**], [**Server**] or [**Local**]
 - [**Server URL**]: You can set the server address where the browser is hosted
Note: Normally you load the SmartInfo into the clone file and load it locally in the TV, therefore you need to set [Source] to [Local]
Note: If set to [USB], the TV will read from the folder TPM181HE_CloneData/MasterCloneData/SmartInfoBrowser/



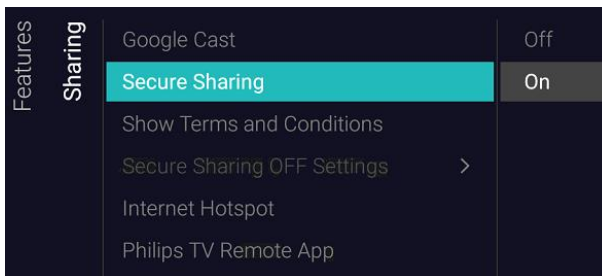
- Navigate to the [**SmartInfo**] [**Apps**] menu
Note: [Apps] will be empty if no SmartInfo app is loaded in TV
- You will see a list of apps loaded in the TV, you need to select the app you want to see as SmartInfo browser
Note: SmartInfo apps are not available from the Play Store, you need to create your own app as SmartInfo application and load it in the TV. All details are explained in the JEDI documentation that can be

obtained after signing an NDA through a salesperson.

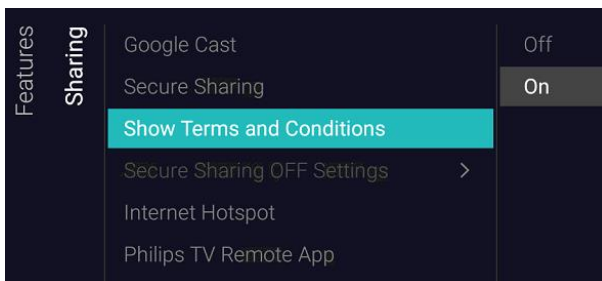
6.8.3 Sharing



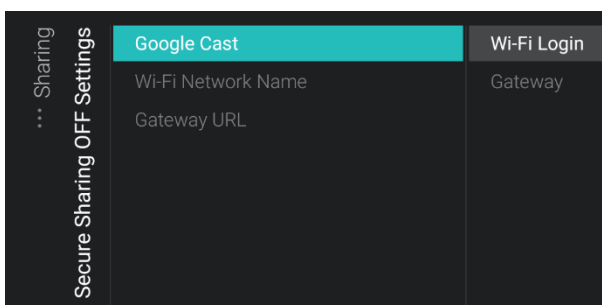
- Navigate to the **[Sharing] [Google Cast]** menu
Note: See more details in the chapter "Guest Menu - Cast"
- You will see below items:
 - **[Off]**: Disable Google Chromecast
 - **[On]**: Enable Google Chromecast, this will allow the users to share content from their own mobile device



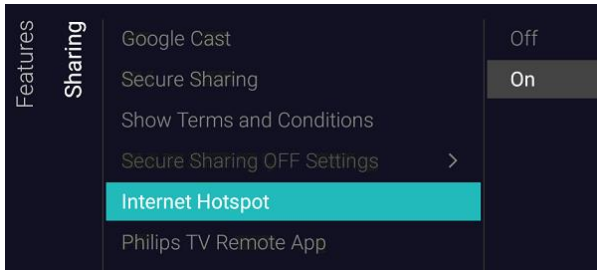
- Navigate to the **[Sharing] [Secure Sharing]** menu
- You will see below items:
 - **[Off]**: Disable Secure sharing
 - **[On]**: Enable Secure sharing, the TV will be able to make a peer-to-peer connection with a mobile device
Note: when you disable secure sharing it's up to the SI to set up his own infrastructure to make the connection



- Navigate to the **[Sharing] [Show Terms&Conditions]** menu
- You will see below items:
 - **[Off]**: Disable Terms and Conditions when user connects to TVs hotspot
 - **[On]**: Enable Terms and Conditions when user connects to TVs hotspot
Note: There is a default T&C text that needs to be updated by the SI. This can be done by editing the CustomTermsAndCondition.json in the TVSettings folder of the clone file. See the example chapter for more details



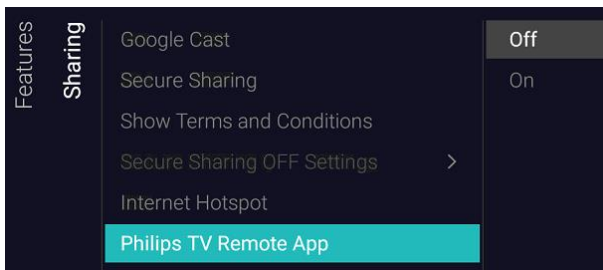
- Navigate to the **[Sharing] [Secure Sharing OFF Settings]** menu
Note: **[Secure Sharing OFF Settings]** is only accessible when **[Secure Sharing]** is set to **[Off]**
- You will see below items:
 - **[Google Cast]**: This is to define how to connect to the TV for using Google Chromecast. You can choose between **[Wi-Fi Login]** or **[Gateway]**
 - **[Wi-Fi Network Name]**: You can set the Wi-Fi Network name (SSID)



- **[Gateway URL]:** You can set the gateway to use for Cast function. This gateway should contain HTML pages that shall be rendered to explain how to use the Cast function

- Navigate to the **[Sharing] [Internet Hotspot]** menu. Internet Hotspot enables an entry point in the user menu for the user to get access to internet. This is also already there if you connect through Chromecast hotspot. This item can be used if Google Cast is disabled. *Note: The user cannot use the hotspot when TV is in STBY, the TV needs to be on in order to use this feature*
- You will see below items:
 - **[Off]:** Disable Internet Hotspot
 - **[On]:** Enable Internet Hotspot, this will enable the user to access internet via TV after making a peer-to-peer connection

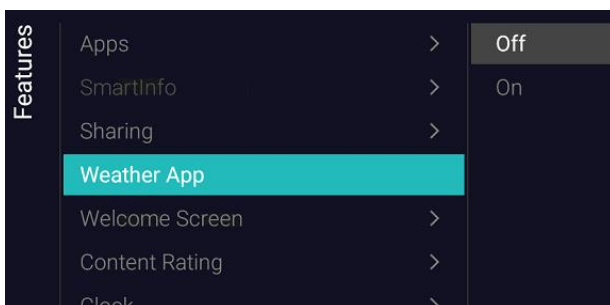
Note: [Internet Hotspot] is only accessible when [Secure Sharing] is set to [On]



- Navigate to the **[Sharing] [Philips TV Remote App]** menu
- You will see below items:
 - **[Off]:** Disable that the TV can be discovered by the Philips TV Remote App
 - **[On]:** Enable that the TV can be discovered by the Philips TV Remote App

Note: This is the "Philips TV remote 2.0" that you can find on the Appstore of your device

6.8.4 Weather App

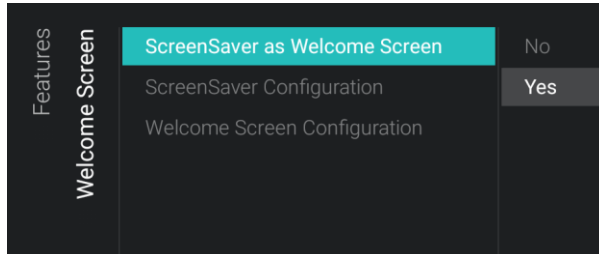


- Navigate to the **[Weather App]** menu
- You will see below items:
 - **[Off]:** To disable the weather information in the default dashboard menu
 - **[On]:** To enable the weather information in the default dashboard menu

Note: This requires the TV to be connected to the internet or to the CMND server (which should be connected to the internet) to be able to

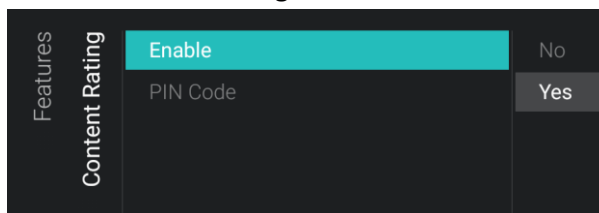
see weather info, also your [Premises Geonames ID] should be set to give the weather info of the correct location

6.8.5 Welcome Screen



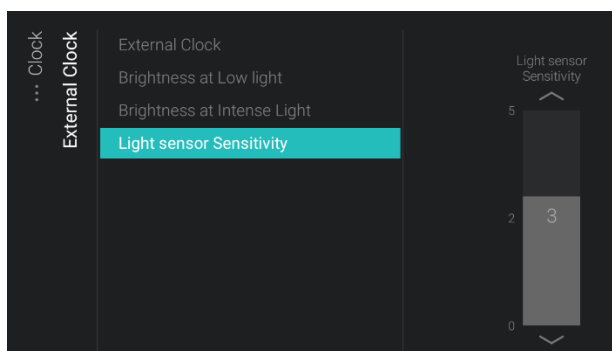
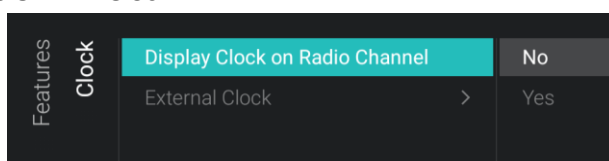
- Navigate to the [Welcome Screen] menu
- You will see below items:
 - [ScreenSaver as Welcome Screen]: You can enable the welcome screen using [Yes] or disable using [No]
 - [ScreenSaver Configuration]: You will be able to manage the Screensaver, see chapter 'Manage Welcome Screen' for more details
 - [Welcome Screen Configuration]: You will be able to manage the Welcome Screen, see chapter 'Manage Welcome Screen' for more details

6.8.6 Content Rating



- Navigate to the [Content Rating] menu
- You will see below items:
 - [Enable]: You can enable the content rating via [Yes] or disable via [No]
 - [PIN Code]: You can set the pin code that is needed to show the content when you are on a rated channel
Note: By default, the PIN code is set to 8888

6.8.7 Clock

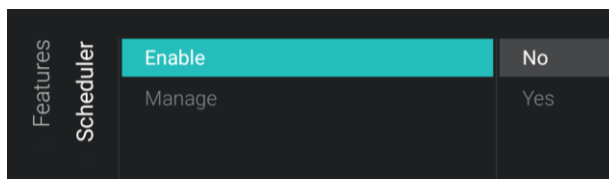


- Navigate to the [Clock] menu. Here you can make changes for the (external) clock. In order to have a functional external clock the [Advanced][Power][Standby Mode] needs to be set to [Fast]
- You will see below items:
 - [Display Clock on Radio Channel]: When you are on a radio channel you will see a radio background when [No] is selected, when [Yes] is selected you will see a clock instead of the radio background
 - [External Clock]:
 - [External Clock]: You disable the external clock via [Off] or enable it via [On]

- **[Brightness at Low light]**: Via a slider you can set the clock brightness at low light environment
- **[Brightness at Intense Light]**: Via a slider you can set the clock brightness at intense light environment
- **[Light sensor Sensitivity]**: Via a slider you can change the light sensor sensitivity

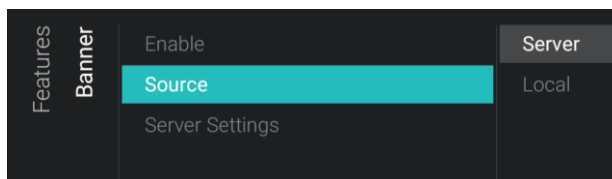
Note: Above menus are only accessible when [External Clock] is set to [On]

6.8.8 Scheduler



- Navigate to the **[Scheduler]** menu
- You will see below items:
 - **[Enable]**: You can enable the scheduler using **[Yes]** or disable using **[No]**
 - **[Manage]**: You will be able to manage the Scheduler, see chapter 'Manage Scheduler' for more details

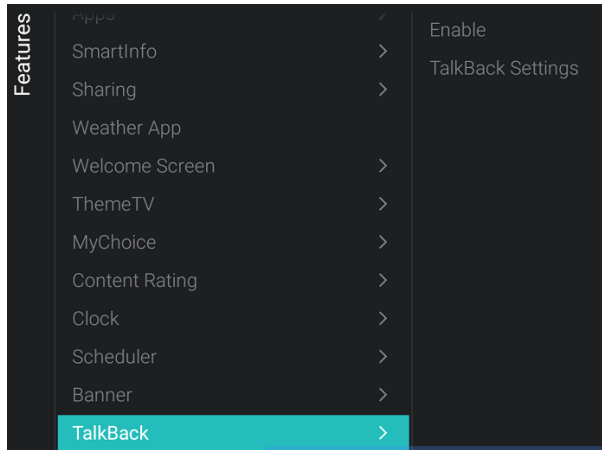
6.8.9 Banner



- Navigate to the **[Banner]** menu, this can for example be used to send an html page to the customers TV asking to fill in an Instant customer satisfaction survey
- You will see below items:
 - **[Enable]**: You can enable the banner feature using **[Yes]** or disable using **[No]**
 - **[Source]**: You can set the source for the banner to **[Server]** or **[Local]**
 - **[Server Settings]**: You can define the server URL that will host the banner content

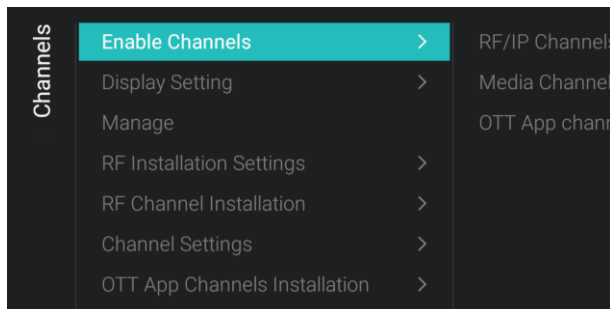
Note: Using CMND you will be able to send banners to TV

6.8.10 TalkBack

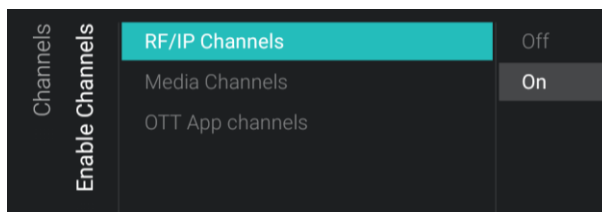


- Navigate to the **[Talkback]** menu
- You will see below items:
 - **[Enable]**: You can enable to show the talkback option in the dashboard using **[Yes]** or disable using **[No]**
 - **[TalkBack Settings]**: These are google settings that cannot be cloned out or cloned in

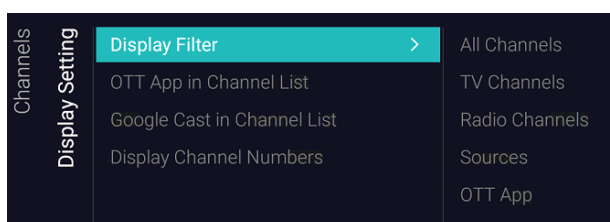
6.9 Channels



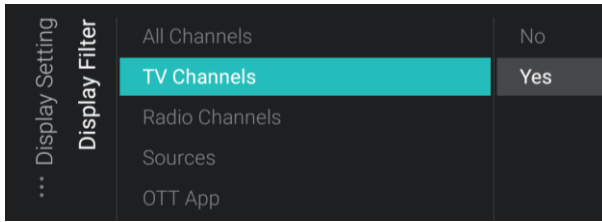
- Navigate to the **[Channels]** menu
- You will see the screen on the left



- Navigate to the **[Enable Channels]** menu
- You will see below items:
 - **[RF/IP Channels]**: Show IP/RF channels in the channel list when **[On]**, or not when **[Off]**
 - **[Media Channels]**: Show media channels in the channel list when **[On]**, or not when **[Off]**
 - **[OTT App Channels]**: Show OTT App channels in the channel list when **[On]**, or not when **[Off]**



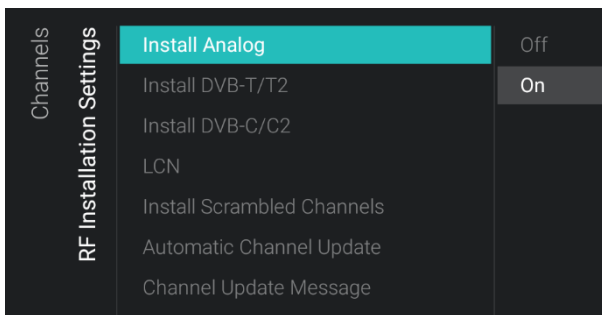
- Navigate to the **[Display Settings]** menu
- You will see below items:
 - **[Display Filter]**: You see a list of possible filters. Per filter you can enable using **[Yes]** or disable using **[No]** if you want to show the filter in the filter list
 - **[OTT App in Channel List]**: When **[Yes]**, the OTT App channels will be listed in the channel list, when **[No]** they will not be shown



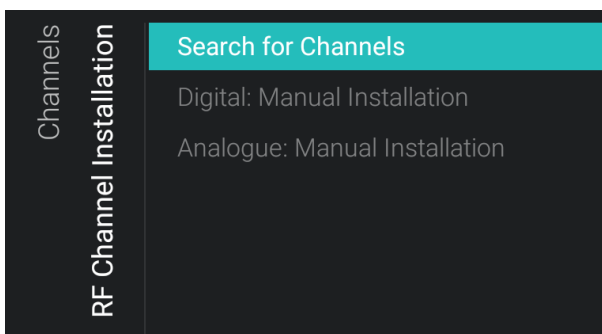
- [Google Cast in Channel List]: When [No], Google Cast won't be shown in the channel list. Select [Yes] to show Google Cast in the channel list.
- [**Display Channel Numbers**]: When set to [Yes], you will see the channel numbers, when [No], you will not see the channel numbers



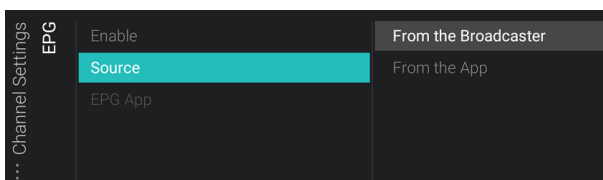
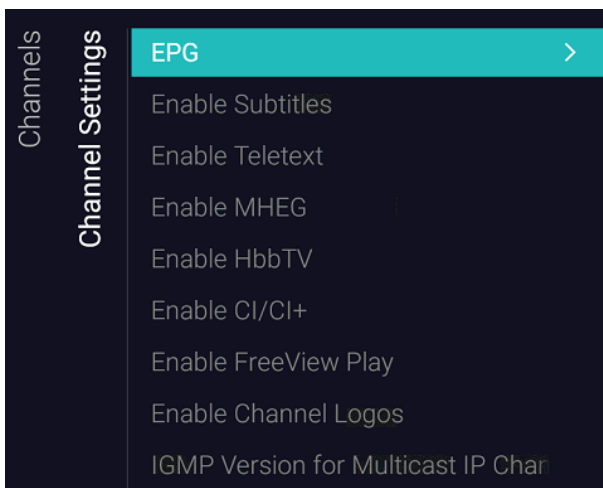
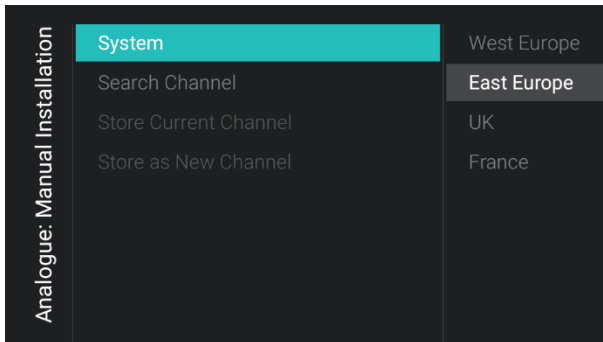
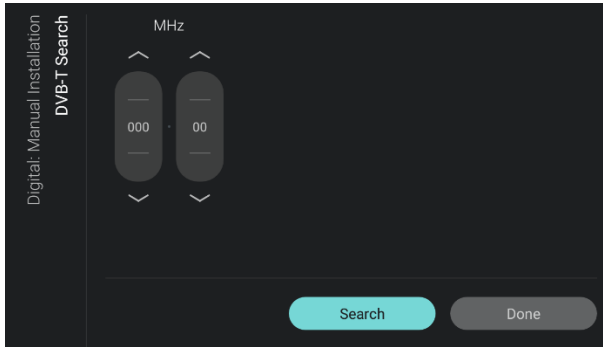
- Navigate to the [**Manage**] menu
- When opening this menu, you will be able to manage the channels, you can use the "options" key to manage the channels
- See chapter 'Manage Channels' for more details



- Navigate to the [**RF Installation Settings**] menu
- You will see below items:
 - [**Install Analog**]: You can put the search of analog channels [Off] or [On]
 - [**Install DVB-T/T2**]: You can put the search of DVB-T/T2 channels [Off] or [On]
 - [**Install DVB-C/C2**]: You can put the search of DVB-C/C2 channels [Off] or [On]
 - [**LCN**]: You can put channel sorting based on Logical Channel Number [Off] or [On]
 - [**Install Scrambled Channels**]: You can disable installation of scrambled channel via [No] or enable it via [Yes]
 - [**Automatic Channel Update**]: You can put automatic channel update [Off] or [On]
 - [**Channel Update Message**]: You can get a message when channels are updated, you can put this option [Off] or [On]



- Navigate to the [**RF Channel Installation**] menu
- You will see below items:
 - [**Search for Channels**]: See chapter 'Channel installation wizard' for more details about installing the channels



- **[Digital: Manual Installation]:** This can be used to manually search for digital channels on a specific frequency. When opening this menu, you can choose between **[DVB-T Search]** or **[DVB-C Search]**. If you open one of above menu items you can give in a frequency to tune to

- **[Analogue: Manual Installation]:** This can be used to manually search for analogue channels. You can set the **[System]** you need, **[Search Channels]** where you can set the frequency you want to search. Once a channel is found you can **[Store Current Channel]** or **[Store as New Channel]**

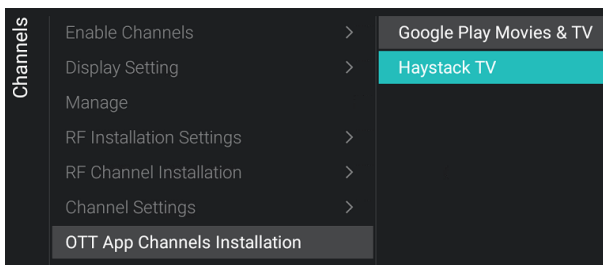
- Navigate to the **[Channel Settings]** menu
- You will see below items:

- **[EPG]:**
 - **[Enable]:** You can enable EPG via **[Yes]** or disable via **[No]**
 - **[Source]:** The EPG data can come **[From the Broadcaster]** or **[From the App]**
 - **[EPG App]:** If you have installed an EPG App then you can select it here to download EPG data through this app. By default, no apps are installed for EPG data

Note: [Source] is only accessible when [Enable] is set to [Yes] and [EPG App] is only accessible when [Source] is set to [From the App]. [EPG App] is for feature usage

- **[Enable Subtitles]:** You can enable the subtitles via **[Yes]** or disable via **[No]**
- **[Enable Teletext]:** You can enable teletext via **[Yes]** or disable via **[No]**
- **[Enable MHEG]:** You can enable MHEG via **[Yes]** or disable via **[No]**
- **[Enable HbbTV]:** You can enable HbbTV via **[Yes]** or disable via **[No]**

- **[Enable CI/CI+]**: TV shall disable the CI/CI+ conditional access support, all UI elements relating to the CI/CI+ shall be removed if **[No]** is selected, if **[Yes]** is selected, then all CI/CI+ functionality shall be available
- **[Enable FreeView Play]**: You can enable FreeView Play via **[Yes]** or disable via **[No]**
- **[Enable Channel Logos]**: Channel logos will be shown if **[Yes]** or will not be shown if **[No]**
- **[IGMP Version for Multicast IP Channels]**: Set your IGMP version for multicast to **[Auto]**, **[1]**, **[2]** or **[3]**

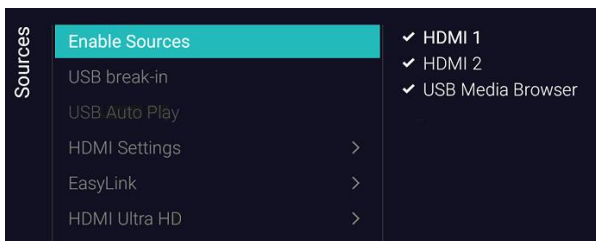


- Navigate to the **[OTT App Channels Installation]** menu
- You will see below items:
 - **[Google Play Movies & TV]**: When you open this menu, the channels linked to this OTT App will be added to the channel list

*Note: You can also have extra items available like **[Haystack TV]**. This depends on the capability of the installed apps supporting OTT functionality and will become available once detected.*



6.10 Sources



- Navigate to the **[Sources]** menu
- You will see the screen on the left

- Navigate to the **[Enable Sources]** menu
- You will see a list of externals (including USB media browser). You can enable or disable sources to be available in the menu

Note1: The list of sources is depending on the hardware in relation to the screen size and can be different from the screenshot

Note2: if available, more HDMI inputs will be listed

Sources	Enable Sources	Off
	USB 5V	On
	USB break-in	
	USB Auto Play	
	HDMI Settings >	
	EasyLink >	
	HDMI Ultra HD >	

- Navigate to the **[USB 5V]** menu
- You can enable the 5V on the USB ports using **[On]** or disable using **[Off]**
- Note: [USB 5V] is only available if [Enable Sources][USB Media Brower] is not checked*

Sources	Enable Sources	Off
	USB break-in	On
	USB Auto Play	
	HDMI Settings >	
	EasyLink >	
	HDMI Ultra HD >	

- Navigate to the **[USB break-in]** menu
- You can enable USB break-in using **[On]** or disable using **[Off]**
- Note: [USB break-in] is only accessible if [Enable Sources][USB Media Brower] is checked*

Sources	Enable Sources	Off
	USB break-in	On
	USB Auto Play	
	HDMI Settings >	
	EasyLink >	
	HDMI Ultra HD >	

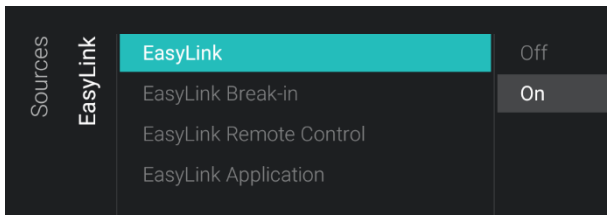
- Navigate to the **[USB Auto Play]** menu
- You will see below items:
 - **[Off]**: From the moment a USB device is connected to the TV, no files will be played automatically
 - **[On]**: From the moment a USB device is connected to the TV, all playable files in the root from your USB device will automatically be played in a loop

Sources	HDMI Settings	HDMI Plug-in/out	Off
		Fallback on HDMI Break-out	On

- Navigate to the **[HDMI Settings]** menu
- You will see below items:
 - **[HDMI Plug-in/out]**: Disable the HDMI plug-in detection to switch to the HDMI source when an HDMI device is connected to the TV using **[Off]** or enable via **[On]**

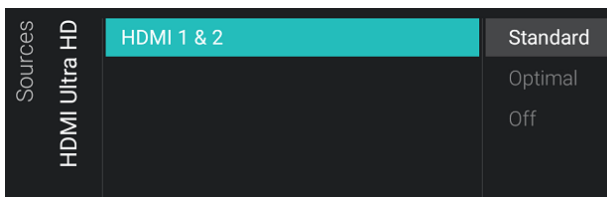
Sources	HDMI Settings	HDMI Plug-in/out	SwitchOnSetting
		Fallback on HDMI Break-out	Previous Application

- **[Fallback on HDMI Break-out]**: If HDMI Plug-in/out is enabled then the TV will follow this setting when the HDMI connection is broken and go back to the **[SwitchOnSettings]** or go back to the **[Previous Application]**



- Navigate to the [**Easylink**] menu
- You will see below items:
 - [**Easylink**]: Disable all HDMI CEC functionality via [**Off**] or enable via [**On**]
 - [**EasyLink Break-in**]: TV shall disable auto tuning/switching to the connected HDMI CEC enabled source via [**Off**] or enable via [**On**] when device is plugged or switched on
 - [**EasyLink Remote Control**]: The keys from your TV RC will not be forwarded via CEC when [**Off**] or will be forwarded when [**On**]
 - [**Easylink Application**]: When [**On**], then TV shall forward the “Menu” key to the source if the device is HDMI CEC enabled and supports RC pass thru

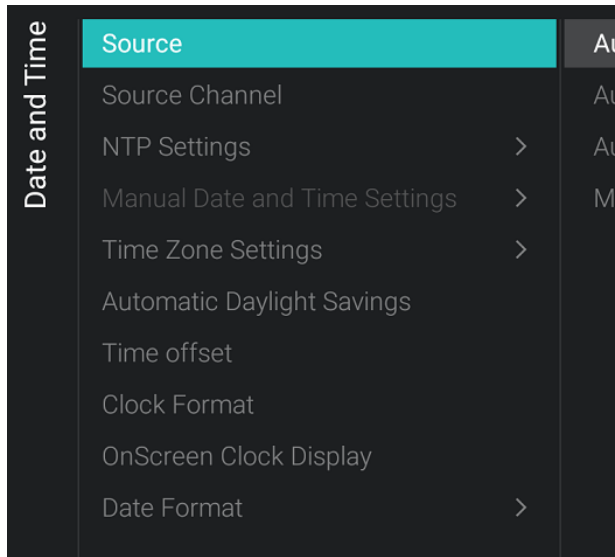
*Note: Above menus are only available when [**EasyLink**] is set to [**On**]*



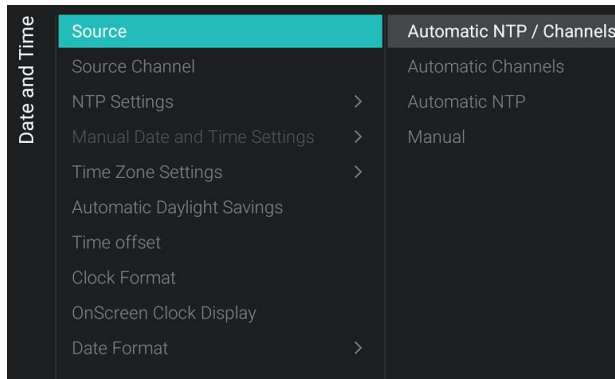
- Navigate to the [**HDMI Ultra HD**] menu
- You will see below items:
 - [**HDMI1 & 2**]: Select [**Optimal**] to enable the highest quality HDMI signal for 4K Ultra HD (4K60 4:4:4), select [**Standard**] or [**Off**] if picture or sound are distorted

*Note: [**Standard**] enables up to 2160p60 4:2:0, [**Optimal**] enables up to 2160p60 4:4:4 and [**Off**] enables up to 1080p60. The list of sources is depending on the hardware in relation to the screen size and can be different from the screenshot*

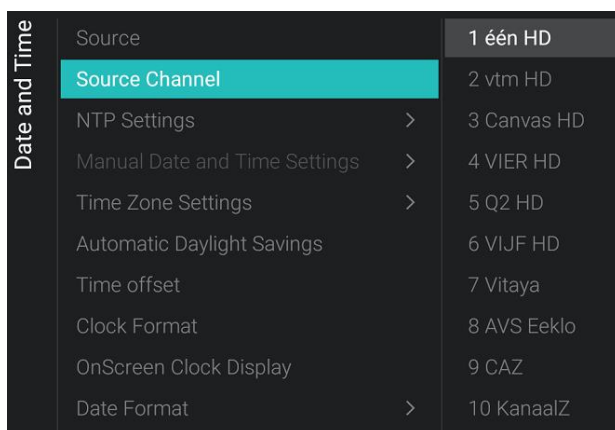
6.11 Date and Time



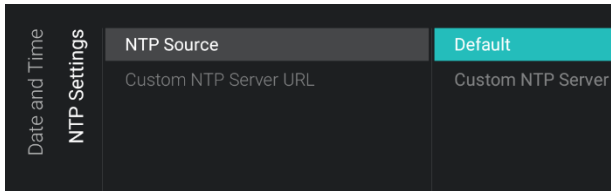
- Navigate to the **[Date and Time]** menu
- You will see the screen on the left



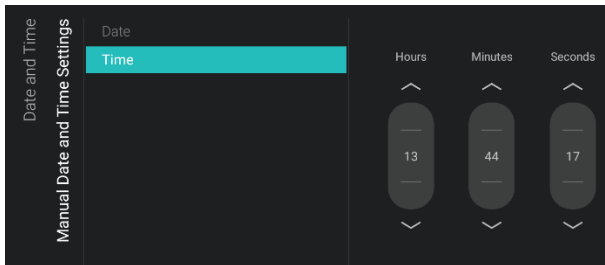
- Navigate to the **[Source]** menu
- You will see below items:
 - **[Automatic NTP/Channels]:** When selected, the clock extraction is performed from a NTP Server or Live Channels (RF & IP). The NTP has higher priority than Channels
 - **[Automatic Channels]:** Date and time is received via channels data (can be both RF or IP depending on the installed channels)
 - **[Automatic NTP]:** Date and time is received via the network
 - **[Manual]:** Date and time is set manually but will not be remembered after a power cycle. This option can be used in combination with JAPIT or SerialXpress to set the clock on startup via commands



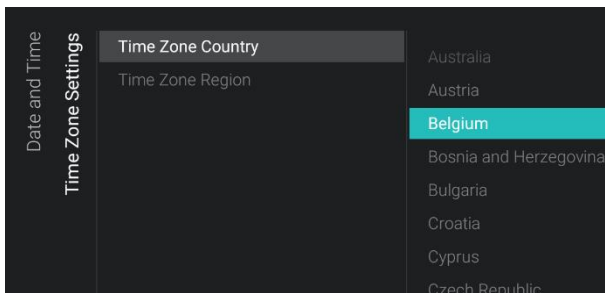
- Navigate to the **[Source Channel]** menu
- You will see a list of installed channels, one item will be highlighted, this is the current selected channel where the TV will obtain the clock from



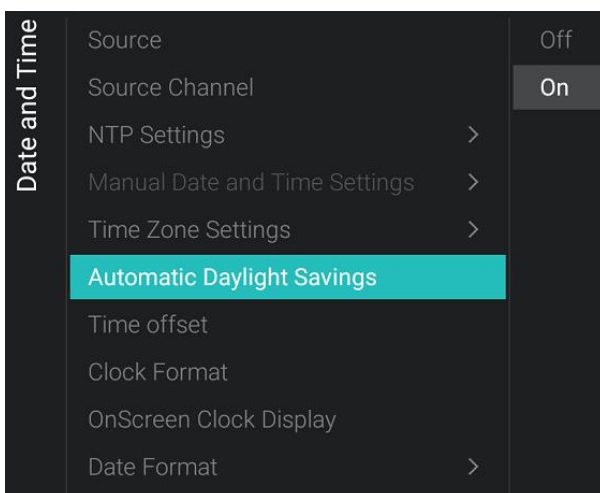
- Navigate to the **[NTP Settings]** menu
- You will see below items:
 - **[NTP Source]**: When selecting **[Default]** the TV will automatically look for the clock via the network, when **[Custom NTP Server]** is selected you will be able to set a custom NTP sever URL
 - **[Custom NTP Server URL]**: Set the link for a custom NTP Server URL



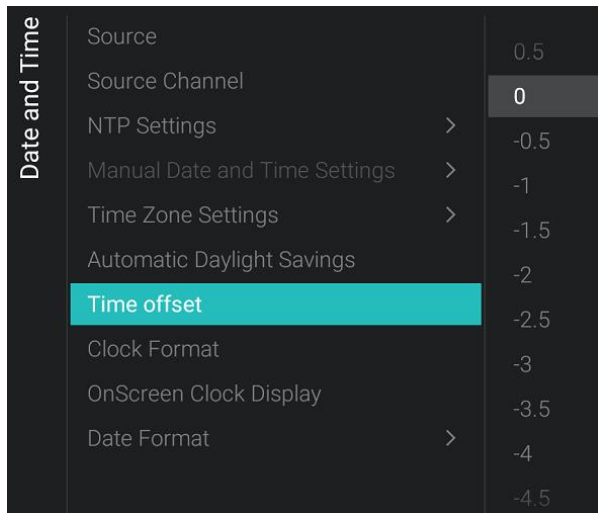
- Navigate to the **[Manual Date and Time Settings]** menu
 - You will see below items:
 - **[Date]**: You can set the date manually
 - **[Time]**: You can set the time manually
- Note: Above menus are only accessible when [Source] is set to [Manual]*



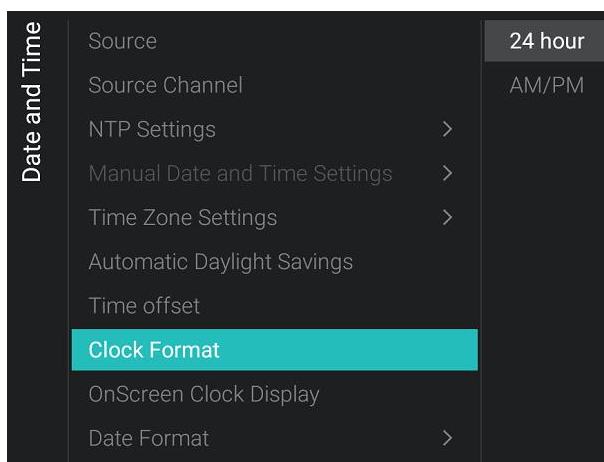
- Navigate to the **[Time Zone Setting]** menu
- Note: This menu in not accessible when [Source] is set to [Manual]*
- You will see below items:
 - **[Time Zone Country]**: You can select the country where you are
 - **[Time Zone Region]**: You can change the region if multiple regions are available for your selected **[Time Zone Country]**



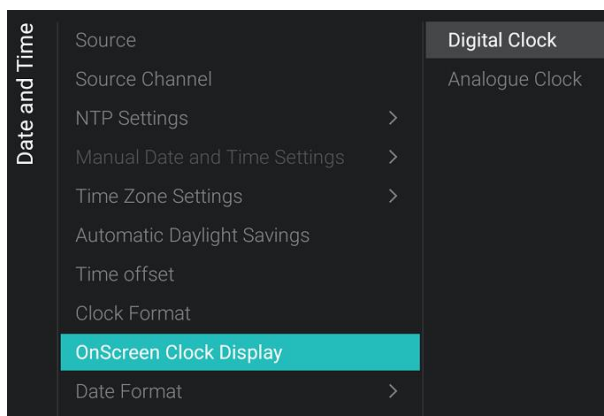
- Navigate to the **[Automatic Daylight Savings]** menu
- Note: This menu in not accessible when [Source] is set to [Manual]*
- You will see below items:
 - **[Off]**: Daylight saving time is disabled, no time correction will be applied while switching between winter and summer time
 - **[On]**: Daylight saving time is enabled



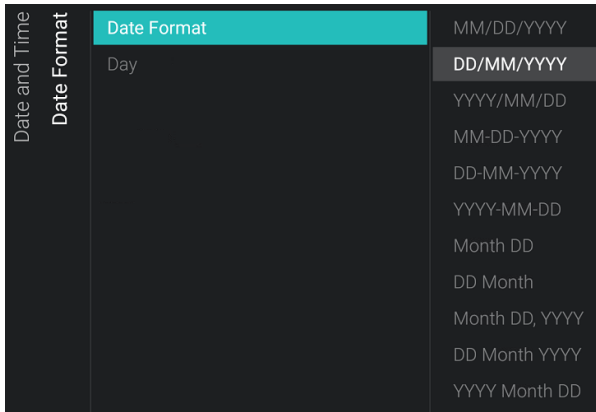
- Navigate to the **[Time offset]** menu
Note: This menu is not accessible when [Source] is set to [Manual]
- You will see a list to make a time offset per 30 minutes



- Navigate to the **[Clock Format]** menu
- You will see below items:
 - **[24 hour]**: You can set the clock format to 24 hours format
 - **[AM/PM]**: You can set the clock format to AM/PM format



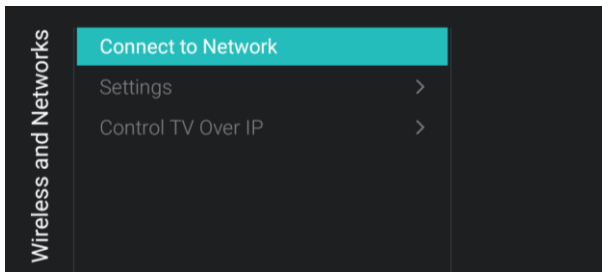
- Navigate to the **[OnScreen Clock Display]** menu
- You will see below items:
 - **[Digital Clock]**: You can set the clock to be shown as a digital clock
 - **[Analogue Clock]**: You can set the clock to be shown as an analogue clock



- Navigate to the **[Date Format]** menu
- You will see below items:
 - **[Date Format]**: You can select the format you want to use to show the date when the clock is shown onscreen and in the welcome screen
 - **[Day]**: You can enable or disable to show the day in the clock or the welcome screen

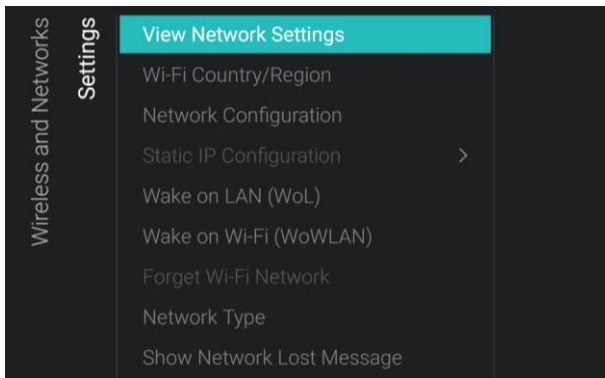
6.12 Wireless and Networks

6.12.1 Network wizard

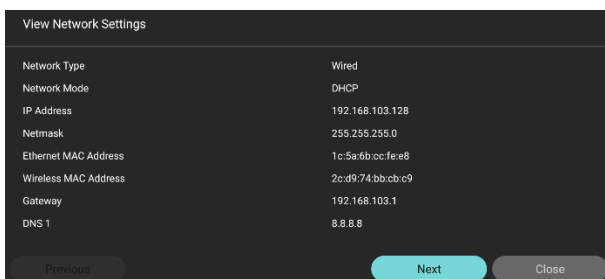


- Navigate to the **[Wireless and Networks] [Connect to Network]** menu
- You will get the network wizard to connect to the network
See chapter 'Network installation wizard' for more details about connecting to the network

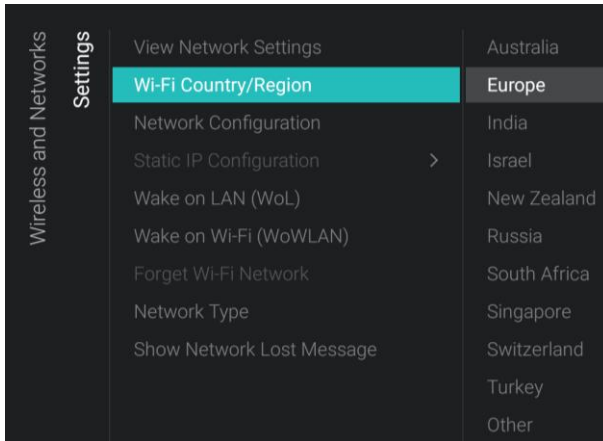
6.12.2 Network settings



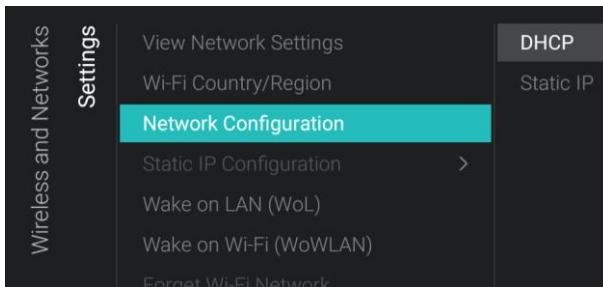
- Navigate to the **[Wireless and Networks] [Settings]** menu
- You will see the screen on the left



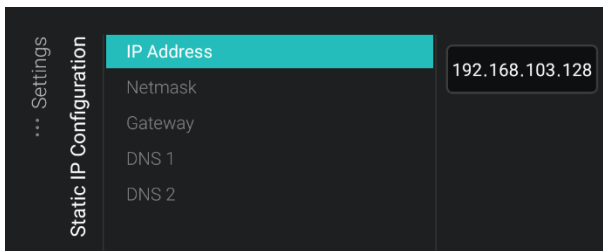
- Navigate to the **[View Network settings]** menu
- You will get the network settings on your TV
- You can navigate to the next page to see more details



- Navigate to the **[Wi-Fi Country/Region]** menu
- You get a list of countries and regions, you need to select what fits your setup

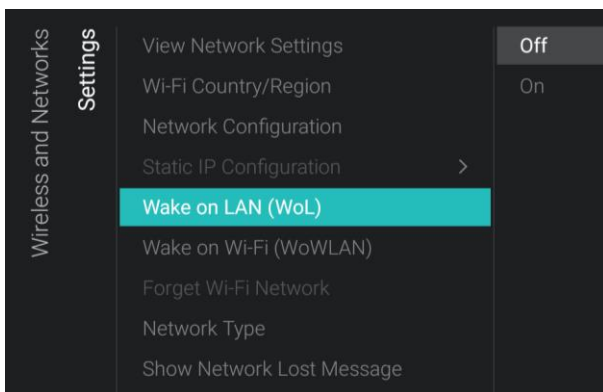


- Navigate to the **[Network Configuration]** menu
- You will see below items:
 - **[DHCP]**: Use DHCP to connect your TV
 - **[Static IP]**: Use Static IP to connect your TV

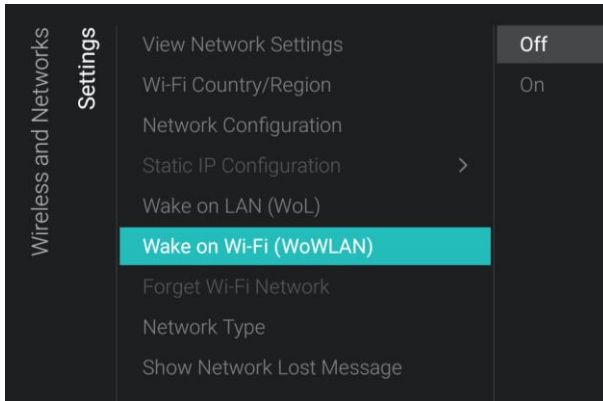


- Navigate to the **[Static IP Configuration]** menu
- You will see below items:
 - **[IP Address]**: Set your IP Address
 - **[Netmask]**: Set your Netmask
 - **[Gateway]**: Set your Gateway
 - **[DNS 1]**: Set your DNS 1
 - **[DNS 2]**: Set your DNS 2

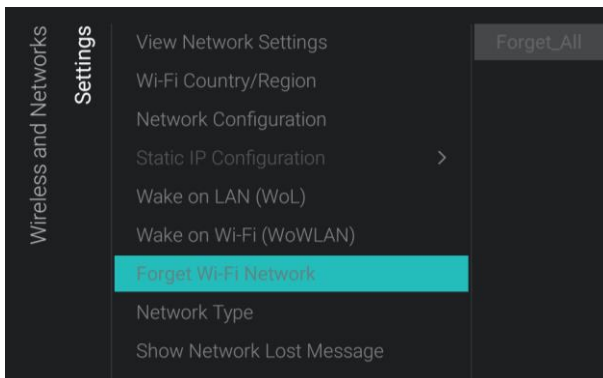
*Note: Above menus are only accessible when in **[Network Configuration]** you have selected **[Static IP]***



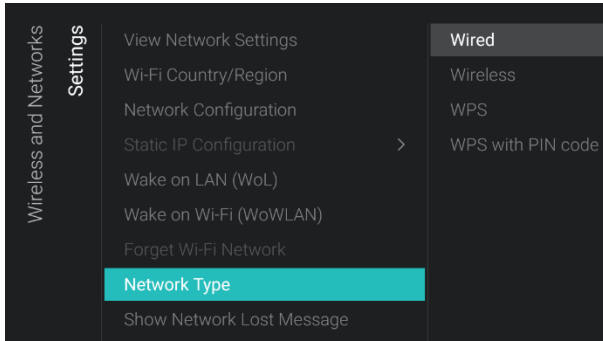
- Navigate to the **[Wake on LAN (WoL)]** menu
- You will see below items:
 - **[Off]**: Wake up via LAN is disabled
 - **[On]**: Wake up via LAN enables an external Server to wake up the TV from complete Standby (green) using the wired network connection. Once you wake up TV using WoL, the TV will go from green mode to fast mode



- Navigate to the [**Wake on Wi-Fi (WoWLAN)**] menu
- You will see below items:
 - [**Off**]: Wake up via WLAN is disabled
 - [**On**]: Wake up via WLAN enables an external Server to wake up the TV from complete Standby (green) using the wireless network connection. Once you wake up TV using WoWLAN, the TV will go from green mode to fast mode



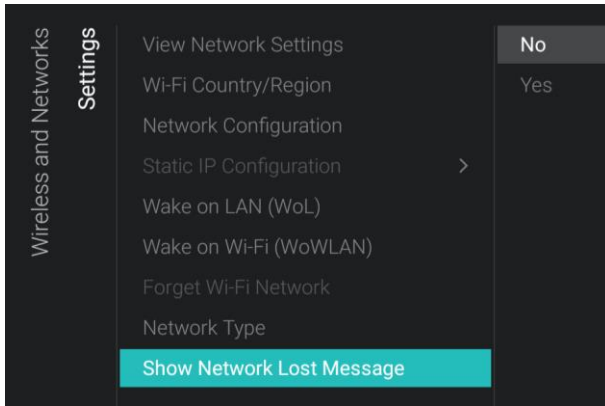
- Navigate to the [**Forget Wi-Fi Network**] menu
- You will see below items:
 - [**Forget_All**]: Remove all wireless networks that the TV was connected to
 - [**List of connected Wi-Fi networks**]: Remove the selected wireless network from the list
Note: This menu is only accessible if the TV was ever connected to Wi-Fi, the list of connected Wi-Fi networks depends on the Wi-Fi connections made in the past



- Navigate to the [**Network Type**] menu
- You will see below items:
 - [**Wired**]: Connect your TV wired to the network. This is NOT the yellow connector on TV. The yellow connector is to be used for Serial Xpress. If you connect a network cable to this connector, the TV will no longer respond to IR commands
 - [**Wireless**]: Connect your TV wireless to the network
 - [**WPS**]: Connect your TV wireless to the network using WPS
 - [**WPS with PIN code**]: Connect your TV wireless to the network using WPS with PIN code

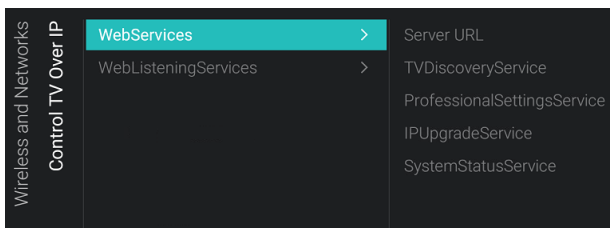


The yellow RJ48 Serial Xpress connector on the back side of TV is not the network connector

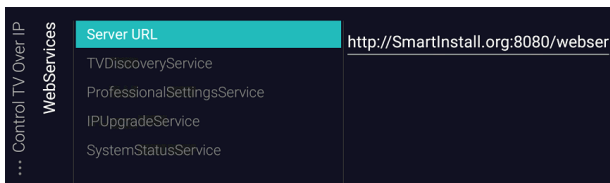


- Navigate to the [**Show Network Lost Message**] menu
- You will see below items:
 - [**No**]: Disable to show a message when the network connection is lost
 - [**Yes**]: Enable to show a message when the network connection is lost

6.12.3 Network Control TV Over IP

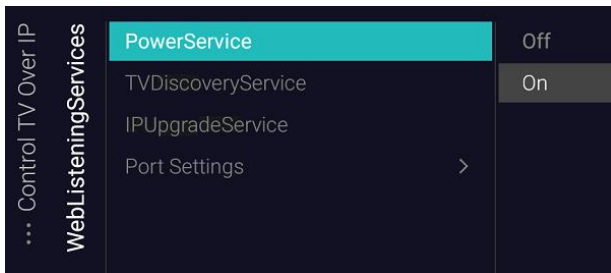


- Navigate to the [**Wireless and Networks**] [**Control TV Over IP**] menu
- You will see the screen on the left

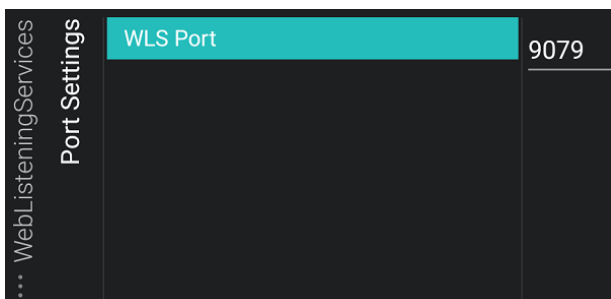


- Navigate to the [**Wireless and Networks**] [**Control TV Over IP**] [**WebServices**] menu
- Web Services is a mechanism to exchange information from the TV to the server. The TV will send below services to the server on a periodically
- You will see below items:
 - [**Server URL**]: This is the URL where the Web Services server can be found. This server will host the pages
By default, this URL is:
`http://SmartInstall.org:8080/webservices.jsp`
To get your TV's detected in CMND you need to change 'SmartInstall.org' to the IP address of your CMND server. For example:
`http://1.2.3.4:8080/webservices.jsp`
 - [**TVDiscoveryService**]: TV Discovery Service is the Web Service through which a Web Server will detect the presence of TVs in the IP Network using the TV Serial Number and Production code (and other data). You can put this option [**Off**] or [**On**]
 - [**ProfessionalSettingsService**]: Professional Settings Services allows changing or requesting the current Professional Settings Parameters. You can put this option [**Off**] or [**On**]

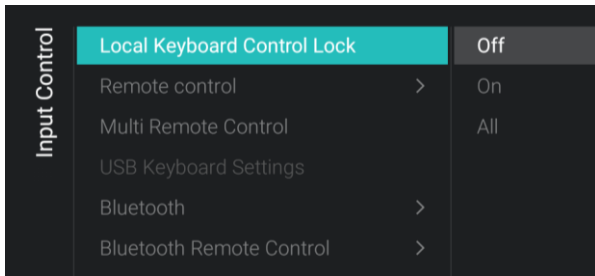
- **[IPUpgradeService]**: This will allow cloning and software update of the TV over IP via CMND, this can be put **[Off]** or **[On]**
- **[SystemStatusService]**: This will allow providing the Status of the TV and other System that is interacting with the TV such as RemoteControl. You can request the RCType, RCBatteryStatus and the MultiRC setting, this can be put **[Off]** or **[On]**



- Navigate to the **[Wireless and Networks]** **[Control TV Over IP]** **[WebListeningServices]** menu
- Web Listening Services is a mechanism to exchange information from the server to the TV. This enables a small server to run inside the TV that listens to services sent from the server.
- You will see below items:
 - **[PowerService]**: PowerService feature shall enable to remotely Request for the current status of the TV or change the Power Status of the TV, this can be put **[Off]** or **[On]**
 - **[TVDiscoveryService]**: TV Discovery Service is the Web Service through which a Web Server will detect the presence of TVs in the IP Network using the TV Serial Number and Production code (and other data). You can put this option **[Off]** or **[On]**
 - **[IPUpgradeService]**: This will allow cloning and software update of the TV over IP via CMND, this can be put **[Off]** or **[On]**
- **[Port Settings]**: Using this menu you can set the **[WLS Port]**, this port is set to 9079

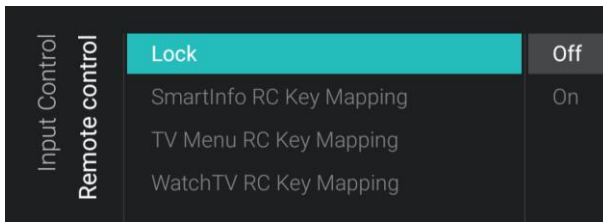


6.13 Input Control



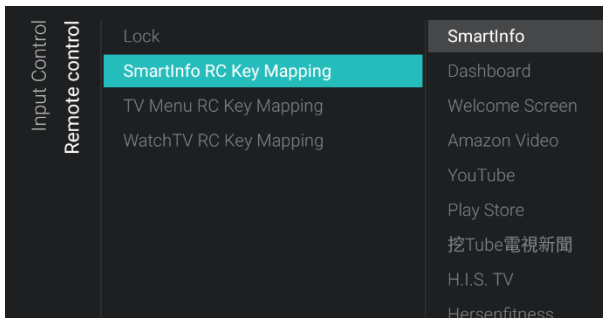
- Navigate to the [Input control] [Local Keyboard Control Lock] menu
- You will see below items:
 - [Off]: All local keyboard buttons are enabled
 - [On]: All local keyboard buttons are disabled except for the power button
 - [All]: All local keyboard buttons are disabled including the power button

Note: Local keyboard buttons are the buttons on the backside of the TV

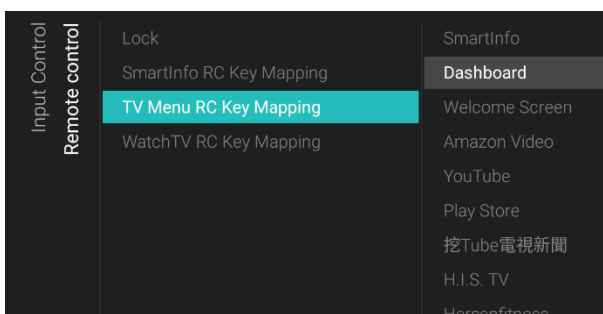


- Navigate to the [Input control] [Remote Control] menu
- You will see below items:
 - [Lock]: The TV will not respond to any RC codes sent to TV by putting Lock to [On], normally this should always be [Off]

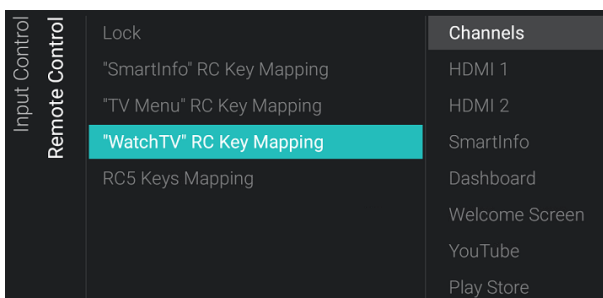
Note: Using the master RC you would still be able to enter in the professional menu and navigate in it



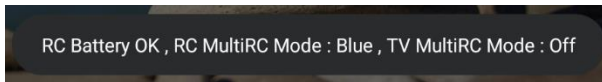
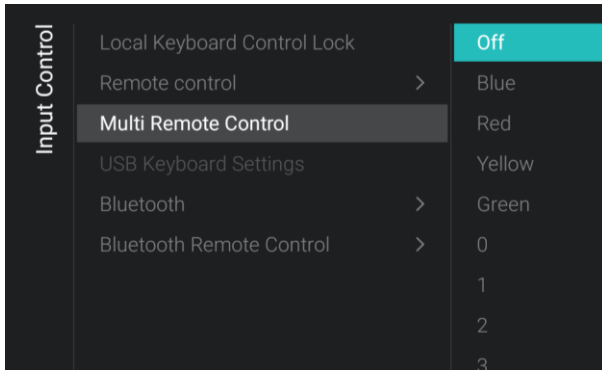
- [SmartInfo RC Key Mapping]: You can map the "SmartInfo" button on the RC to different apps
Note: The list will be depending on enabling/disabling of features and installed apps



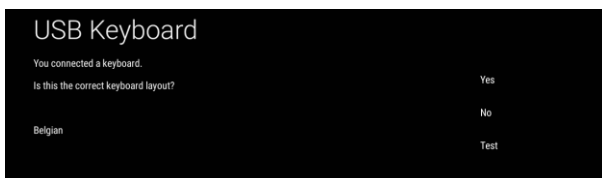
- [TV Menu RC Key Mapping]: You can map the "TV Menu" button on the RC to different apps
Note: The list will be depending on enabling/disabling of features and installed apps



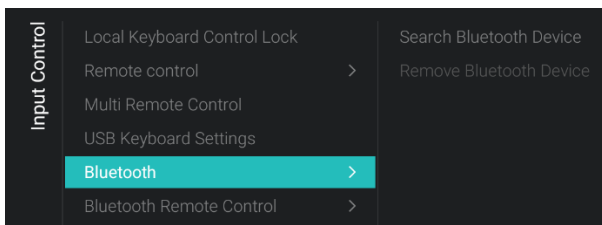
- [Watch TV RC Key Mapping]: You can map the "Watch TV" button on the RC to different sources and to different apps installed on the TV
Note: The list will be depending on enabling/disabling of features/sources and installed apps



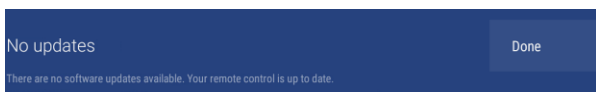
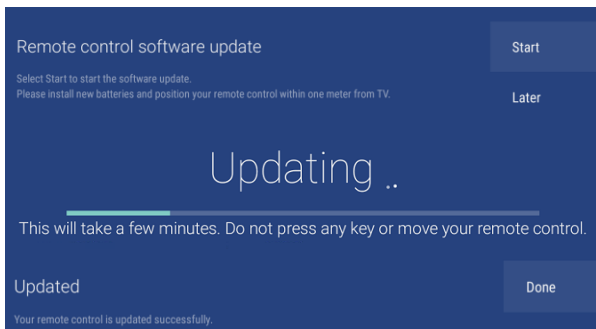
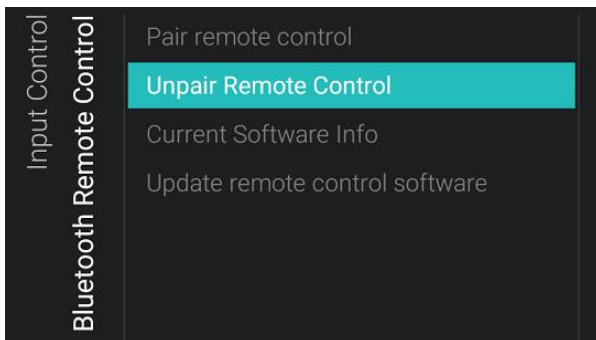
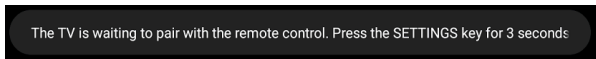
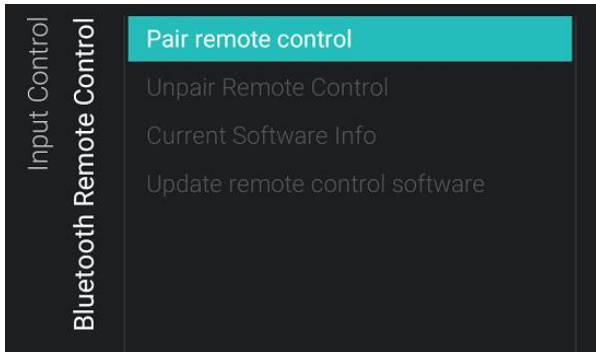
- Navigate to the **[Input control] [Multi Remote Control]** menu
- This function allows that up to 14 televisions can be installed in a room whereas each TV will react to its own RC
- You will see a list of options ('Off', the 4 color keys and all digits)
- The TV will only react on the RC that is programmed linked to your selection
Note: The TV will still respond to the master RC
- Once the TV is set to some value other than **[Off]**, also the RC should be programmed to the same selection to still work with the TV
- How to program the RC:
 - Press and hold both the menu and the color button or digit button on the RC for about five seconds (You should not point the RC to the receiver on the TV)
 - To see the status of the remote control, while pointing at the TV, press and hold the **"Mute"** button for about five seconds until you get a notification on screen
 - You will see the battery status of the RC, the setting programmed in the RC (default = blue) and the setting in TV
Note: See also more details in chapter 'Remote control'



- Navigate to the **[Input control] [USB Keyboard Settings]** menu
Note: This menu is only accessible when a USB keyboard is connected to the TV
- When you connect a keyboard to the TV, you will get a wizard to install the keyboard automatically. By opening this menu item, you will be able to do this installation wizard again and change the keyboard layout and test your keyboard

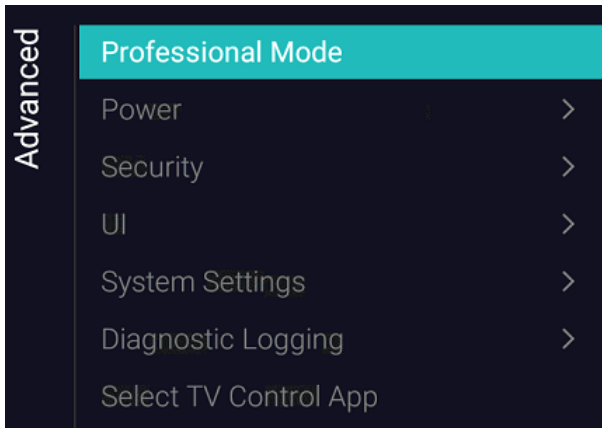


- Navigate to the **[Input control] [Bluetooth]** menu
- This menu is only here for future use, it is currently **NOT** working
Bluetooth audio devices will never be able to be connected

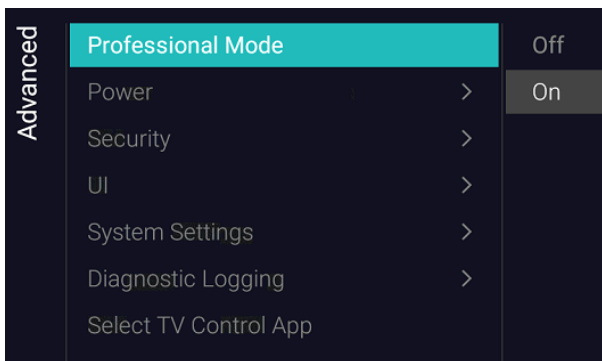


- Navigate to the [Input control] [Bluetooth Remote Control] menu
- This menu is to pair the 22AV2025B remote control to the TV
- You will see below items:
 - [Pair remote control]: If you press “OK” to activate this action you will see a message onscreen asking you to press the “Settings” key on the Bluetooth RC for 3 seconds to pair with the TV. After 3 seconds you will see a blue LED blinking next to the standby button. You will see a message onscreen that the TV is paired with your remote control. Once done, below menu items will become controllable.
 - [Unpair Remote Control]: You disconnect the Bluetooth connection between the RC and the TV by pressing “OK”. You will see a message onscreen that the TV has unpaired with your remote control
 - [Current Software Info]: When pressing “OK” you will see a message onscreen indicating the current software version of the remote control
 - [Update remote control software]: A wizard will appear to start the software update of the remote control
 - Press [Start] to start the software update, make sure you have new batteries and make sure the RC is within one meter from the TV
 - If a new SW update is available you will see ‘Updating’ on screen with the progress. Do not press any key on the remote control and don’t move the remote control. Once the update is done you will see a message ‘Updated’. You can press [Done] to close the wizard
 - When no updates are found you will see a ‘No updates’ message saying that your RC is up to date, you can close the wizard by pressing [Done]

6.14 Advanced

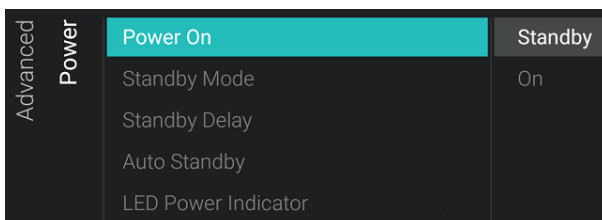


- Navigate to the [**Advanced**] menu
- You will see the screen on the left



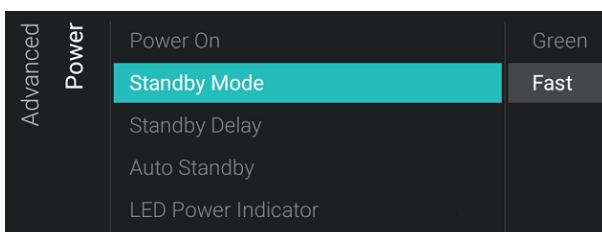
- Navigate to the [**Professional Mode**] menu
- You will see below items:
 - [**Off**]: To put the professional mode Off, this means your TV is in consumer mode
 - [**On**]: To put the professional mode On, this means your TV is configured as a Hospitality TV

*Note: this option should always be set to [**On**] to be able to use the TV as a professional TV. You should never turn this option to [**Off**]*

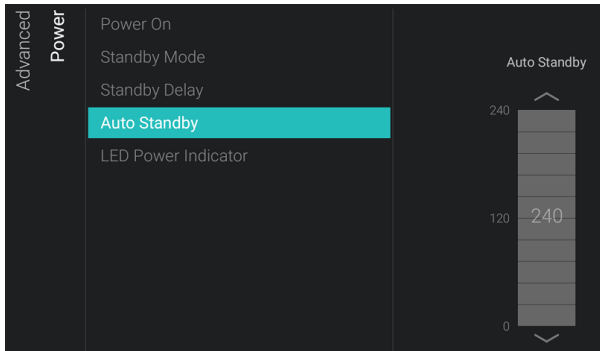
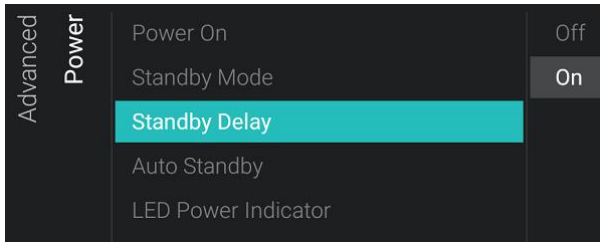


- Navigate to the [**Power**] menu
- You will see below items:
 - [**Power On**]: After a power reboot of the TV the TV will restart in [**Standby**] or in [**On**] mode, depending on the selection
 - [**Standby Mode**]: The TV will quickly turn on (higher power consumption in stand-by) when [**Fast**] is selected, TV will consume less power (but will have a slower startup time) when selecting [**Green**]

Note: For RF installations, the client needs to choose to use Green or Fast mode, this will have impact on the power consumption, for IP connected installations it must be set to Fast



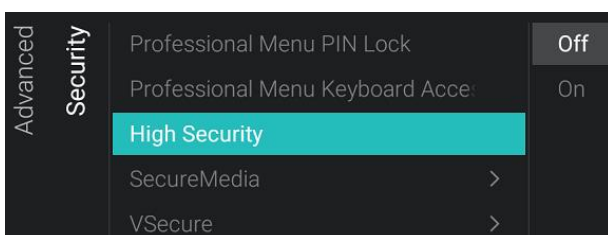
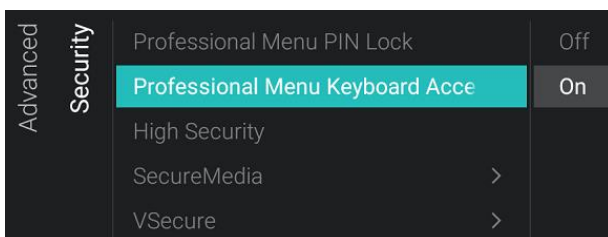
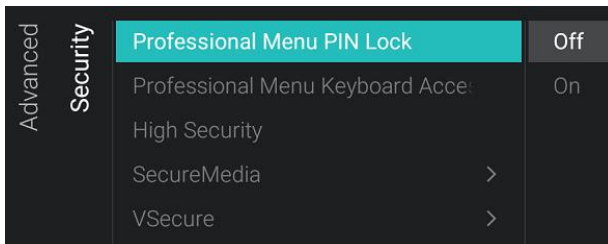
- [**Standby Delay**]: You can select [**On**] to let the TV go to fast standby mode 5 minutes after cold boot of the TV or you can select [**Off**] to let the TV go to



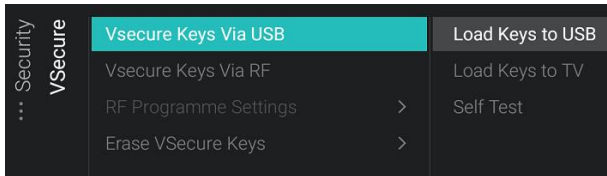
fast standby mode immediately after cold boot, this also enables the 5V on USB immediately after cold boot.

Note: This menu is only accessible if [Standby Mode] is set to [Fast]

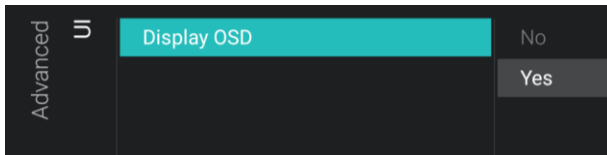
- **[Auto Standby]:** If any value bigger than [0] is set, the TV will go to STBY by itself after 10 minutes if no video signal is there. If there is video signal, the TV will go to STBY if no user interaction is there for the time set using the slider between [30] and [240] minutes. You can also put this [0] to disable the TV to go to STBY.
- **[LED Power Indicator]:** If [On], the power LED will be red while the TV is in standby. When [Off], there will be no power LED indication.



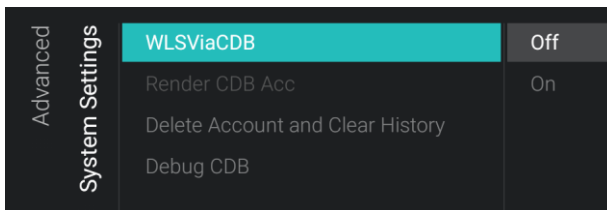
- Navigate to the [Security] menu
- You will see below items:
 - **[Professional Menu PIN Lock]:** When [On] you can set a 5 digits PIN code to lock the professional menu, when entering the professional menu using the key sequence you will need to enter the 5 digits, when [Off], this is disabled
 - **[Professional Menu Keyboard Access]:** When [On], you will be able to use the "F9" key on your keyboard to access the professional menu using the TeamViewer application or when you have a keyboard connected to the TV. When set to [Off], you will not be able to access the professional menu via the "F9" key on the keyboard.
- Note: Some behavior will be depending on your keyboard. In general, you will be able to navigate using the arrows and exit a menu using the Esc key*
- **[High Security]:** When [On], the professional setup menu can only be accessed by the Master RC and not using the key sequence via a User RC, when [Off] you can use both



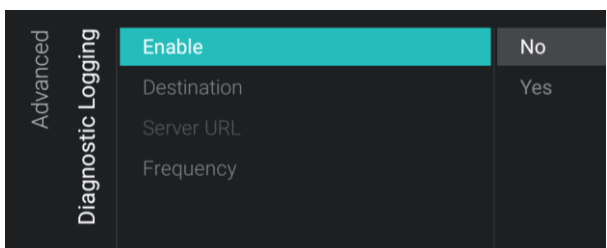
- **[SecureMedia]**: You can set the **[Server URL]** for the SecureMedia registration server
- **[VSecure]**: VSecure encrypts the content between the headend and the TV in order to protect your copy protected content (DRM). If you are interested to use it, please contact the local Philips country sales manager.
Note: You can download the certificate of the TV needed for generating the encrypted VSecure keys via [Load Keys to USB] or via JAPIT or via SerialXpress. To load the VSecure key in the TV it should have following naming: 'vseckey.txt'



- Navigate to the **[UI] [Display OSD]** menu
- You will see below items:
 - **[No]**: No OSD will be shown, you will not be able to enter any menu
 - **[Yes]**: All OSD and menus can be seen and accessed



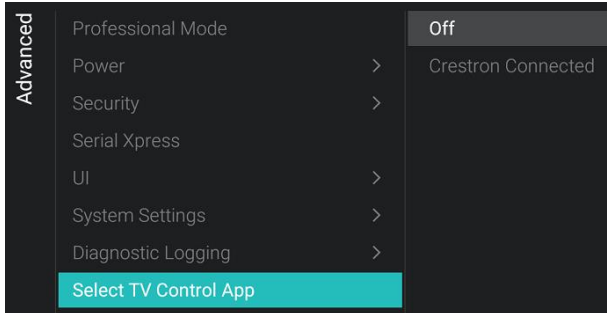
- Navigate to the **[System Settings]** menu
- You will see below items:
 - **[WLSViaCDB]**: Using **[On]**, you can enable WebListeningServices via CDB or disable using **[Off]**
 - **[Render CDB Acc]**: This menu is deprecated and will be removed through SW upgrade
 - **[Delete Account and Clear History]**: This menu is to logout and clear your history
 - **[Debug CDB]**: This will enable the CDB's HTML and JS to be debugged via chrome inspector



- Navigate to the **[Diagnostic Logging]** menu
- You will see below items:
 - **[Enable]**: You can enable diagnostic logging via **[Yes]** or disable it via **[No]**
 - **[Destination]**: You can set the location where the data should be stored to **[Internal]**, **[Portal]**, **[USB]** or **[Server]**.
 - **[Server URL]**: You can set the server url to where the logs need to be stored

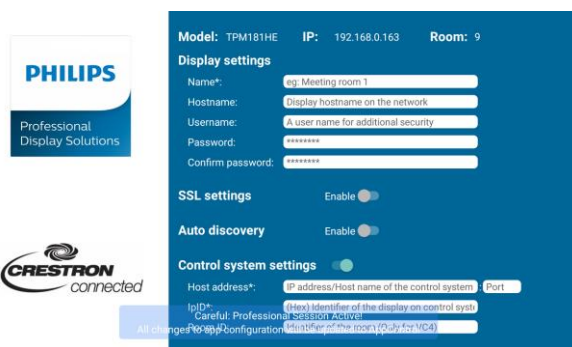
Note: This will only be selectable when [Destination] is set to [Server]

- **[Frequency]:** This is the frequency interval in seconds for diagnostic logging

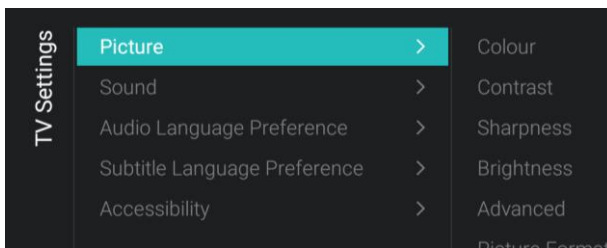


- Navigate to the **[Select TV Control App]** menu
- You will see below items:
 - **[Off]:** You can use the TV in normal mode
 - **[Crestron Connected]:** You can use the TV in normal mode and you can also control the TV using Crestron Connect. When you press “OK” you will open the configuration wizard of the Crestron connect

Note: See more details in the ‘Crestron Connected wizard’ chapter

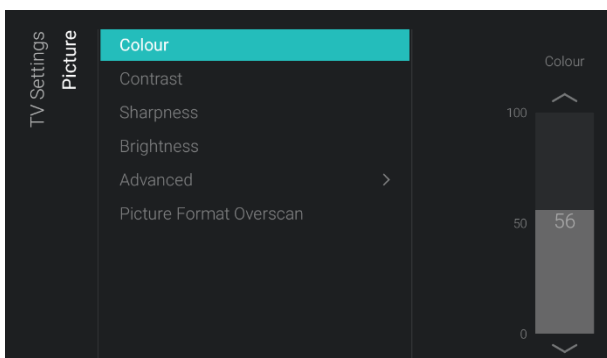


6.15 TV Settings



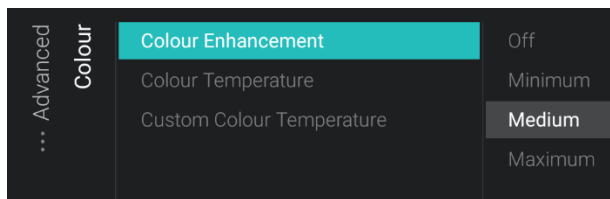
- Navigate to the **[Advanced]** menu
- You will see the screen on the left

6.15.1 Picture

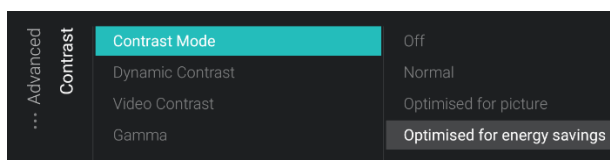


- Navigate to the **[Picture]** menu
- *Note: These settings will be applied when using the [Switch on Settings][Picture Settings][Picture Style][Personal]*
- You will see below items:
 - **[Colour]:** You can adjust the level of colour from black & white to the highest colour saturation using the slider
 - **[Contrast]:** You can adjust the level of contrast from the lowest to the highest colour distinction using the slider

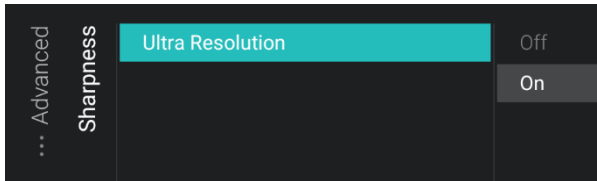
- **[Sharpness]**: You can adjust the level of sharpness of the picture from normal to exceptional sharpness by using the slider
- **[Brightness]**: You can adjust the brightness of the picture by using the slider
- **[Advanced]**: See below in more detail
- **[Picture Format Overscan]**: You can enable the picture overscan using **[On]** or disable using **[Off]**



- Navigate to the **[Picture] [Advanced] [Colour]** menu
- You will see below items:
 - **[Colour Enhancement]**: Adjust the level of enhancement for colour intensity and details in bright colours between **[Off]**, **[Minimum]**, **[Medium]** or **[Maximum]**
 - **[Colour Temperature]**: Select a preset colour temperature **[Normal]**, **[Warm]**, **[Cool]** or select **[Custom]** to set a colour temperature setting
 - **[Custom Colour Temperature]**: You will see several sliders to adapt the colour settings
Note: This is an expert user setting and should normally not be changed. It is only selectable when [Colour Temperature] is set to [Custom]

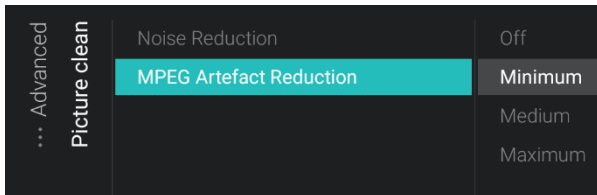


- Navigate to the **[Picture] [Advanced] [Contrast]** menu
- You will see below items:
 - **[Contrast Mode]**: Select how the TV automatically reduces the contrast via **[Off]**, **[Standard]**, **[Best Power]** or **[Best Picture]**
 - **[Dynamic Contrast]**: Set the level at which the TV automatically enhances the details in the dark, middle and light areas of the picture via **[Off]**, **[Minimum]**, **[Medium]** or **[Maximum]**
 - **[Video Contrast]**: Adjust the level of the contrast of the picture signal via the slider
 - **[Gamma]**: Set a non-linear setting for picture luminance and contrast via the slider



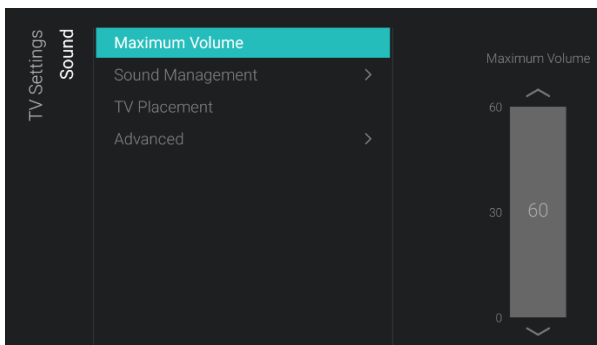
- Navigate to the [Picture] [Advanced] [Sharpness] menu
- You will see below items:
 - [Ultra Resolution]: This offers superior sharpness, especially on lines and contours in the picture, you can put this [On] or [Off]

Note: [Ultra Resolution] might have a different name depending on your set type and screen size

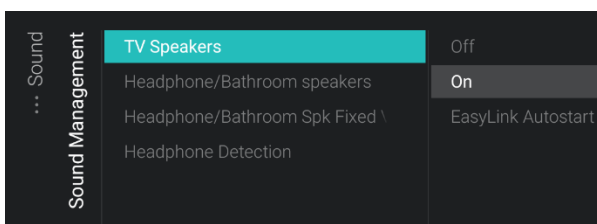


- Navigate to the [Picture] [Advanced] [Picture clean] menu
- You will see below items:
 - [Noise Reduction]: Noise reduction filters out and reduces the image noise, you can put this [Off], [Minimum], [Medium] or [Maximum]
 - [MPEG Artefact Reduction]: MPEG artefact reduction smoothens the digital transitions in the picture, you can put this [Off], [Minimum], [Medium] or [Maximum]

6.15.2 Sound

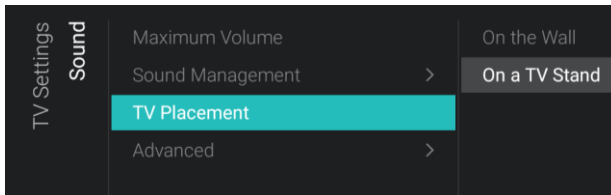


- Navigate to the [Sound] [Maximum Volume] menu
- Set the maximum volume by changing the slider value, this will be the maximum volume that a user can set on the TV

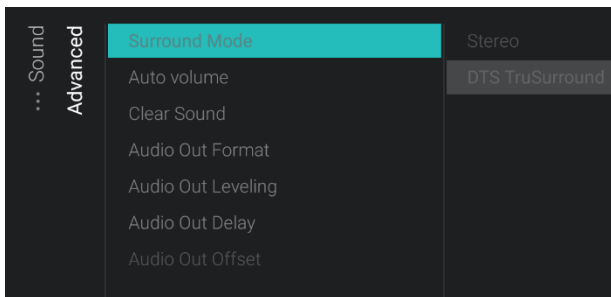


- Navigate to the [Sound] [Sound Management] menu
- You will see below items:
 - [TV Speakers]: You can set the TV to play sound on TV using [On] or on the connected audio system using [Easylink Autostart] or you can disable the speakers using [Off]
- Note: The audio system (supporting ARC) must be connected via HDMI*
- [Headphone/Bathroom speakers]: No audio will be played via the Headphone/Bathroom speakers when [Off], it will be heard when [On] and a device is connected

- **[Headphone/Bathroom Spk Fixed Vol]**: When **[On]**, the volume level of the Headphone/Bathroom speaker will be fixed to the Switch on Setting
- **[Headphone Detection]**: When the Headphone Detection is set to **[On]** and the headphone is connected then TV speakers shall be muted automatically. When **[Off]**, the user has to manually mute the TV speakers



- Navigate to the **[Sound]** **[TV Placement]** menu
- You will see **[On the Wall]** and **[On a stand]**. Depending on your selection you will optimize the sound acoustics of the TV for the placement of your TV

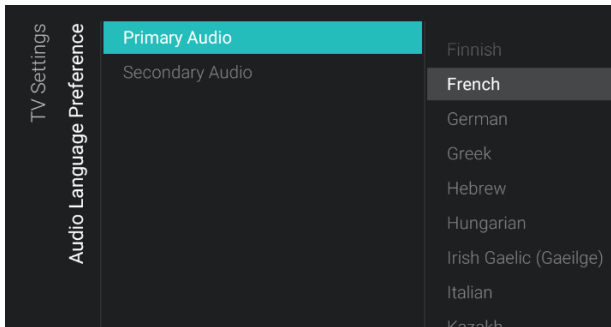


- Navigate to the **[Sound]** **[Advanced]** menu
- You will see below items:
 - **[Surround Mode]**: Select the sound effect for the internal TV, you can choose **[Stereo]** or **[DTS TruSurround]**
Note: You can only change this is the [Sound Style] is set to [Personal] in the switch on settings
 - **[Auto volume]**: Select **[DTS TruVolume]** or **[Night mode]** if you want to enable to level out sudden volume differences or **[Off]** if you want to disable
 - **[Clear Sound]**: Select if you want to enable Clear Sound to improve the sound for speech **[On]** or **[Off]** if you want to disable
 - **[Audio Out Format]**: Set the audio out signal of the TV to fit with the sound capabilities of the connected Home Theatre System to **[Stereo (uncompressed)]**, **[Multichannel]**, **[Multichannel (bypass)]** or **[Dolby Digital Plus]**
 - **[Audio Out Leveling]**: Select the level out of the volume of the Home Theatre System and the TV when switching over from one to the other to **[More]**, **[Medium]** or **[Less]**
 - **[Audio Out Delay]**: Switch the delay if a sound delay is set on the Home Theatre System to **[On]** or **[Off]**

- **[Audio Out Offset]**: Set an audio offset by changing the slider value if you cannot set a sound delay on the Home Theatre System

*Note: This can only be changed if **[Audio Out Delay]** is set to **[On]***

6.15.3 Audio Language Preference



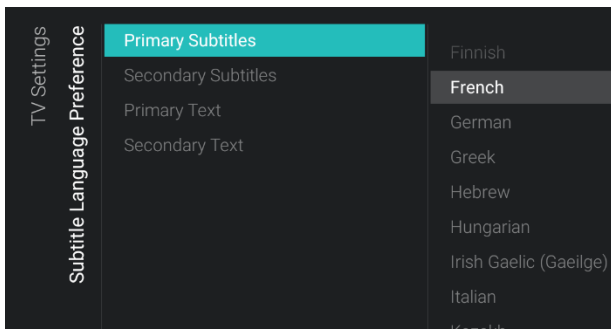
- Navigate to the **[Audio Language Preference]** menu

- You will see below items:

- **[Primary Audio]**: Select the highest preference for audio language in broadcast
- **[Secondary Audio]**: Select the next preference for audio language in broadcast

Note: For all the above items, make your selection and press "OK" to confirm your selection

6.15.4 Subtitle Language Preference



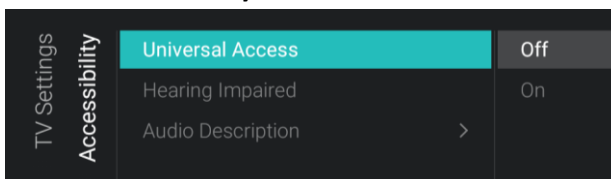
- Navigate to the **[Subtitle Language Preference]** menu

- You will see below items:

- **[Primary Subtitles]**: Select the highest preference for subtitle language in broadcast
- **[Secondary Subtitles]**: Select the next preference for subtitle language in broadcast
- **[Primary Text]**: Select the highest preference for text language in broadcast
- **[Secondary Text]**: Select the next preference for text language in broadcast

Note: For all the above items, make your selection and press "OK" to confirm your selection

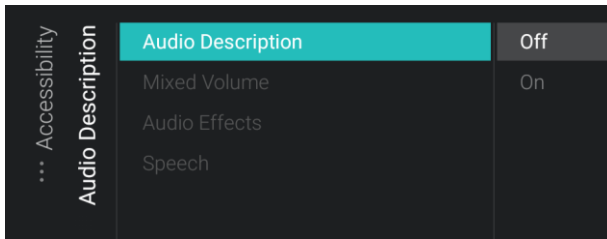
6.15.5 Accessibility



- Navigate to the **[Accessibility]** menu

- You will see below items:

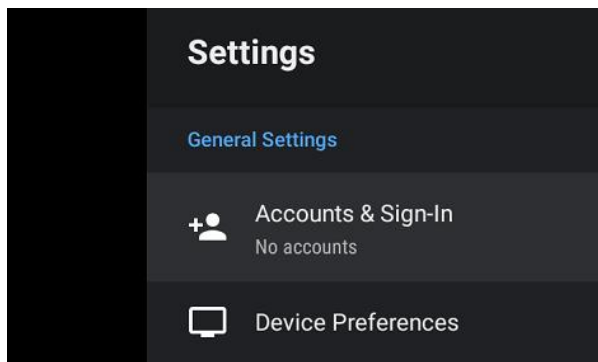
- **[Universal Access]**: You can enable using **[On]** the universal access to activate special functions for hearing and visually impaired people or disable using **[Off]**



- **[Hearing Impaired]**: You can enable hearing impaired for adapted audio and subtitles if available using **[On]** or disable using **[Off]**
- **[Audio Description]**:
 - **[Audio Description]**: Using **[On]** you can enable the accompanying audio commentary if available or disable using **[Off]**
 - **[Mixed Volume]**: Set the mix of normal audio and commentary audio by changing the slider value
 - **[Audio Effects]**: Switch **[On]** for extra audio effects in the commentary audio, there can be more information on when to fade/pan the Main Audio, while the audio description is being rendered along with main audio. This can also be turned **[Off]**
 - **[Speech]**: Select **[Descriptive]** to hear the audio commentary or select **[Subtitles]** to read the spoken words

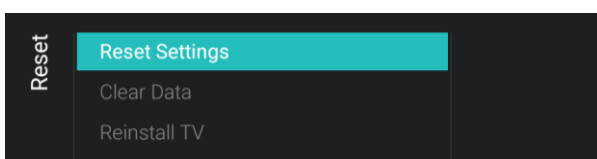
*Note: Above menus are only available if **[Accessibility][Audio Description]** menu is set to **[On]***

6.16 Android Settings

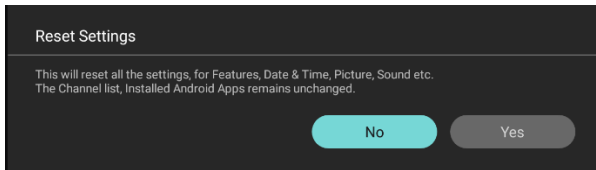


- Navigate to the **[Android Settings]** menu
 - You will see the screen on the left
- Note: It is not recommended to make changes in this menu as this is only to be used by android developers*

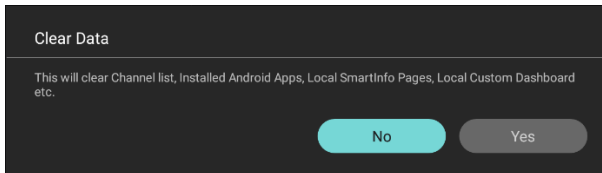
6.17 Reset



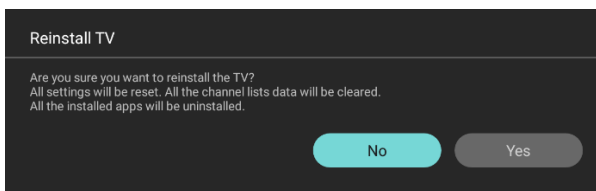
- Navigate to the **[Reset]** menu
- You will see the screen on the left



- Navigate to the **[Reset Settings]** menu
- When you press “**OK**” you will reset all settings to the factory settings except for some set specific settings like RoomID, professional mode, WebServices URL, channel list, professional menu pin lock and logging url. Installed android apps remain unchanged



- Navigate to the **[Clear Data]** menu
- When you press “**OK**” you will clear all data like the channel list, installed android apps, local SmartInfo pages, local custom dashboard. The settings will not be reset



- Navigate to the **[Reinstall TV]** menu
- When you press “**OK**” you will Reinstall the TV, your TV will reboot and start in IIC mode (like the TV comes out of the box). All the settings will be reset to the factory settings except for RoomID, professional mode, WebServices Server URL, Secure Communication server URL, Master TV, Render CDB Acc, professional menu pin lock and diagnostic logging server url. All user data will be cleared

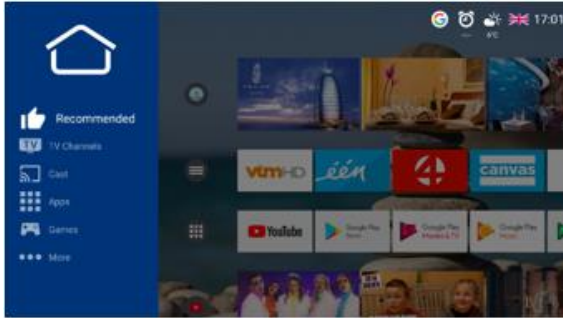
***Note:** You will see an erasing message for a while, all your settings will be reset and you will have to load a new clone file to the TV or perform an IIC installation. This action can take several minutes.*

7. Professional setting wizards

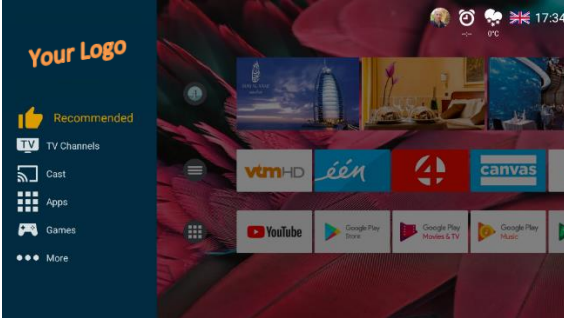
7.1 Philips Home Dashboard configuration

The new UI also called `Philips home Dashboard` has received a major update in order to be more content-rich, easy to use, fast moving, smart, adaptive and is fully customizable.

Default UI:



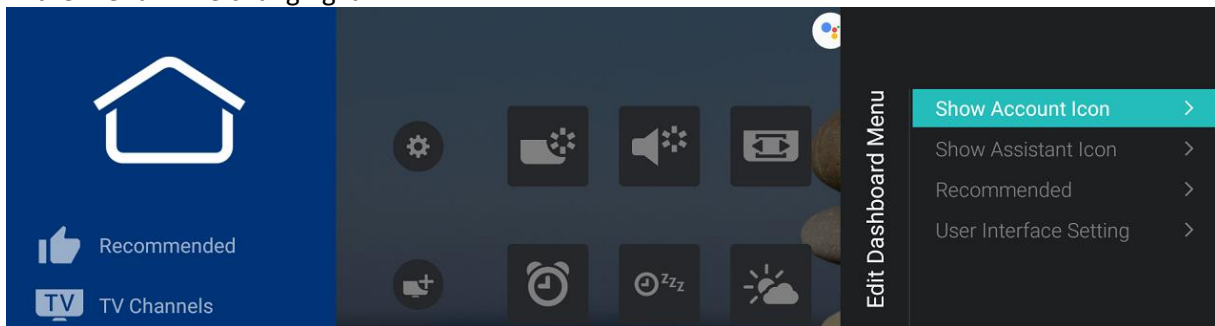
Adapted UI:



You are able to change all colours and backgrounds to map the color scheme of your customer's wishes, however the menu items you see are the same and are depending on the settings made in the professional settings.

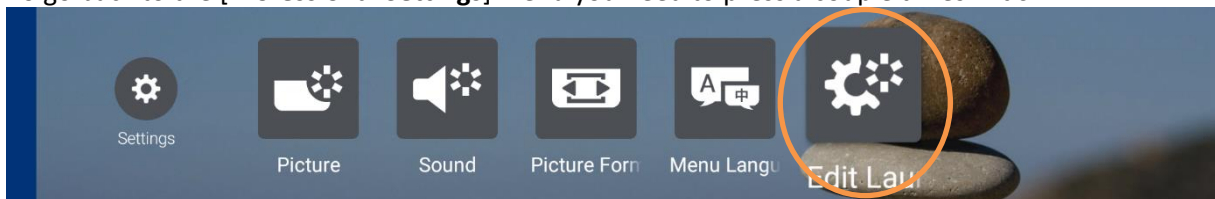
This can be done using the **[Edit Dashboard Menu]**. You can open this menu via **[Professional Settings][Dashboard][Select Dashboard][Philips Home]** and press **"OK"**.

On the right side of the screen a menu appears and changes you do in this menu you will see reflected in the menu while changing it.



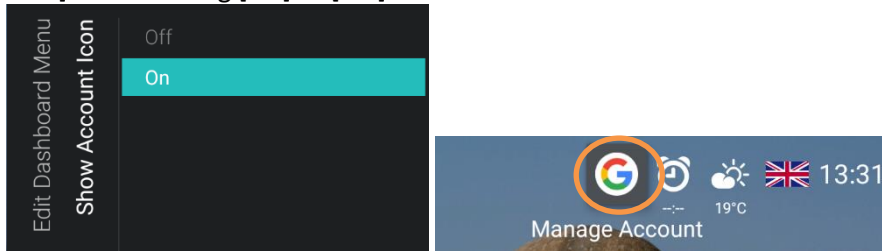
If you have exited this menu by pressing **"Back"**, you are still in the professional session (See chapter 'Professional Session') you will see that you can access this menu again using the **[Edit Launcher]** menu and continue to change your settings.

To go back to the **[Professional Settings]** menu you need to press a couple times **"Back"**.



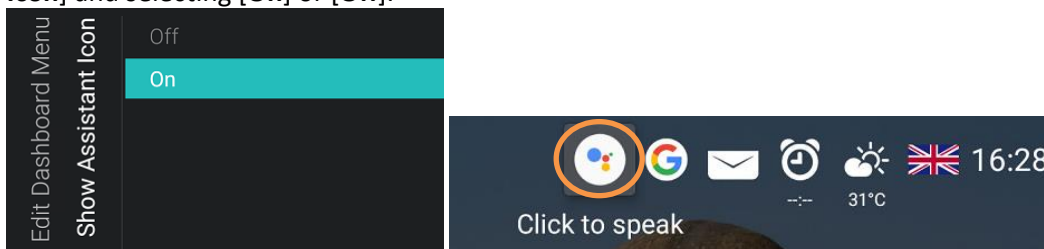
7.1.1 Show Account Icon

In the **[Edit Dashboard Menu]** you can show or hide the 'Manage Account' icon using **[Show Account Icon]** and selecting **[On]** or **[Off]**.



7.1.2 Show Assistant Icon

In the **[Edit Dashboard Menu]** you can show or hide the 'Click to speak' icon using **[Show Assistant Icon]** and selecting **[On]** or **[Off]**.

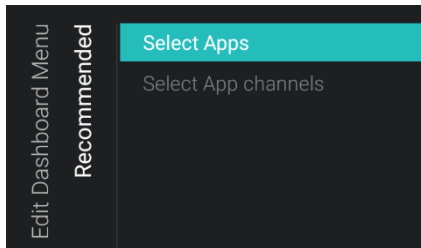


7.1.3 Recommended

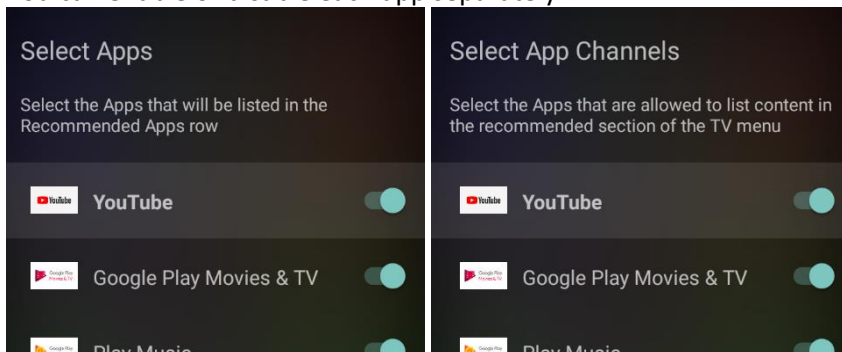
In the **[Edit Dashboard Menu]** you can change your settings that are reflected in the recommended user menu via **[Recommended]**.

Using **[Select Apps]** you can select the apps that will be shown in the Recommended shelf in the user menu. This can be a sub selection of all apps that are shown in the Apps shelf.

Using **[Select App channels]** you can select the apps that are allowed to list content in the recommended section of the TV menu.

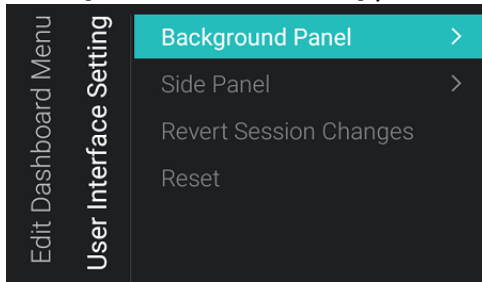


You can enable or disable each app separately.



7.1.4 User Interface Setting

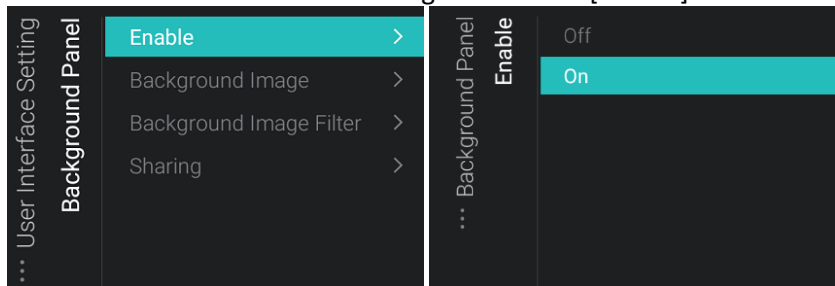
In the [Edit Dashboard Menu] you can change the complete menu look and feel.



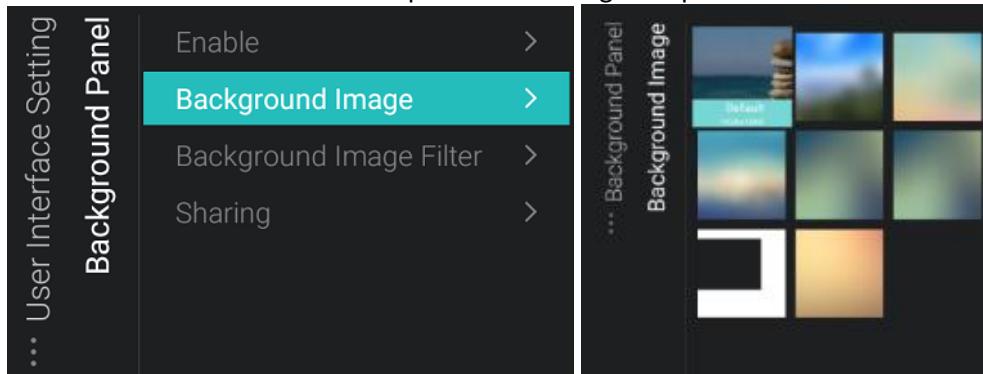
Changes made towards the look and feel of the UI can be reverted or reset to its default values. This can be done by selecting the [Revert Session Changes] or [Reset] option within the same menu.

You can change the [Background Panel] where you can:

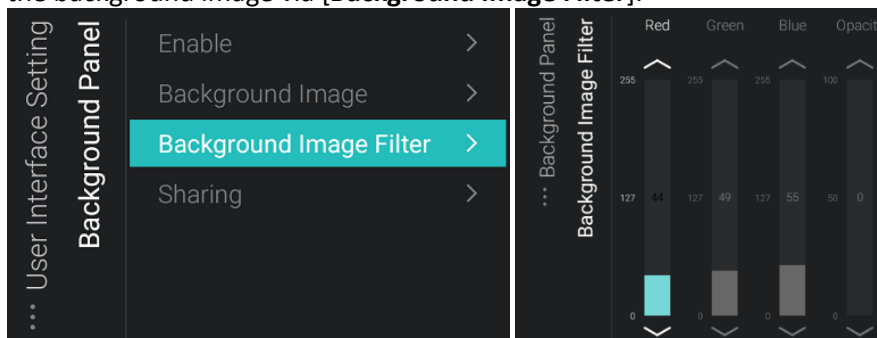
- Enable or disable to show the background in the [Enable] menu.



- Change the background image using the [Background Image].
You need to connect a USB device containing the picture you want to use and select it by pressing "OK". Pictures can be both .png and .jpg format. The optimal resolution is 1920x1080 for the background images and it's recommended to keep the file size of the background image around or below 1Mb to avoid impact on the navigation performance of the dashboard.

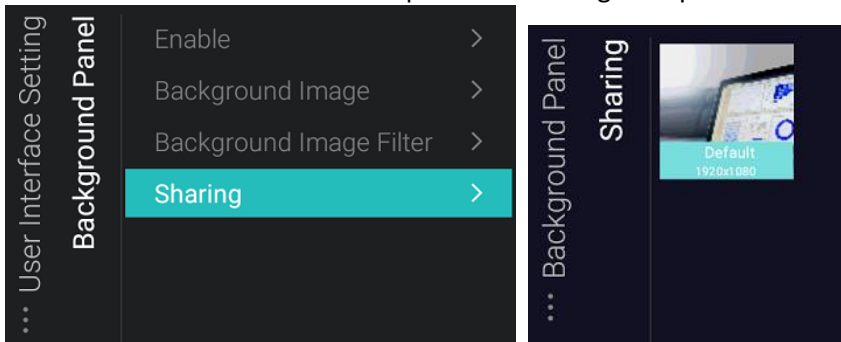


- Adapt the background color and the Opacity of the background color that is shown on top of the background image via [Background Image Filter].



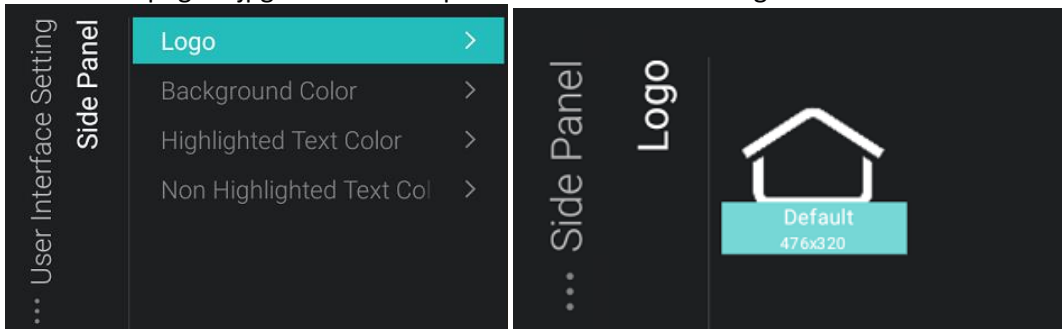
- Change the default background for the sharing screen via [Sharing]

You need to connect a USB device containing the picture you want to use and select it by pressing “OK”. Pictures can be both .png and .jpg format. The optimal resolution is 1920x1080 for the background images and it’s recommended to keep the file size of the background image around or below 1Mb to avoid impact on the navigation performance of the dashboard.

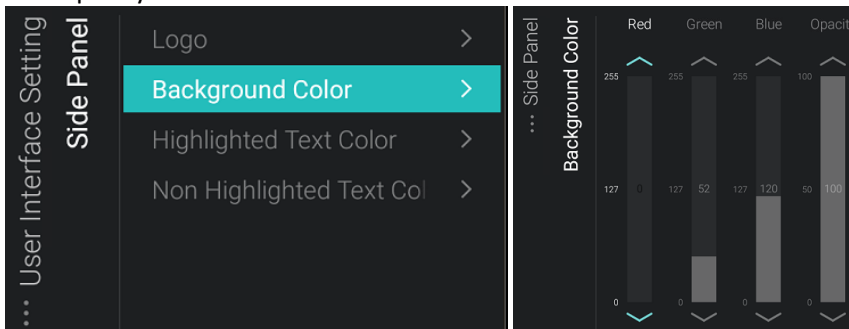


You can change the [Side Panel] where you can:

- Change the logo, this can be done in the same way as changing the background image and it can be in a .png or .jpg format. The optimal resolution of the logo is 550x425



- Change the [Background Color], [Highlighted Text Color] and the [Non Highlighted Text Color] and Opacity



7.2 Manage Apps

7.2.1 Manage Apps configuration wizard

There are two ways to configure your apps in the TV.

- First is to create your own Profile in order to manage the apps through the web portal (<https://appcontrol.cmnd.pro/>). The initial configuration is to be done through the TV in order to see the apps in the web portal.
- Second is to make an 'auto generate AppProfile'. If you use an 'Auto generate AppProfile' you will not be able to manage this through the web portal, you can only edit the profile by logging into a TV with this profile already configured and edit the profile through the TV.

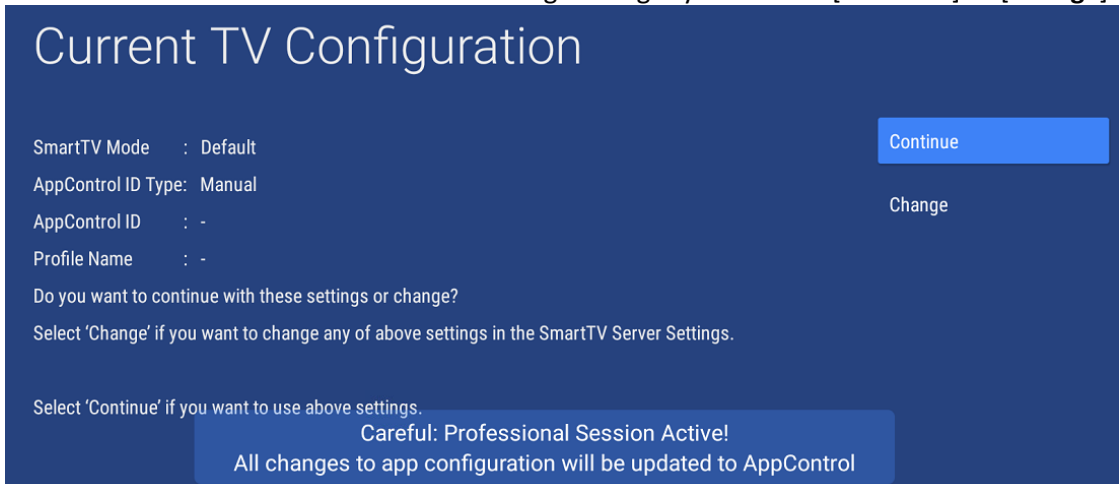
If you go to the Professional menu and navigate to **[Features][Apps][Manage]** you will open the wizard to configure your Apps settings. Once you have gone through the wizard your profile settings can be found back in the **[Features][Apps][SmartTV Server Settings]** submenu's.

In the wizard, you will be guided through several screens before you can access the menu to further configure your apps.

Each time you want to enter this menu again, you will need to go through the wizard again before you can change settings or install new apps. If you have already configured a profile, the fields will already be filled with your current settings.

You will see following screens when going to **[Features][Apps][Manage]** wizard:

- You will see an overview of the current settings asking is you want to **[Continue]** or **[Change]**



Current TV Configuration

SmartTV Mode : Default Continue

AppControl ID Type: Manual Change

AppControl ID : -

Profile Name : -

Do you want to continue with these settings or change?

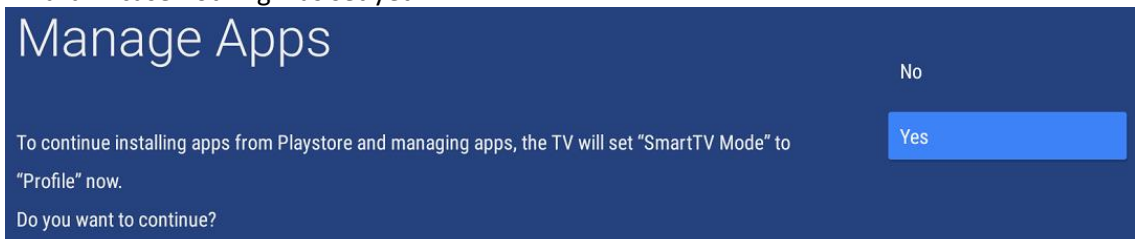
Select 'Change' if you want to change any of above settings in the SmartTV Server Settings.

Select 'Continue' if you want to use above settings.

Careful: Professional Session Active!
All changes to app configuration will be updated to AppControl

If you select **[Change]**, you will exit the wizard and be able to go back to the **[SmartTV Server Settings]** to change them

- If you **[Continue]**, you are asked to agree to change the settings to 'Profile' to continue the wizard in case nothing was set yet



Manage Apps

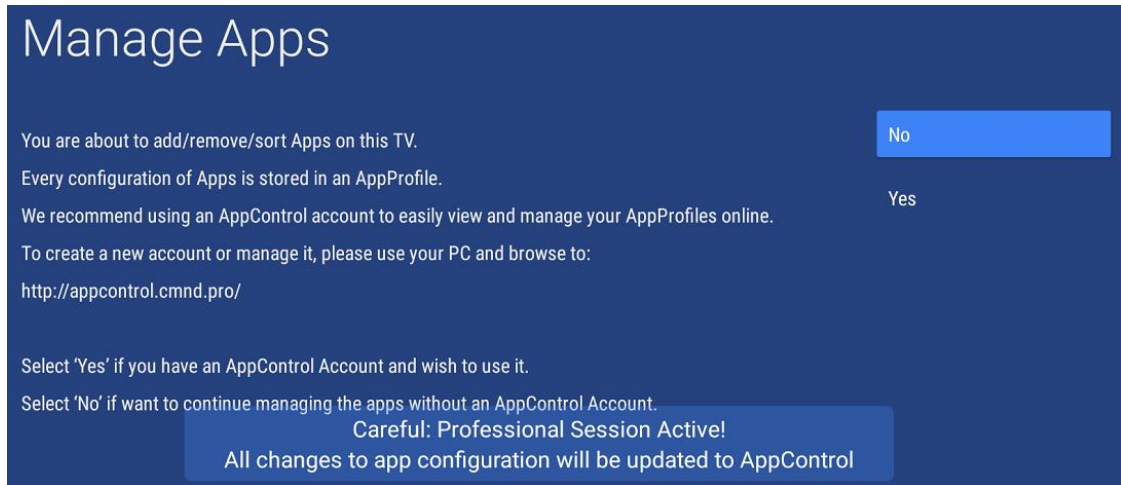
No

To continue installing apps from Playstore and managing apps, the TV will set "SmartTV Mode" to "Profile" now.

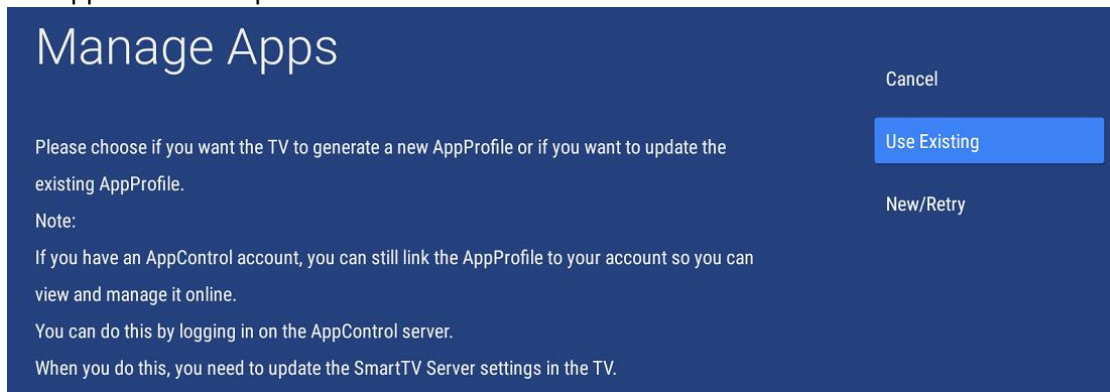
Do you want to continue? Yes

If you were already using a profile, you will not see this screen and go to the next screen already

- If you choose **[Yes]** or **[Continue]** in the previous screen, you can choose to use an existing AppControl account using **[Yes]** or **[No]** if you want to configure the TV without an AppControl account.



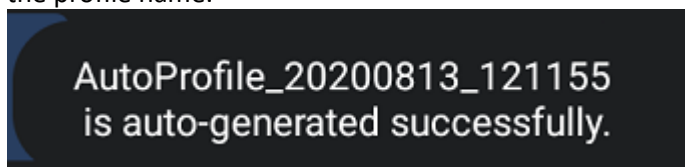
- If you select **[No]**, you will need to choose to **[Use Existing]** or create a **[New/Retry]** one to create or use an 'Auto generate AppProfile'. So you will not be able to manage your apps using the AppControl web portal



When **[Use Existing]**, you will be asked to enter the name



When creating a new one, you will see a successful message in the bottom right corner with the profile name.



- If you select **[Yes]**, you will need to use your own **[AppControl ID]**, **[PIN Code]** and use your **[Use Existing]** profile or generate a **[New Profile]**.
Note: To create your own AppControl ID, see next chapter "Manage Apps through the web portal"



Manage Apps

Please enter your AppControl account ID and PIN code to proceed:

AppControl ID _____

PIN Code _____

Manage Apps

Please choose if you want to generate a new AppProfile or if you want to update the existing AppProfile.

A new AppProfile will become visible on your AppControl account after upload is complete.

An update in an existing AppProfile will be uploaded to your account and all TV's using the same AppProfile will get the same update.

Cancel

Use Existing

New Profile

Manage Apps

Please enter AppProfile: _____

- After you have created or loaded a profile or after you are using an existing or new 'Auto generate AppProfile' you will get a successful notification and move to the next screen where you see the profile is being synchronized

Apps Status Sync from SmartTV server

SmartTV Apps: 0 of 0
Playstore Apps: 2 of 4
Others: 0 of 0

Storage

Total Space: 8.77 GB
All Apps: 1.41 GB
Free: 7.35 GB

Careful: Professional Session Active!
All changes to app configuration will be updated to AppControl

Close

- Next, you will get a confirmation screen that the Manage Apps mode is successfully activated

Manage Apps

'Manage Apps' Mode successfully activated.

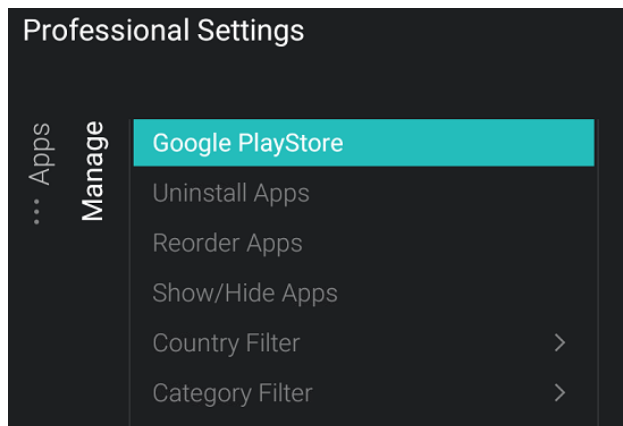
Remember! All the changes you now make on this TV will be updated in the AppProfile, uploaded to the AppControl Server and distributed to all TV's using the same AppProfile:

1. Installation or Uninstallation of Apps
2. Reordering of apps
3. Hiding or Unhiding of apps

An onscreen OSD will keep on reminding you that the Professional Session is active.

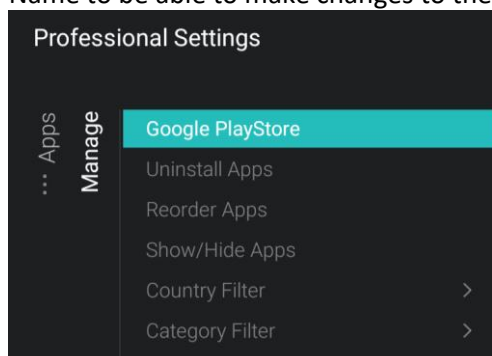
OK

From here onwards, you can access the menu to control your apps and manage them as explained in the 'Apps' chapter under 'Professional Settings'.



7.2.2 Installing Apps using Google Play Store

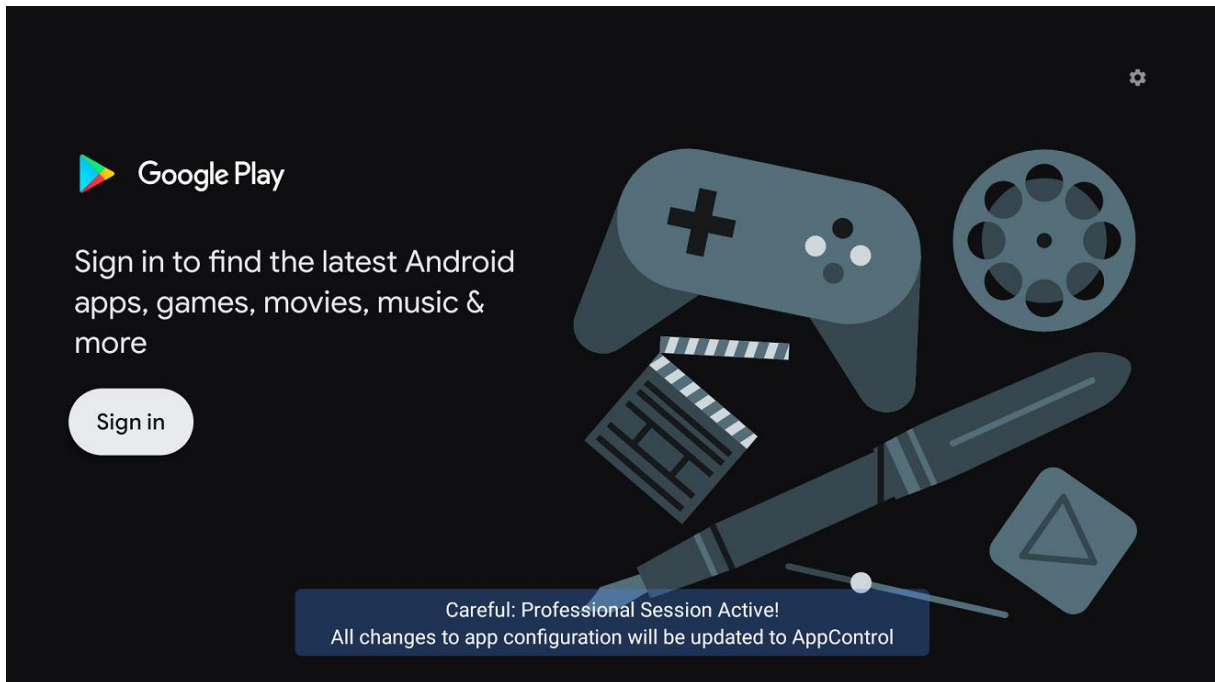
After you have gone through the wizard, you can access the menu to manage all the apps. If you need to change something and you want to access the menu again, you will need to go through the wizard again but reuse the AutoProfile that was created before or by entering your AppControl ID and Profile Name to be able to make changes to the existing profile.



In this chapter, we are going to explain the "Google PlayStore" menu item. The other menu items are explained in the chapter "Professional Settings - Features - Apps".

When you enter the Google Play Store menu, you will see the google Sign in screen.

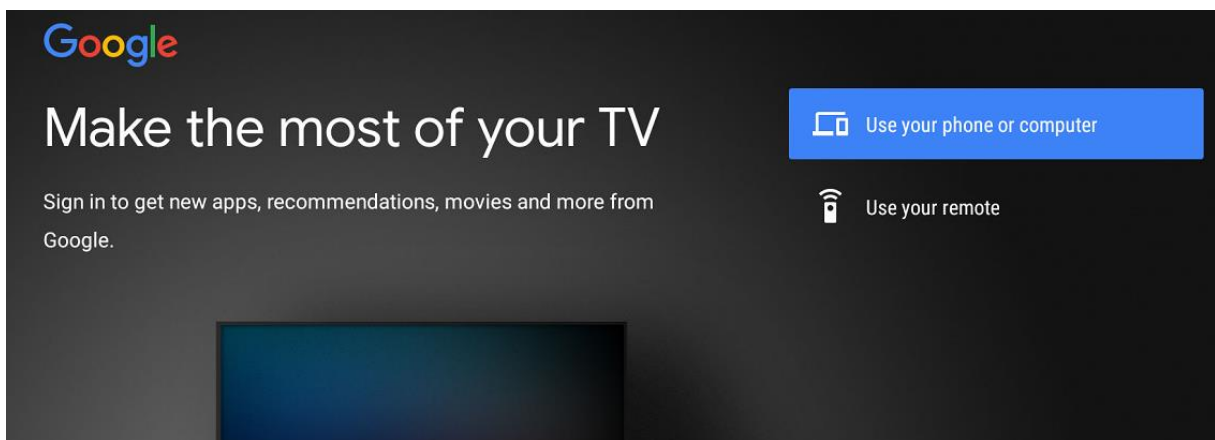
***Note:** You see the "Professional Session Active" message, only when you see this message you can make changes to the Profile. If you access the Google Play Store through the User menu, you will not see this message and your changes will not be stored to your profile.*



You need to sign in using your own Google account using your phone/computer or by entering your email and password using the onscreen keyboard.

***Note:** When done, you will be logged out again from your personal account and no changes will be stored on your account as they will be linked to the TV's profile*

***Note:** You can also connect a real keyboard to the TV*

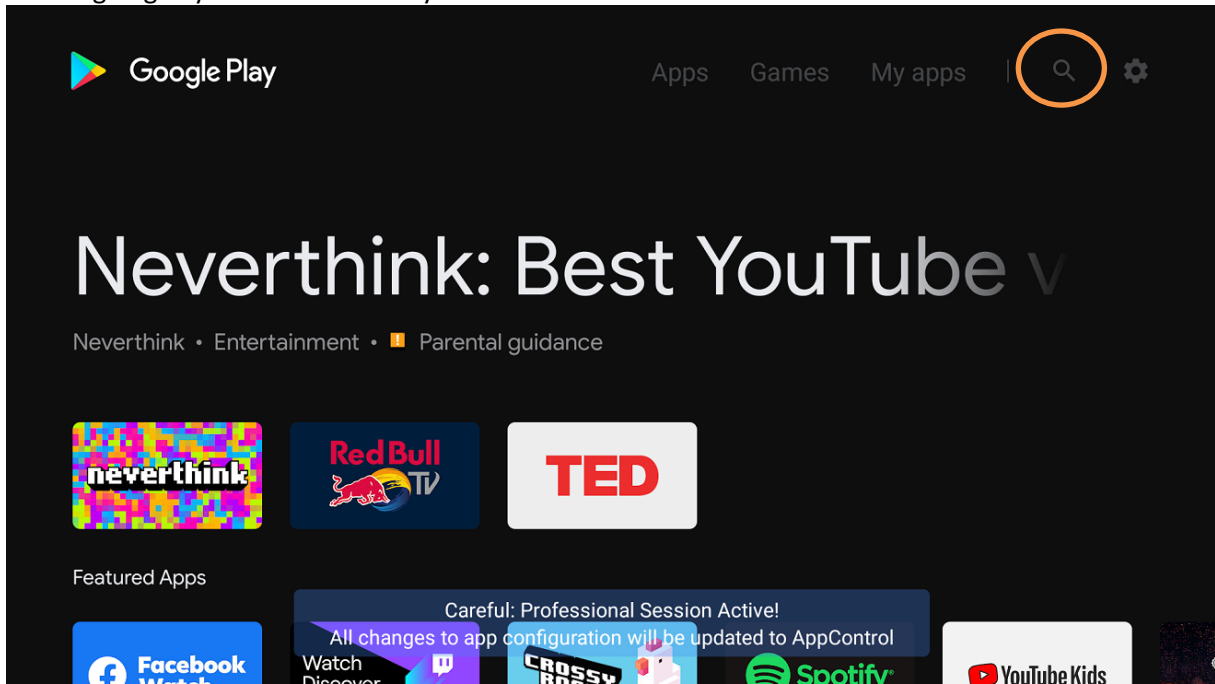


Sign in

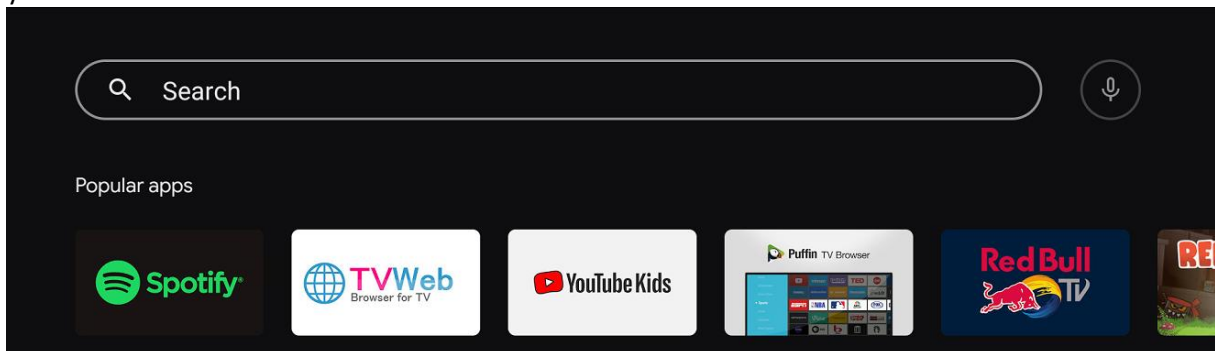
Use your Google Account

Email or phone

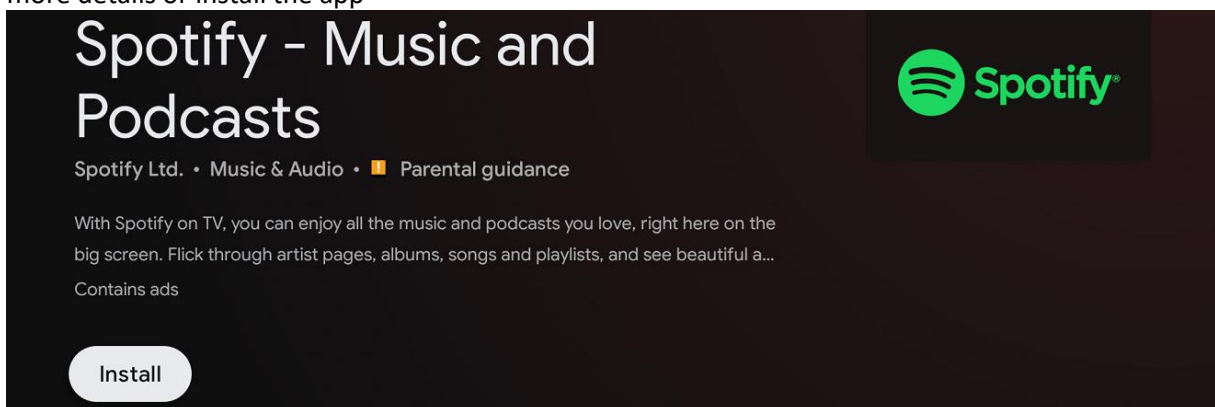
After signing in you will see the PlayStore



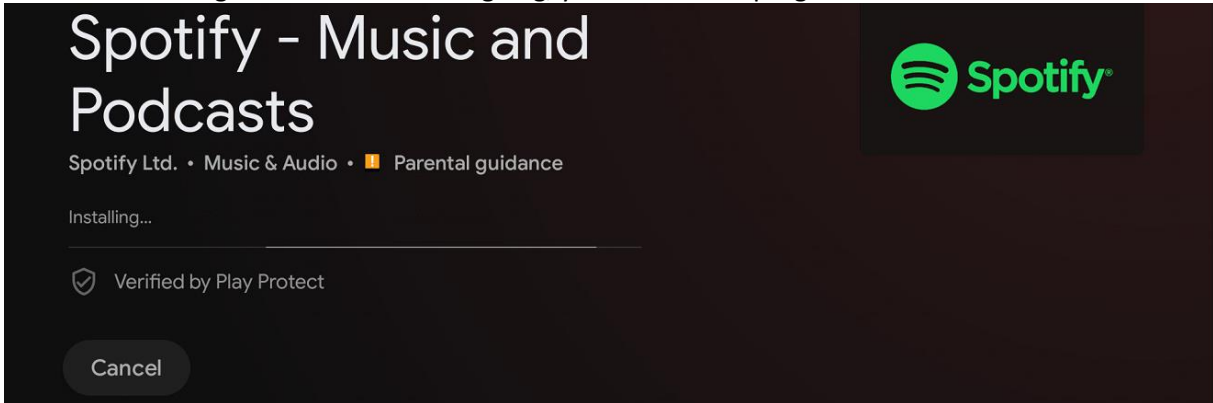
You can navigate and try to find apps or use the search function in the right upper corner to find apps you want to install.



Once you have found the app you were looking for you can select and open the app in order to see more details or install the app

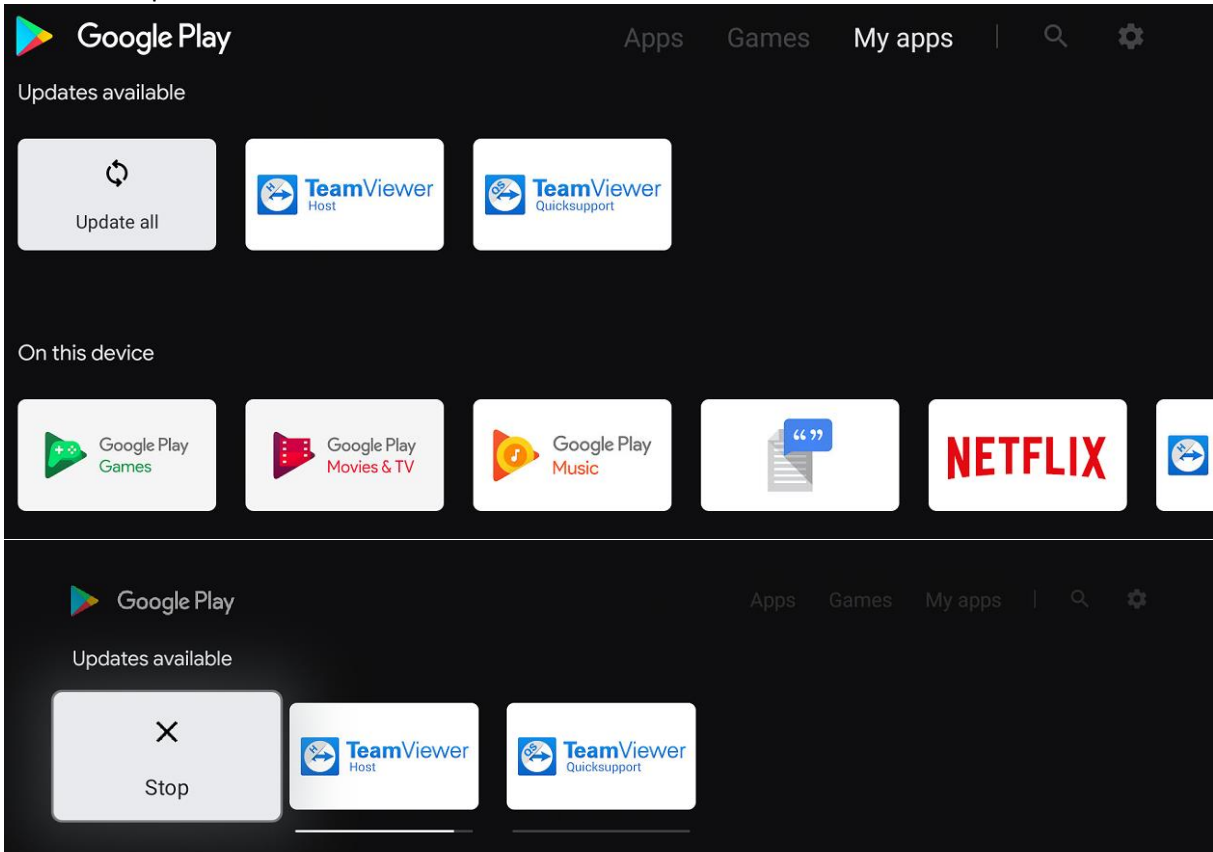


Once downloading and installation is ongoing, you will see the progress.

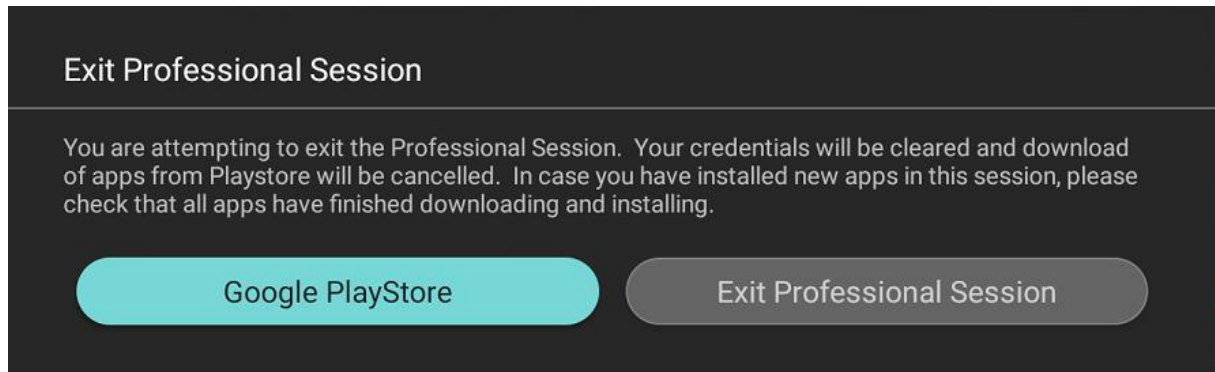


Once downloading and installing is ongoing you do not need to wait, you can go back to the previous screen and search for other apps you want to install.

If you go back to the main screen and go to **[My Apps]**, you will see a list of apps. You can see what apps are installed or still being downloaded or installed. You can also see if updates are still available. If you see there are still pending updates, you need to press the **[Update all]** button and wait until apps have been updated.



If you see that there are no more updates available and installation of all apps is done, you can exit the professional menu. You will be asked to confirm that the installation was completely finished. You can go to the [Google PlayStore] or [Exit Professional Session] if you know everything is updated and installed. If the updates are not done, they will not be uploaded to the portal and hence will also not be loaded to other monitors.



After exiting the professional menu, the profile configuration will be sent to the portal website where you can see your configuration. The uploading of apps to the portal website can still take some time depending on the number of apps you configured.

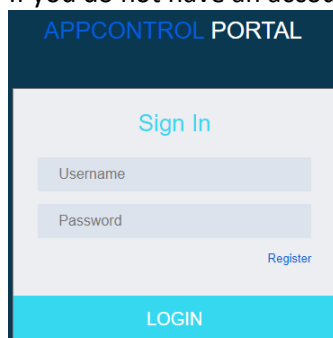
7.2.3 Managing Apps through the AppControl Portal

In this product, we have the support for Google Play Store and the ability to install apps directly from it both as a user and as an installer. Since the Google framework itself does not cater for professional use, we have extended the already existing AppControl framework from previous generations to allow easy and remote management of the apps on the TV.

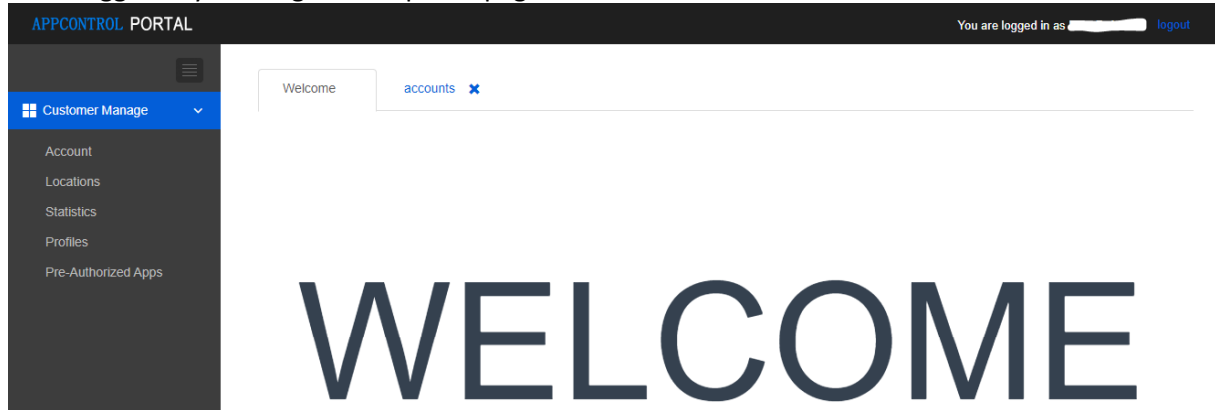
Using the AppControl function, you can re-order and remove apps on the. Adding new apps from the Play store still requires you to do this locally on one TV, from which the app gets uploaded to AppControl and distributed to all TV's having the same profile configuration.

You can access the web portal via <https://appcontrol.cmnd.pro/>

If you do not have an account, you need to click the "Register" button in order to create one.

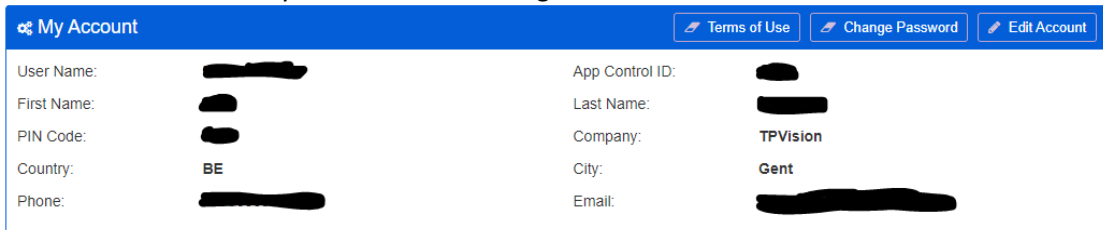


Once logged in you will go to the portal page:

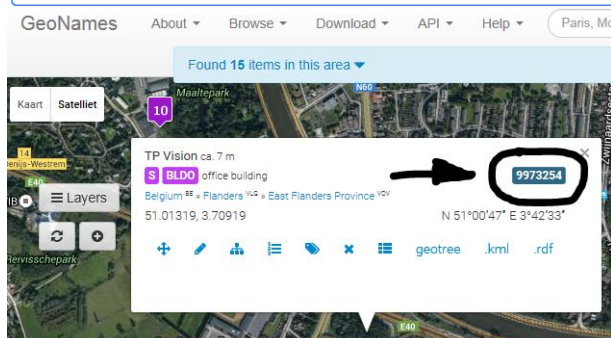
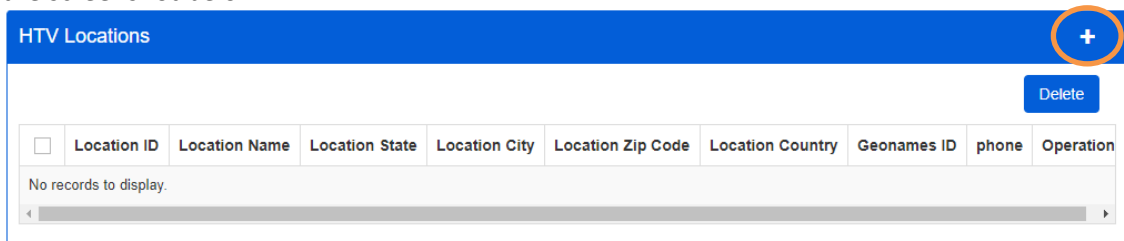


On the left side, there are 5 buttons:

- **Account:** Here you can find and edit the details of your account. This includes the 'App Control ID' and 'PIN Code' that you will need to configure a TV

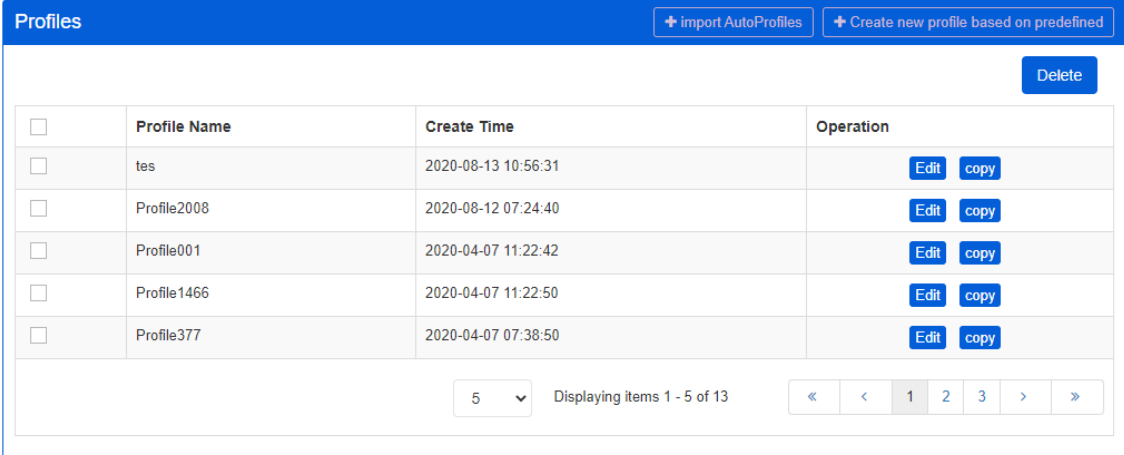


- **Locations:** Here you can configure locations where TV's are installed but this is not required, this location might be used later on for statistics information. When you add a location When adding a location, you will be requested to fill in a Geonames ID. You can find the ID on www.geonames.org, search for your location, open it and check the location ID as marked in the screenshot below



- **Statistics:** This page will be used to find statistics linked to your account

- **Profiles:** In the profiles page you can find back all profiles you have created with your account

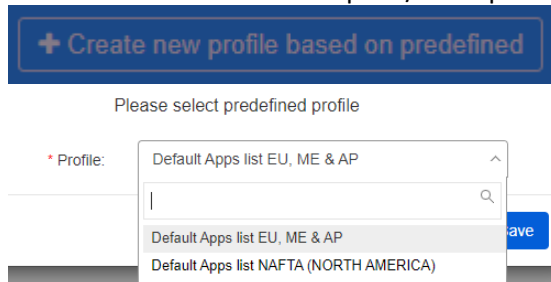


<input type="checkbox"/>	Profile Name	Create Time	Operation
<input type="checkbox"/>	tes	2020-08-13 10:56:31	Edit copy
<input type="checkbox"/>	Profile2008	2020-08-12 07:24:40	Edit copy
<input type="checkbox"/>	Profile001	2020-04-07 11:22:42	Edit copy
<input type="checkbox"/>	Profile1466	2020-04-07 11:22:50	Edit copy
<input type="checkbox"/>	Profile377	2020-04-07 07:38:50	Edit copy

5 | Displaying items 1 - 5 of 13

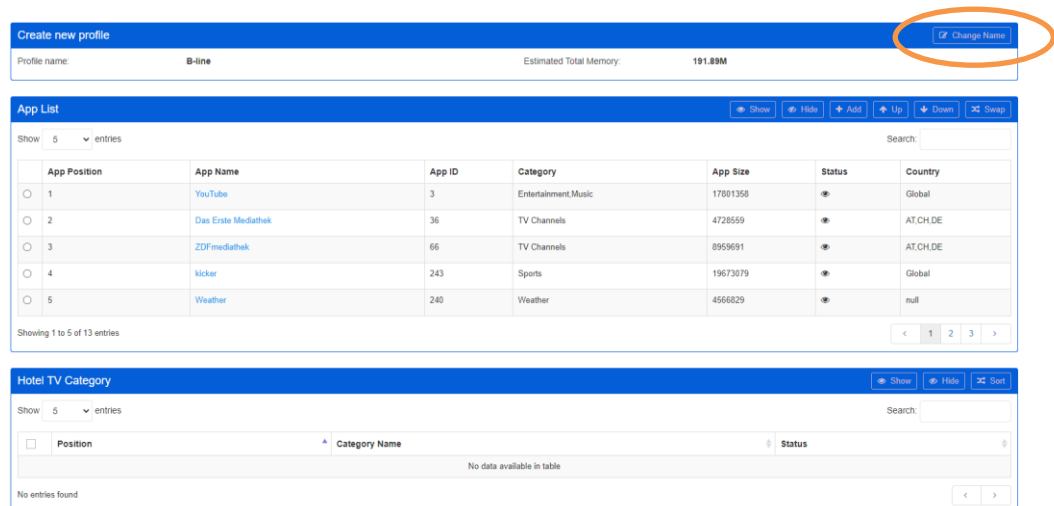
By default, there will be no profiles until you have created on using the Apps wizard on TV or if you have imported one or if you have created a profile

- **[+Create a new profile based on predefined]:**
When you click the upper right button, you can create an empty new profile. This needs to be based on a European/APAC profile or a Nafta profile for US.



Once created you will see the details of the profile, the default apps and the available Hotel TV Categories.

If required you can change the 'Profile name' using the **[Change Name]** in the upper right corner



Create new profile [Change Name](#)

Profile name: **B-line** Estimated Total Memory: **191.89M**

App List

App Position	App Name	App ID	Category	App Size	Status	Country
1	YouTube	3	Entertainment,Music	17801358	●	Global
2	Das Erste Mediathek	36	TV Channels	4728559	●	AT,CH,DE
3	ZDFmediathek	66	TV Channels	8959691	●	AT,CH,DE
4	kicker	243	Sports	19673079	●	Global
5	Weather	240	Weather	4566829	●	null

Showing 1 to 5 of 13 entries

Hotel TV Category

Position	Category Name	Status
No data available in table		

No entries found

- **[+ Import AutoProfiles]:**
As earlier explained you can generate an 'Auto generate AppProfile' in the TV. This is without having an account. If you decide to start using an account you can load an existing 'Auto generate AppProfile' into your account.

As the name of this 'Auto generate AppProfile' is unique, you can load it into your profile and save it

[+ import AutoProfiles](#)

Please select AutoProfile

* Profile:

Cancel

Save

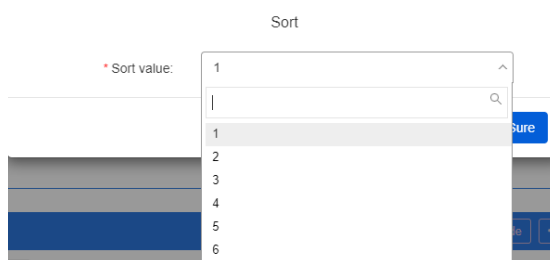
Once you have your profile in your account you can do following:

App List							
Show Hide + Add ↑ Up ↓ Down remove Swap							
Show		Search:					
5 entries							
	App Position	App Name	App ID	Category	App Size	Status	Country
<input type="radio"/>	1	YouTube	3	Entertainment.Music	17801358		Global
<input type="radio"/>	2	Das Erste Mediathek	36	TV Channels	4728559		AT,CH,DE
<input type="radio"/>	3	ZDFmediathek	66	TV Channels	8959691		AT,CH,DE
<input type="radio"/>	4	kicker	243	Sports	19673079		Global
<input type="radio"/>	5	Weather	240	Weather	4566829		null

Showing 1 to 5 of 13 entries

< 1 2 3 >

- **[Show]**: When you select an app, you can unhide the app by clicking **[Show]**, you will see the icon changes in the 'Status' column
- **[Hide]**: When you select an app, you can hide the app by clicking **[Hide]**, you will see the icon changes in the 'Status' column
- **[Up]**: When you select an app, you can move it up 1 step up by clicking **[Up]**
- **[Down]**: When you select an app, you can move it up 1 step down by clicking **[Down]**
- **[Remove]**: When you select an app, you can remove the app by clicking **[Remove]**
- **[Sort]**: When you select an app, you can swap it from location with the app position number you can select from the dropdown list



- **[Add]:** You can also add new apps into the profile using a search function. You need to select the correct **[Device]** and **[App Type]**, **[Search]** and **[Country]** can be left blank to see all available apps.

By default, there are only a few Portal (app type) apps available

Add Apps



*Device:

Search App:

Country:

App Type:

Search

<input type="checkbox"/>	App ID	Icon	App Name	PackageName	Category	Country
<input type="checkbox"/>	4340		BBC iPlayer	org.droidtv.netvapp4340	TV Channels,News	GB
<input type="checkbox"/>	4932		GameTreeTV GOLD	org.droidtv.netvapp4932	Games	DE,DK,ES,FI,GB,IT,NL,NO,SE,AU,NZ

5 | Displaying Items 1 - 2 of 2 | << < 1 > >>

If you want to install PlayStore apps you need to search for App type = PlayStore

App Type:

Search

This list will not contain any app by default. This list will only contain apps that you have ever installed in any profile using this app control account.

Once you have installed a Google PlayStore app in a profile with this account you will see the app in the list.

- **Pre-Authorized Apps:** Currently there is only 'Netflix' as an application to be authorized, more might be added later on.

You can see than you have actions available next to the app you want to authorize for and also the current status.

Note: even that Netflix is listed in the Pre-authorized Apps list, Netflix can't be installed on a xxBFL2114. Even not allowed.

This can only be done by making use of an xxHFL5014 or xxHFL6014U ProTV.

7.2.4 Add a local app in the TV

Once you have configured your TV you can also add your own local app. This is an app that is locally installed in TV and not part of the app control.

This can be done via CMND where you can upload your local apk to be installed or load directly via USB in the clone. When you use CMND to load the app, CMND will create the json file.

You can afterwards download it to USB to see how json file exactly looks like.

If you want to manually install the local app, the app should be added in the /MasterCloneData/AndroidApps/ folder and you should adapt the AndroidAppsMetaData.json file accordingly.

In the json file you will see that the "packageType": "local". All other parameters will be adapted on you current setup as already available in CMND.

For example:

```
{
  "packageName": "com.android.myapp",
  "packageURI": "./myapp.apk",
  "silentAction": "install",
  "packageType": "local",
  "packagePosition": 10,
  "packageShowHide": "1",
  "packageCountry": [
    "ALL"
  ],
  "packageCategory": [
    "Other"
  ],
  "authorizationNeeded": 0,
  "authorizationStatus": 0,
  "authorizedDeveloper": 0
}
```

7.2.5 Remove or update a local installed app from TV

If you have installed a local apk from TV and you want to remove it again you can do this with below instructions.

- Download your clone file to USB including apps
- Open the .../MasterCloneData/AndroidApps/AndroidAppsMetaData.json file using a text editor
- Search for your local installed apk
 - You should find it in a clonePackage tag with a packageURI containing the apk name
 - One of the settings is "silentAction": "install"
 - You need to change this to "silentAction": "uninstall" or "silentAction": "update"
 - Save the file and upload the clone in TV in order to uninstall the apk again. You can also upload this clone file in CMND and assigned it using CMND to the TV's you want the app to be removed from

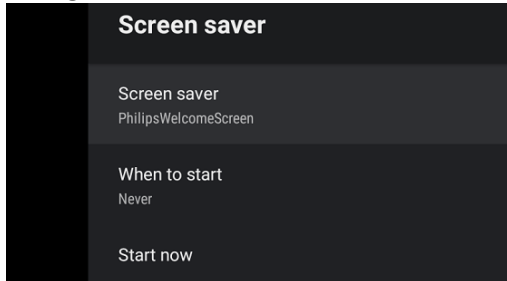
```
"clonePackages": [
  {
    "packageURI": "./xxx.apk",
    "silentAction": "uninstall",
    ...
  }
]
```

7.3 Manage Welcome Screen

You can change the configuration of the welcome screen and set it as screen saver in below menus.

7.3.1 ScreenSaver Configuration

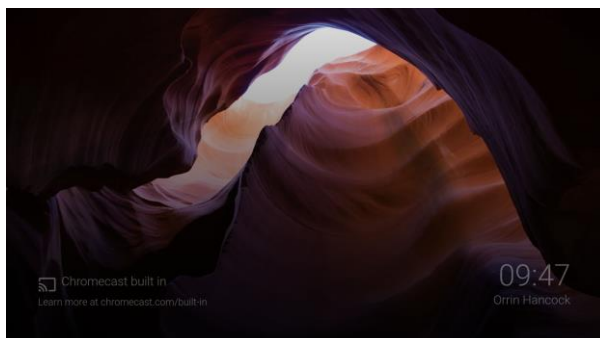
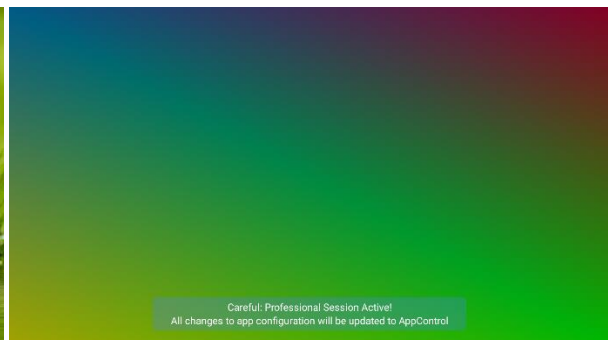
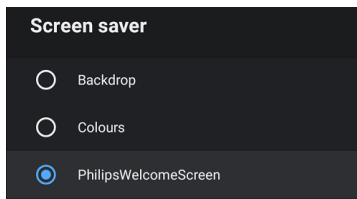
In the [Professional Settings][Features][Welcome Screen][ScreenSaver Configuration] you can configure the screensaver for TV. You can activate the screensaver by pressing [Start now].



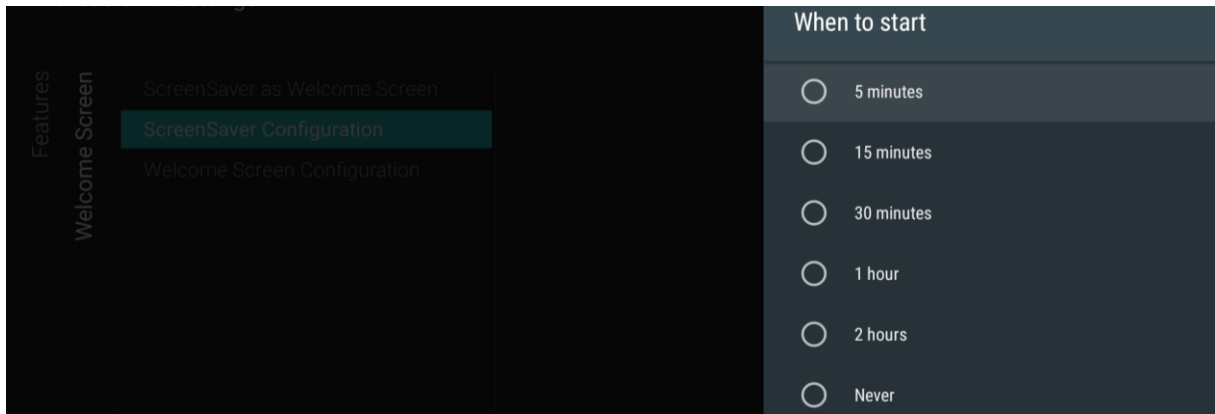
By default, there are 3 screensavers available:

- Backdrop
- Colours
- PhilipsWelcomeScreen

You can add your own screensaver application by loading it as a local apk in TV. With the correct settings, it will be detected as screensaver application. All details are explained in the JEDI documentation that can be obtained after signing an NDA through a salesperson.



You can set the screensaver to start automatically after some fixed durations or disable it by choosing [Never].

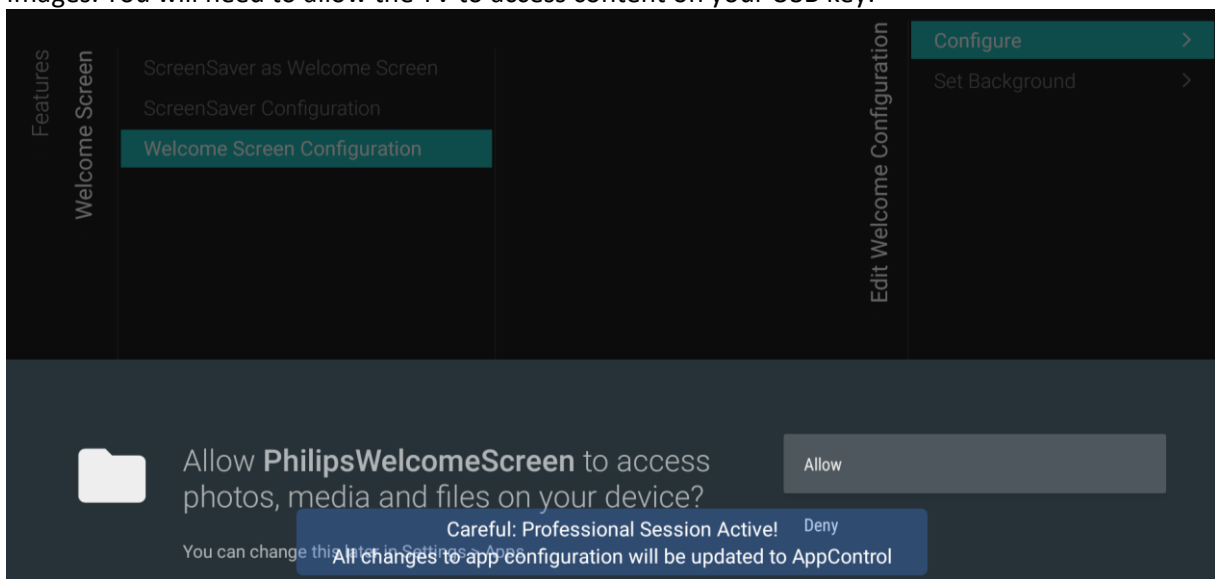


7.3.2 Welcome Screen Configuration

In the [Professional Settings][Features][Welcome Screen][Welcome Screen Configuration] you can configure the welcome screen.

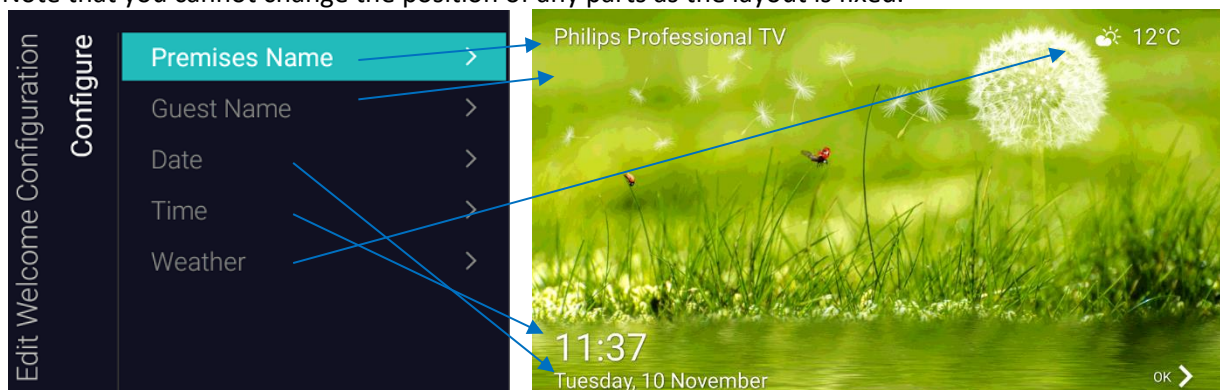
The same can also be done through CMND where it's possible to also work with multilingual text for the text messages.

Through the professional settings menu you can create the configuration and change the background images. You will need to allow the TV to access content on your USB key.



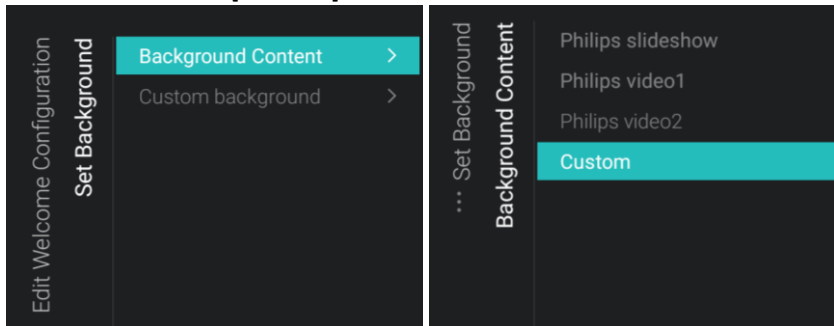
In the configuration screens, you can enable or disable all parts of the welcome screen.

Note that you cannot change the position of any parts as the layout is fixed.



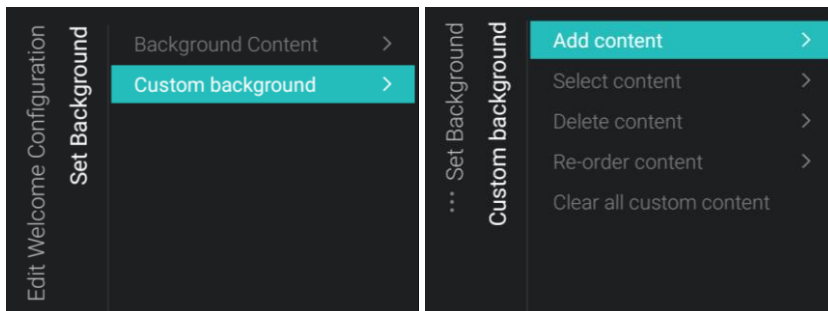
You can also change the background content of the welcome screen.

By default, there are two videos and one slideshow available. If you want to use your own content you will need to select **[Custom]**



After you have selected **[Custom]** you can change the content according your own likes. If TV can play the content, you will be able to upload it in the TV. This can be both pictures and videos.

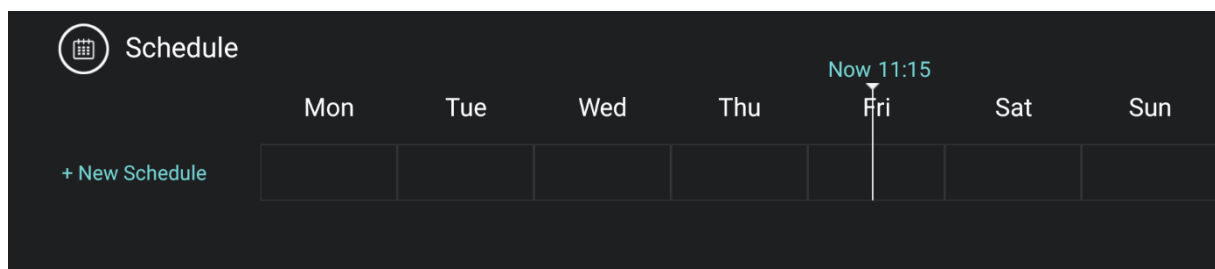
The optimal resolution for background pictures is 1920x1080, make sure you use this exact size as the picture will not be resized when uploaded in TV.



7.4 Manage Scheduler

Navigate to the **[Professional Menu]** **[Features]** **[Scheduler]** menu, this function allows to set up different schedules on same or different sources when the feature is enabled.

Navigate to the **[Professional Menu]** **[Features]** **[Scheduler]** **[Manage]** and open the menu

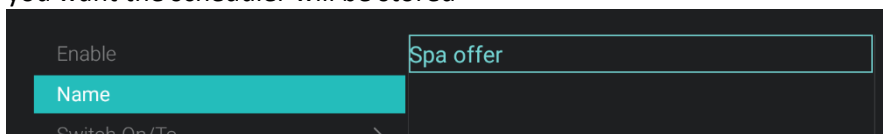


You can add a new schedule by opening **[+ New Schedule]**

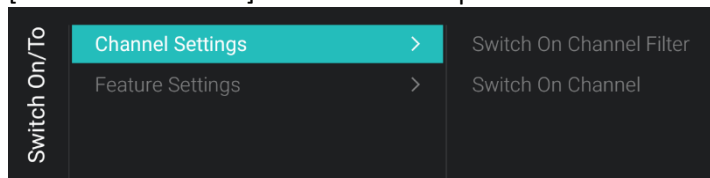


You will see below items:

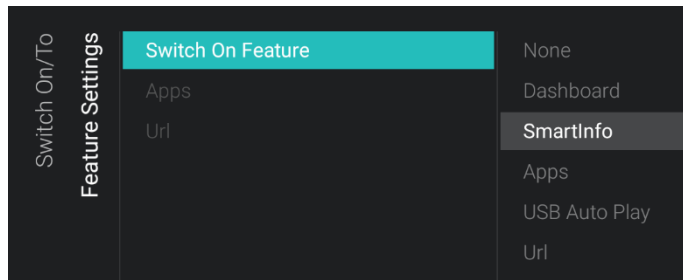
- **[Enable]**: You can disable the new Scheduler via **[No]** or enable it via **[Yes]**
- **[Name]**: You need to give a name to the new Scheduler. Once you changed the name to what you want the scheduler will be stored



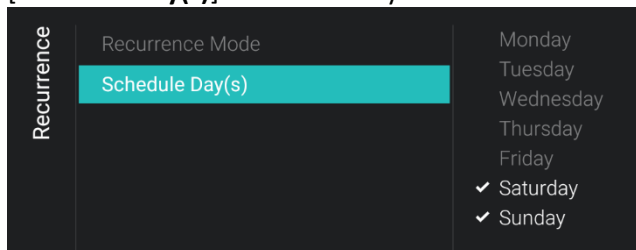
- **[Switch On/To]**: You can select different Switch On/To settings:
 - **[Channel Settings]**: Switch On/To related to channels:
 - **[Switch On Channel Filter]**: You can select between:
 - **[All Channels]**
 - **[TV Channels]**
 - **[Radio Channels]**
 - ... (list depends on your installation)
 - **[Switch On Channel]**: You can select specific Switch On channel



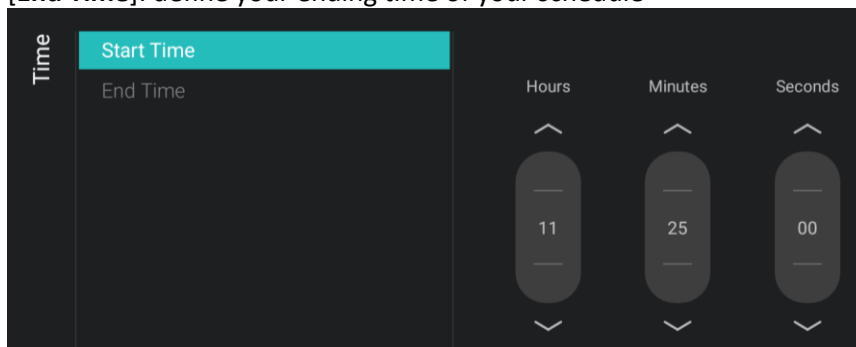
- **[Feature Settings]**: Switch On/To related to features:
 - **[Switch On Feature]**: You can select between:
 - **[None]**: no **[Switch On Feature]** will be activated
 - **[Dashboard]**: will activate the dashboard
 - **[SmartInfo]**: will activated the SmartInfo page or SmartInfo app
 - **[Apps]**: will activate an App
 - **[USB Auto Play]**: will automatically play all media files on the USB player
 - **[Url]**: will activate an URL and will activate the **[Url]** field to be able to select a specific URL
 - **[Apps]**: make your App selection out of the list of all installed Apps
Note: [Apps] will only be selectable when [Switch On Feature] is set to [Apps]
 - **[Url]**: type in the URL to what website you want to open
Note: [Url] will only be selectable when [Switch On Feature] is set to [Url]



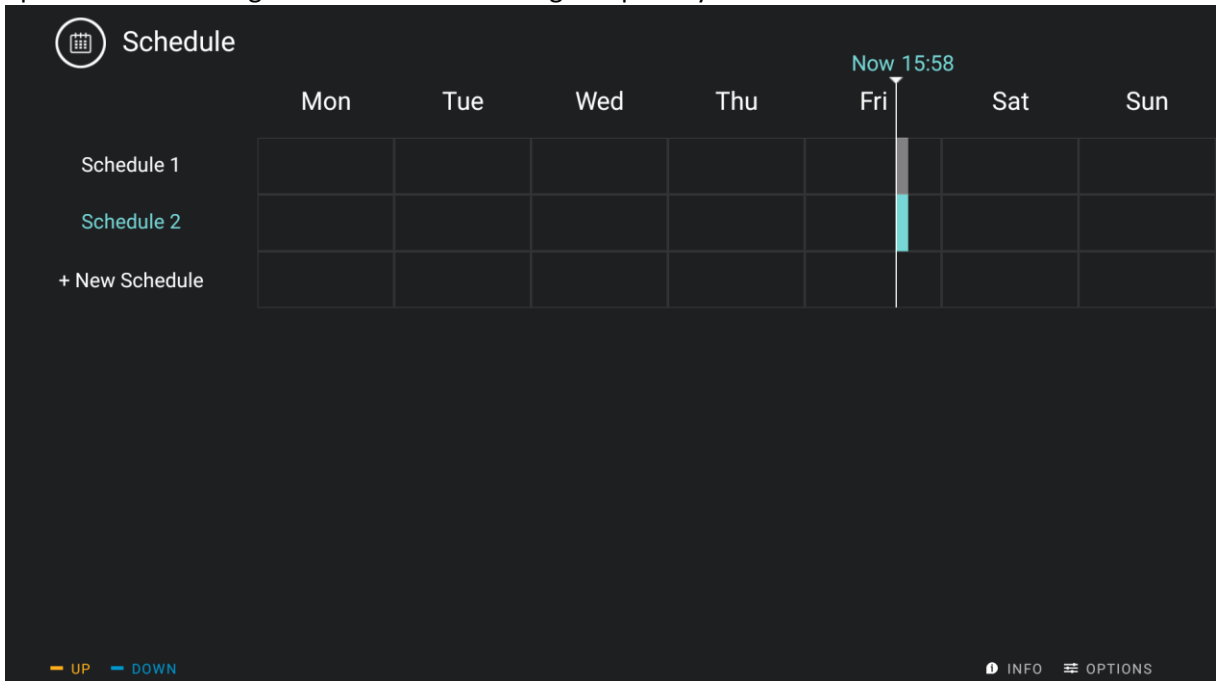
- **[Recurrence]:** You can define the recurrence settings
 - **[Recurrence Mode]:**
 - **[Once]:** will only playback the defined scheduler one time per defined time and day
 - **[Weekly]:** will playback the defined scheduler every week at a number of days (additional day selection can be made with “Schedule Days”)
 - **[Schedule Day(s)]:** select the days the schedule should be active based on your definition



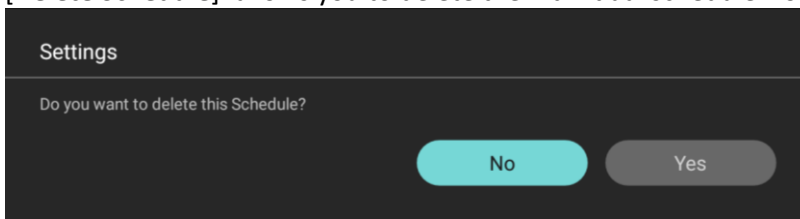
- **[Time]:** define the start / end time of the schedule
 - **[Start Time]:** define your starting time of your schedule
 - **[End Time]:** define your ending time of your schedule



- **[Priority/Order]**: shows the priority based on the list of defined schedules
You can change the order using the “**Yellow**” and “**Blue**” keys to move the selected schedule up and down. The highest schedule has the highest priority.

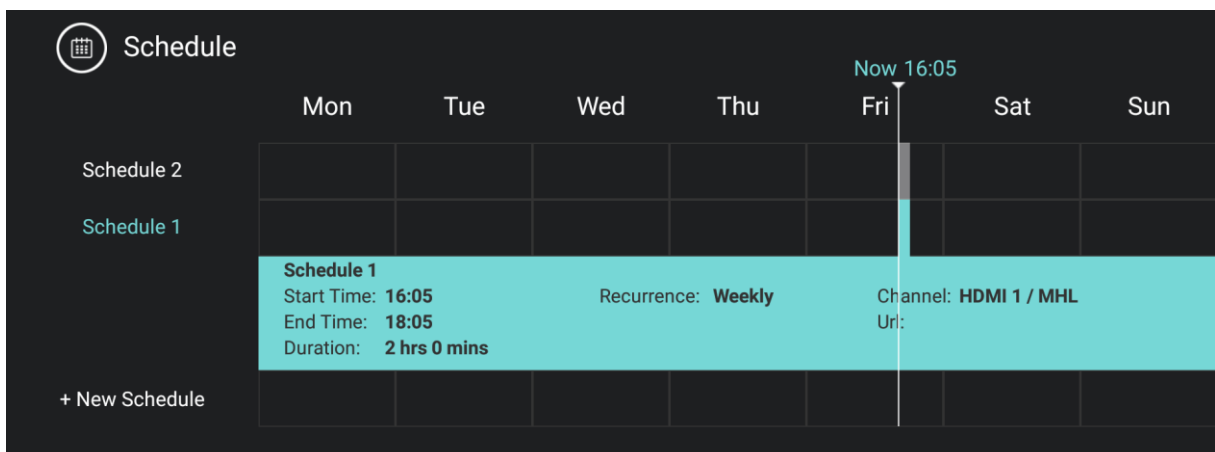


- **[Delete Schedule]**: allows you to delete the individual schedule from the scheduling list



- To get out of the wizard, press the “**back**” key on the RC

You will see an overview of the schedules you have created.
When selecting them you will see the details without opening the details.

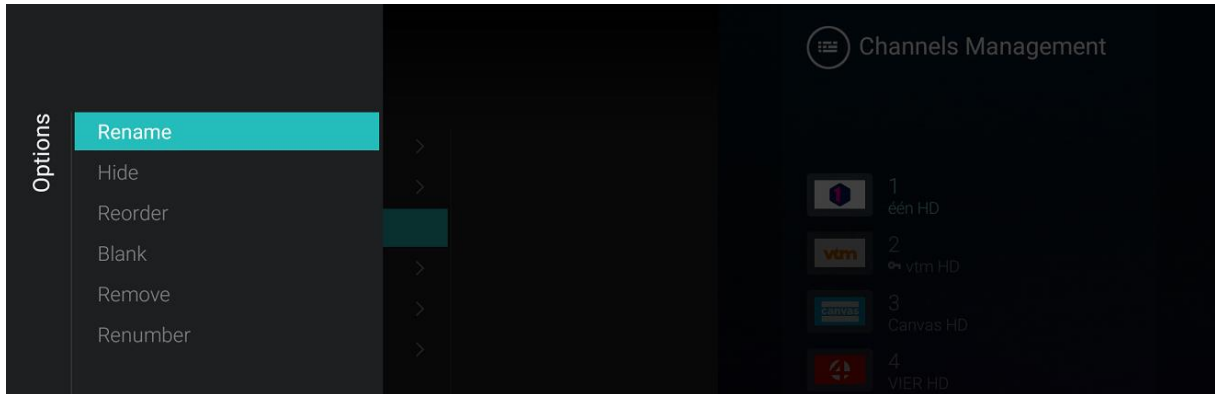


7.5 Manage Channels

You can manage your channels, this means you can rename, reorder, hide/show, blank/non-blank the channels. This can also be done using CMND.

To manage your channels, you have to go to the **[Professional Settings] [Channels] [Manage]** menu. When you open this menu, you will get an overview of the installed channels.

Press **"Options"** on your remote to rename, hide/show, reorder or blank/non-blank channels.

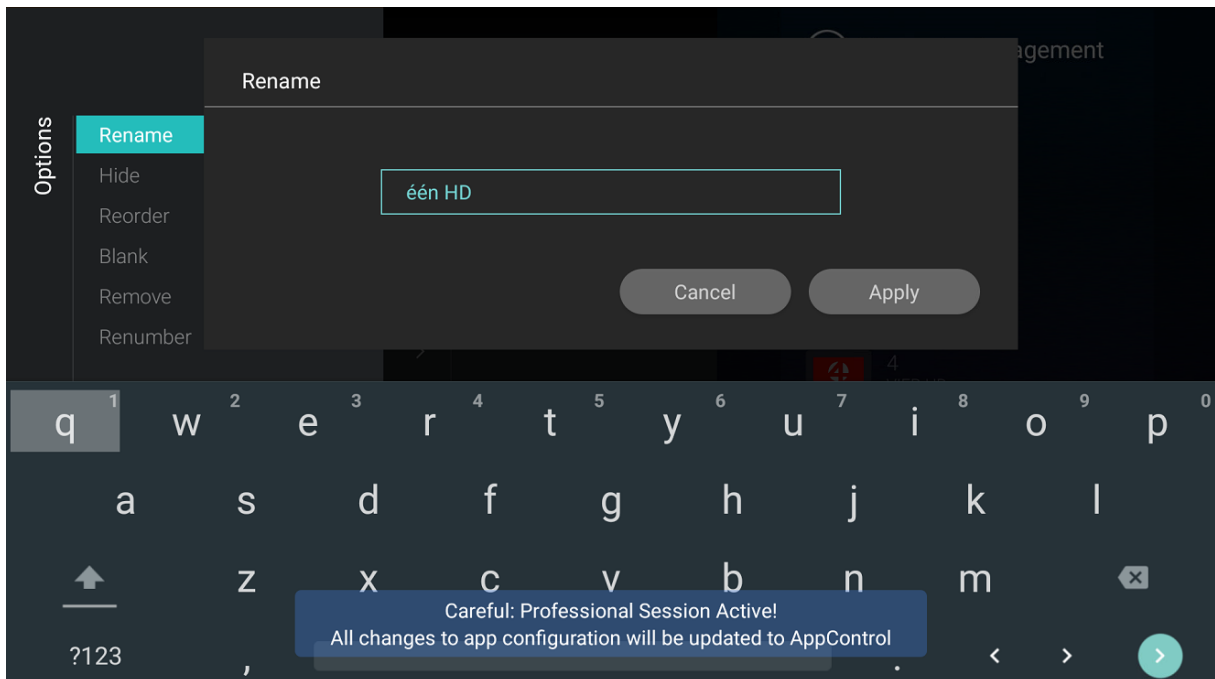


Note: If you are missing a channel logo, you can add the channel logo manually though CMND, you cannot do this through this menu. See chapter "Examples" how to do this.

7.5.1 Rename channels

Go to the manage channel list, select the channel you want to rename. Press **"Options"**, select **[Rename channel]** to rename the channel.

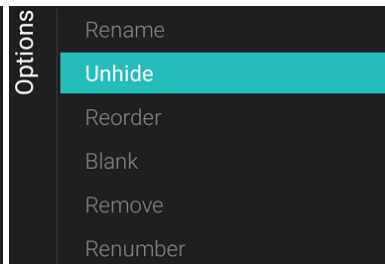
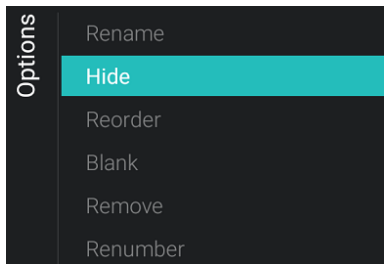
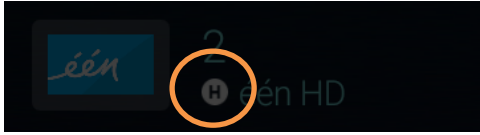
Note: This option is not always available, it depends on the broadcaster requirements



7.5.2 Hide/Show channels

By using the hide/show channels, you will hide or show a channel in the channel list. Go to the manage channel list, select the channel you want to hide or unhide. Press **"Options"**, select **[Hide]** (when channel is currently visible) or **[Unhide]** (when channel is currently hidden) to hide or show the channel.

When you hide a channel, you will see an icon next to the channel name to indicate it's hidden.



7.5.3 Reorder channels

Go to the manage channel list and press **"Options"**, select **[Reordering]**.

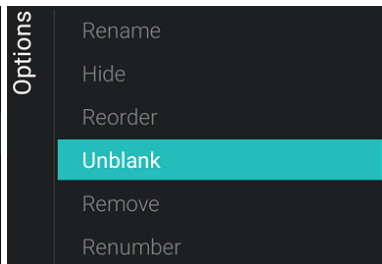
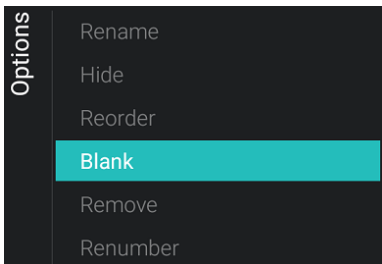
- Navigate to the channel you want to reorder
- Press **"OK"** to select the channel, you will see an indication of the selected channel
- Navigate to the preferred location where you want to store the channel
- Press **"OK"** to move the channel to your selected location
- Navigate to the other channels you want to reorder and repeat above steps
- Press **"Back"** to exit the reordering



7.5.4 Blank/Unblank channels

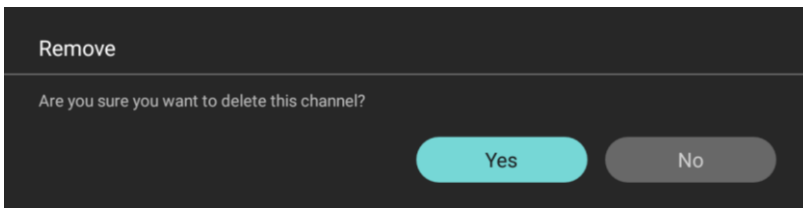
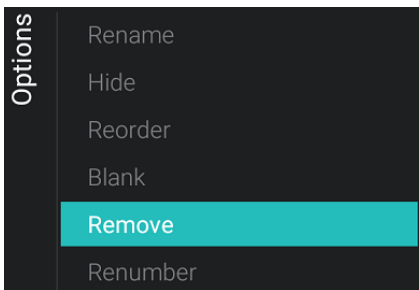
By using the blank/unblank channels you will blank the video and audio from a channel but the channel will still be shown in the channel list. Go to the manage channel list, select the channel you want to blank or unblank. Press **"Options"**, select **[Blank]** (when channel is currently unblanked) or **[Unblank]** (when channel is currently blanked) to blank or unblank the channel.

When you blank a channel, you will see an icon next to the channel name to indicate it's blanked.



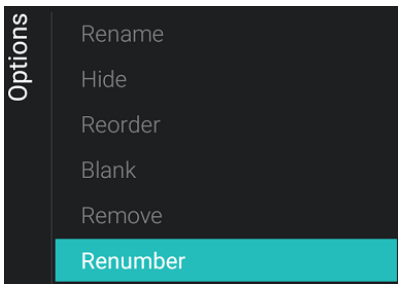
7.5.5 Remove channels

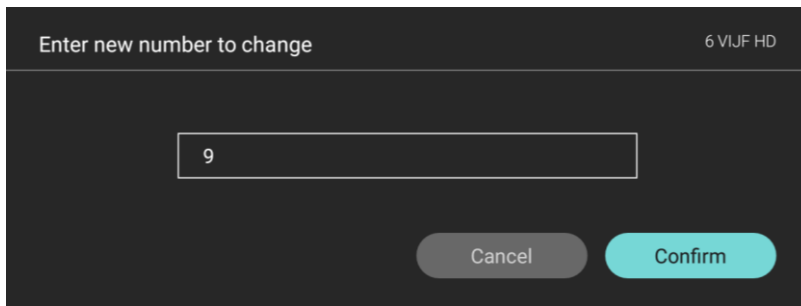
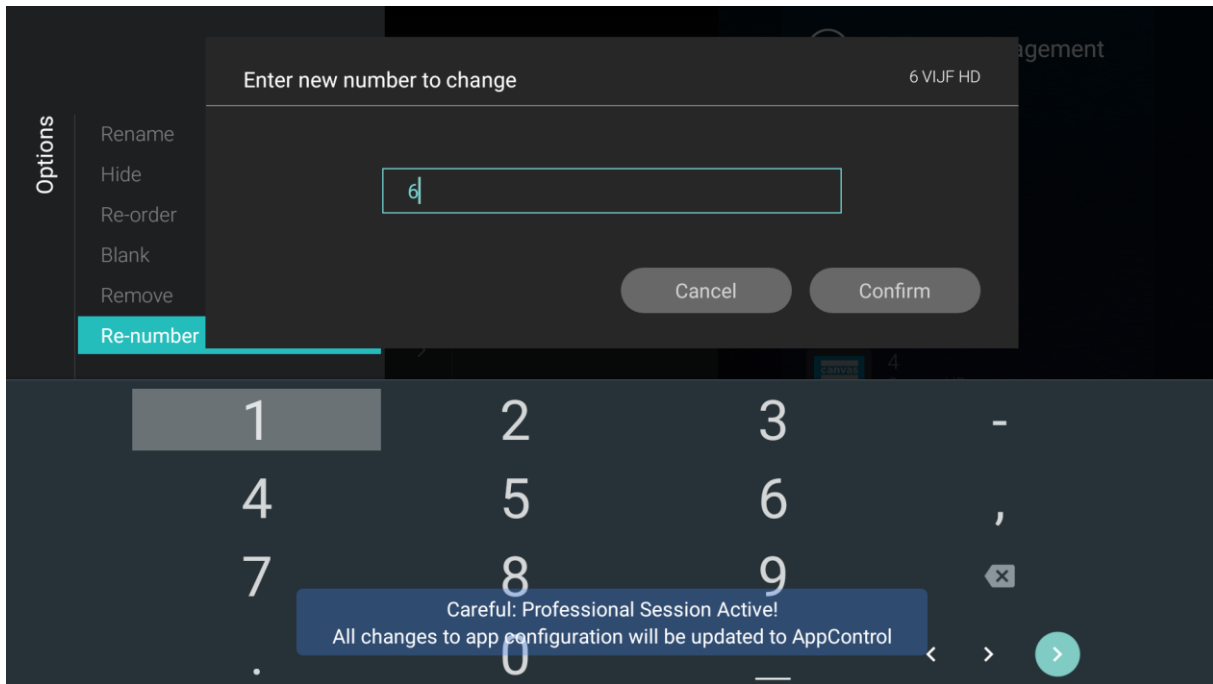
You can select a channel you want to remove and press **"Options"**, select [**Remove**]. You will get a confirmation screen where you can select [**Yes**] to remove the channel from the list.



7.5.6 Re-number channels

Even if you cannot see the channel number in your TV, you can change the channel number. You will actually reorder the channels by changing the number. You need to select the channel you want to re-number and press **"Options"**, select [**Re-number**] and you will see below screens to re-number the selected channel.





7.6 Channel installation wizard

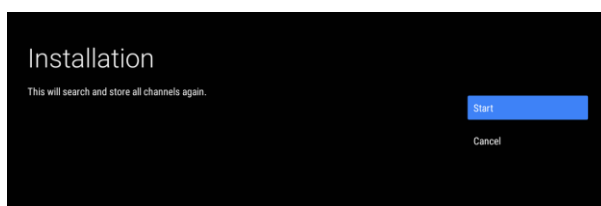
7.6.1 Install RF channels

To install channels, you have to go to the [**Professional Settings**] [**Channels**] [**RF Channel Installation**] menu. In this menu you can go to [**Search for Channels**] or do a [**Digital: Manual Installation**] or do an [**Analogue: Manual Installation**].

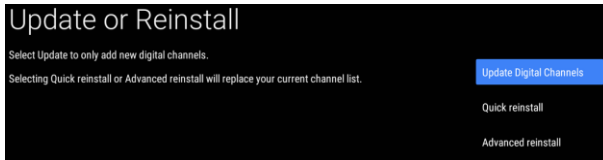
Using the [**Search for Channels**] you will be able to do a full channel installation. You will get below screens after starting the installation.

Note: Some screens will be shown depending on your settings or selections made, some screens will not be shown. Also, the content of the screens is depending on your selections

Note: Both SPTS and MPTS (Single and Multiple Program Transport Stream) are supported



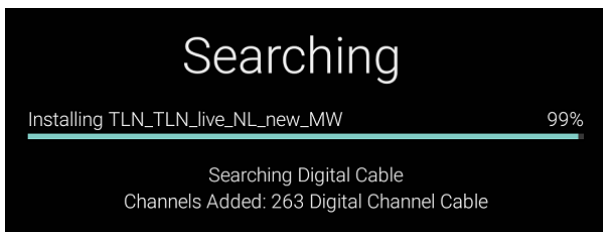
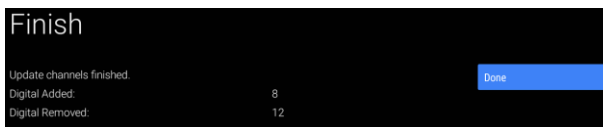
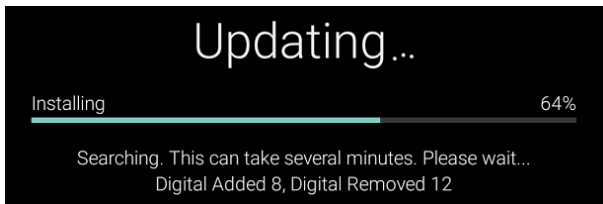
- You can [**Start**] to start the installation or [**Cancel**] to exit back to TV last status



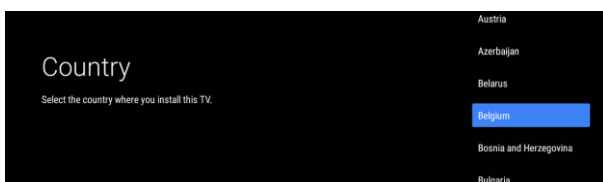
- In the next screen you can see below items:
 - **[Update Digital Channels]**: This is to only update the digital channels
 - **[Quick reinstall]**: This is to install all channels with default settings
 - **[Advanced reinstall]**: This is to do a full re-installation which takes you through each step including changing the installed country
- Note: Both reinstall options will replace the current channel list*



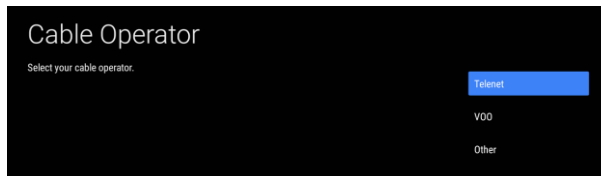
- When selecting **[Update Digital Channels]** you will need to press **[Start]** to start the update, next you will see that the TV is searching for updates. Once done it will give you an overview of how many digital channels have been added or removed. You can press **[Done]** to close and go back to TV last status



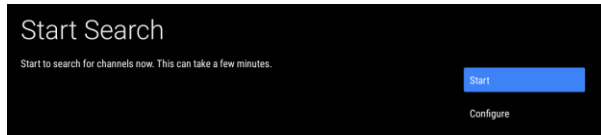
- When selection **[Quick reinstall]** you will see that the TV starts searching to find channels based on your default settings. First it will search for digital channel, after for analogue channels (if enabled in the settings). Once done it will give you an overview of how many digital channels have been added or removed. You can press **[Done]** to close and go back to TV last status



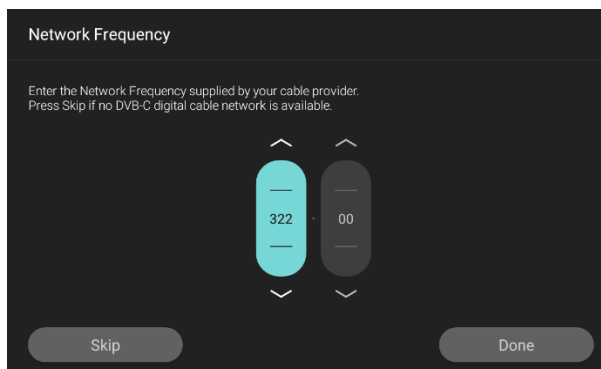
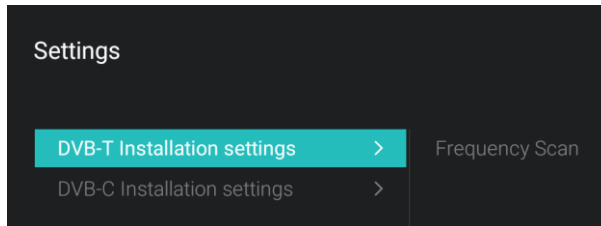
- **[Advanced reinstall]** is what you need to go through the complete wizard. This is also the default wizard you should get the first time. First you will need to make a country selection



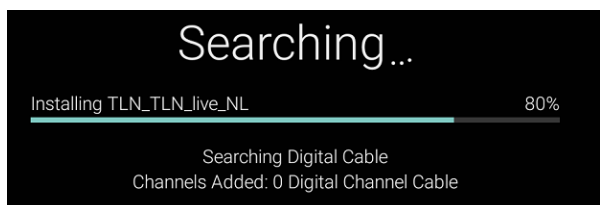
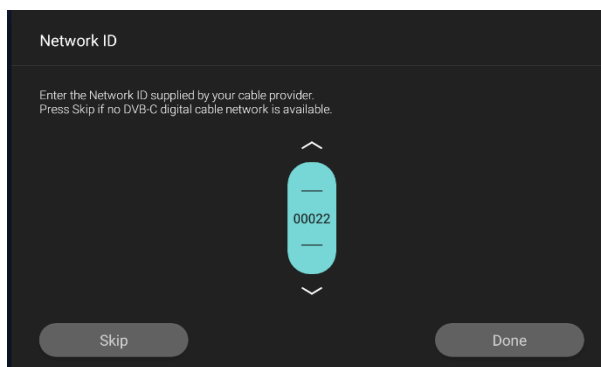
- In the next screen you need to select the Cable operator
Note: This list is country dependent



- In the next screen you can [**Start**] or [**Configure**] some more settings, these settings are also available in the professional menu. If you have changed the setting you can return back using the color keys as indicated on the screen
Note: By default [Quick Scan] is used, you need to change the setting if you want to do a full scan



- Next, you need to set the Network Frequency and the Network ID. If you [**Skip**] the installation will just start the channel installation
Note: The default values (if these screens are shown) are depending on the selected operator



- Once all settings are done the TV will start searching channels
- Once done you will see the result of the search being the amount of channels found
- Using [**Done**] the wizard you will exit the menu and TV will tune to the first installed channel



7.6.2 Install OTT channels and TIF Channels

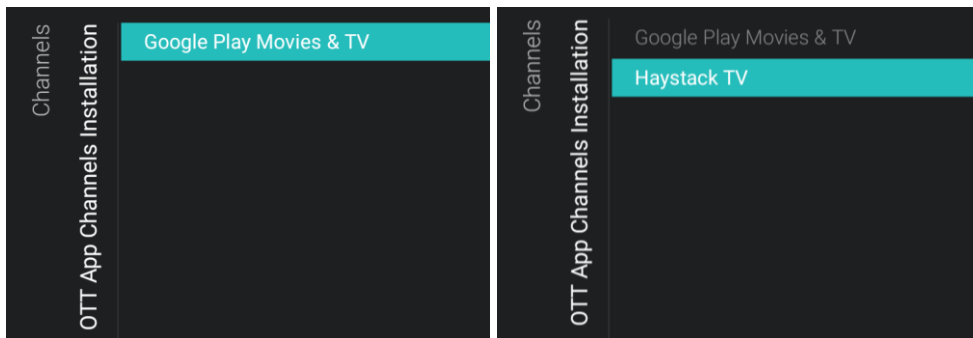
It is possible to install “Over The Top” channels, or OTT channels. In case an app offers streaming media via the TIF principle, it can be installed and added into the TV channel list.

The principle works via the TV Input framework or TIF. More information can be found at: <https://source.android.com/devices/tv/index.html>

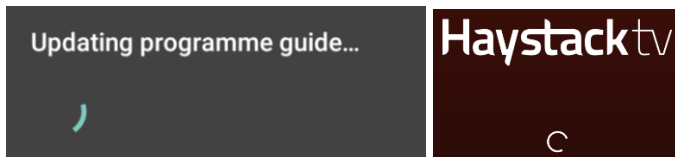
To install OTT channels, you have to go to the [**Professional Settings**] [**Channels**] [**OTT App Channels Installation**] menu and select the OTT App you want to install.

By default, you will only see [**Google Play Movies & TV**].

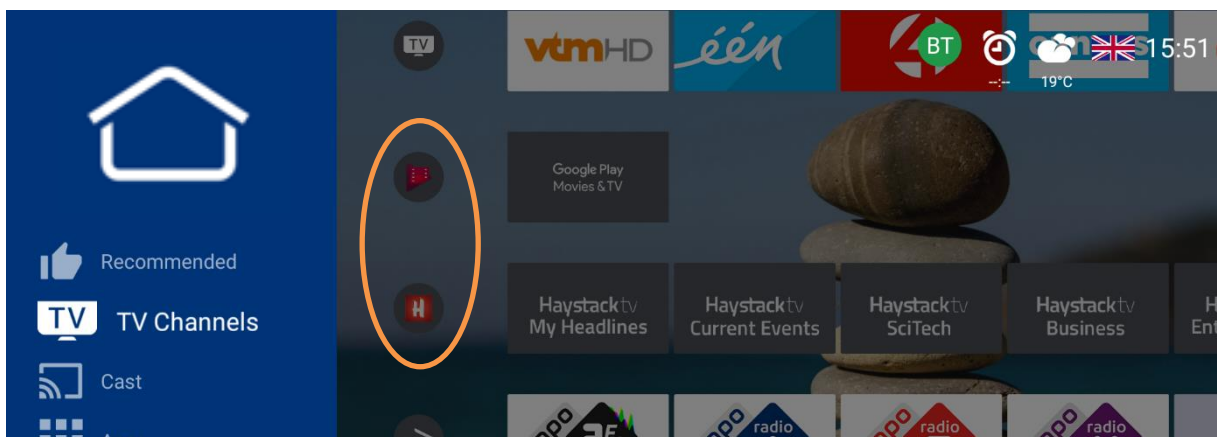
If you have installed other apps containing OTT channels they will also be listed here. (in below example you see [**Haystack TV**]).



If you press “OK” on the app it will install the OTT Channels in your channel list.



Once updated you will see the channels in the channel list.



7.6.3 Install IP channels

IP channels cannot be searched for. You need to have a list of IP streams you want to install. See chapter “IP TV installation” to know how to install IP Channels.

7.6.4 Install media channels

Media channels are local files uploaded in TV that can be installed as a media channel. See chapter “Examples” on how to install media channels.

It is not possible to add a video stream over the internet as a channel. This has to be done using a webpage or a video player app.

7.7 Network installation wizard

To connect to a network, you have to go to the [Professional Settings] [Wireless and Networks] [Connect to Network] menu.

Note: Some screens will be shown depending on your settings or selections made, some screens will not be shown



- Wired, Wireless, WPS, WPS with PIN code selection

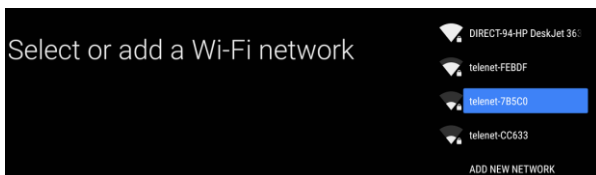
Note: If you have connected a wired network cable and you make a wireless connection, the TV will still give priority on the wired network over the wireless network



- When ‘Wired’ is selected you will go to the next screen where you will see a message that the router is contentiously scanned until a network connection is found

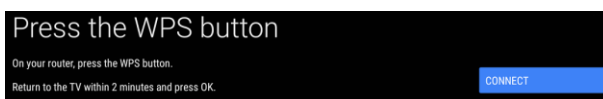
- Once a network is found you will see a screen that the wired network is connected

Note: The yellow connector is to be used for Serial Xpress and not for a wired network connection



- When ‘Wireless’ is selected you will see that the TV is scanning for wireless networks and it will show the networks that were found

- After selecting a network (and entering the password if needed) you will get message that the wireless network is connected, you can also manually add a new network



- When ‘WPS’ is selected you will see that you have to press the WPS button on the

router and press within 2 minutes on the connect button

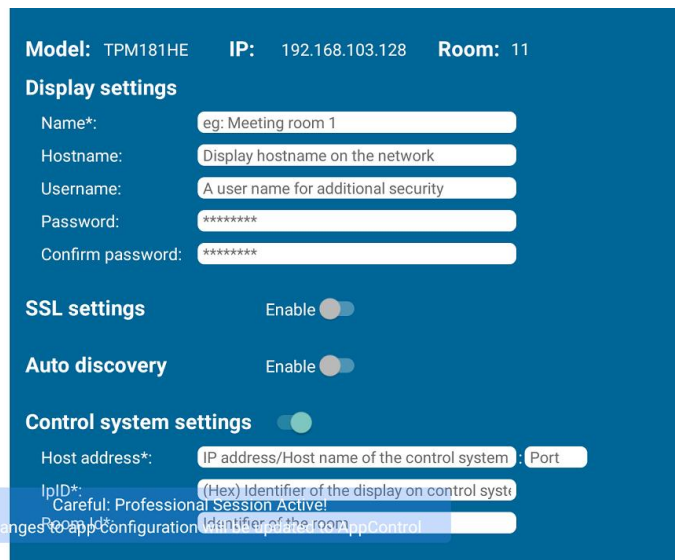
- Once you pressed you will get a 'connecting' message
- Once connected you will get a message
- When 'WPS with PIN code' is selected you will see that you have to enter an 8-digit WPS PIN in your router as indicated on the screen.
- Once connected you will get a message

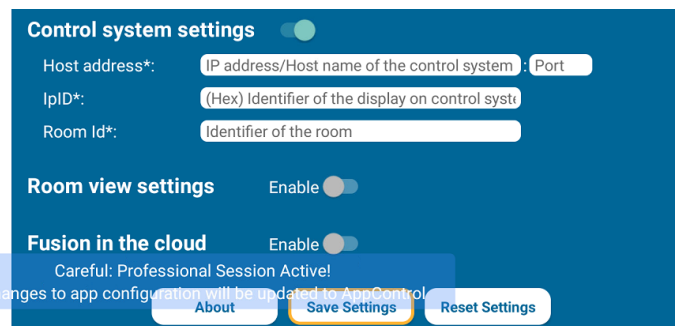


7.8 Crestron Connected wizard

In order to configure the Crestron application, you need to make sure you are connected to the internet.

In the [Professional Settings][Advanced][Select TV Control App], you need to select [Crestron Connected] and press "OK" to start the configuration wizard.



7.8.1 Display Settings

- [Name]: the name of the device as it will appear in the different Crestron (control) setups
- [Hostname]: the DNS name of the Display

- **[Username]**: used for extra security (most of the time together with TLS setup)
- **[Password]**: used for extra security (most of the time together with the TLS setup)
- **[Confirm Password]**: used for extra security (most of the time together with the TLS setup)

7.8.2 SSL settings (known as Secure connections feature)

This is a section that is enabled by an ON/OFF toggle. The default for this feature is OFF. In order for this to work, it is necessary to have at hand some software certificates (more about what software certificates are here: <https://www.computerhope.com/jargon/c/certific.htm>).

The certificates can be uploaded to the device using the USB as follows:

- copy the certificates on a USB Stick
- insert the USB Stick in any slot available on the device and follow the instructions below
 - **ROOT CA**: Pressing this button enables searching on the Android managed files (Similar with e.g. Windows Explorer). By this means the installer can select a Root Type Certificate which will be stored in-memory by the APP
 - **Certificate**: Pressing this button enables searching on the Android managed files (Similar with e.g. Windows Explorer). By this means the installer can select the actual Certificate to be used in the TLS connection and which will be stored in-memory by the APP
 - **Private Key**: Pressing this button enables searching on the Android managed files (Similar with e.g. Windows Explorer). By this means the installer can select the primary key (pem file) to be used in the TLS connection and which will be stored in-memory by the APP
 - **Strict Mode**: When it is disabled, it ignores the problems that might appear with TLS

7.8.3 Auto Discovery

This is a section that is enabled by an ON/OFF toggle. The default for this feature is OFF. Auto-discovery is a mechanism for Crestron control systems to locate other Crestron devices on the same network.

The only parameter to change is the PORT. Most used value for the port is the default: 41794

7.8.4 Control System Settings

This is a section that is enabled by an ON/OFF toggle. The default for this feature is ON. When this feature is enabled, the Fusion in the Cloud (described below) feature is disabled. This Crestron Feature addresses configuration for Virtual Control 4 and the Crestron Controller physical device.

- **[Host address + Port]**: The ipv4 address of the Crestron Virtual Controller instance. For further reference look at the Crestron Virtual Controller setup
- **[IpID]**: The unique identifier for the Crestron Virtual controller instance (use the hexadecimal value)
- **[Room ID]**: Unique identifier of the room, that is set in the Crestron Virtual Controller instance

7.8.5 Room view settings

This is a section that is enabled by an ON/OFF toggle. The default for this feature is OFF.

This is a section to configure the Room View software. For configuring a connection with RoomView the following parameters are needed:

Room IpID: The unique identifier of the display in (for) the room (use the hexadecimal value).

7.8.6 Fusion in the Cloud

This is a section that is enabled by an ON/OFF toggle. The default for this feature is OFF. When this feature is enabled, the Control System Settings (described above) feature is disabled.

The FITC feature is working with a normal API URL. The default port is 443. However, the communication with the server can be affected in combination with the SSL settings.

If SSL settings are used together with FITC and the SSL strict setting is ON, then the right certificate configuration needs to be configured in the SSL section so that the connection with the Cloud API will work.

The parameters used for realizing this connection are:

- Registration URL: This is the API URL for the device to be connected with the Fusion in the Cloud feature
- Port number: This is the port to be used with the FITC connection

7.8.7 Buttons

- [About]: When this button is pressed, a new overview is opened. This section has information about the app's purpose, Philips (PPDS), Crestron, and the 3rd party software used to craft the app
- [Save Settings]: When this button is pressed the settings are saved in the memory of the app. **IMPORTANT:** In order for the settings to take effect a Display restart (ON to OFF) is required
- [Reset Settings]: When this button is pressed the settings will be cleaned up to default

7.8.8 Device limitations

- **Audio & Image Control:** 'Image freeze' is not applicable
- **Lamp:** 'Lamp Hours' and 'Lamp Count' are not applicable
- **Image Configuration:** 'Backlight' is not applicable
- **Help and Messaging:** 'Emergency Messaging' is not applicable
- **Source inputs:** 'Preset Mode' and 'Source Naming' is not applicable
- **Network Information:** 'DHCP Settings' is not applicable
- **Temperature:** There is no temperature sensor in this device so the feedback will always be 0
- **Power Settings:** In order for the Crestron App to remain awake if the TV is off, the TV needs to be configured in **[Standby Mode] = [Fast]**
- **Welcome Screen:** When the TV has the Welcome screen APP on top, it cannot be controlled via an external controller, therefore you need to disable the Welcome Screen

7.8.9 Cloning

In the clone file, you will find the details of this wizard in the professional apps folder after cloning to USB. You can find the folder here:

"TPM181HE_CloneData\MasterCloneData\ProfessionalAppsData\com.tpvision.crestron"

In this folder, you will find the 'CrestronConnected.json' file with the details of this setup as you have configured it. You can also find certificates if available.

If you want to clone the settings to another TV you can edit this json file according to your needs before cloning into another TV.

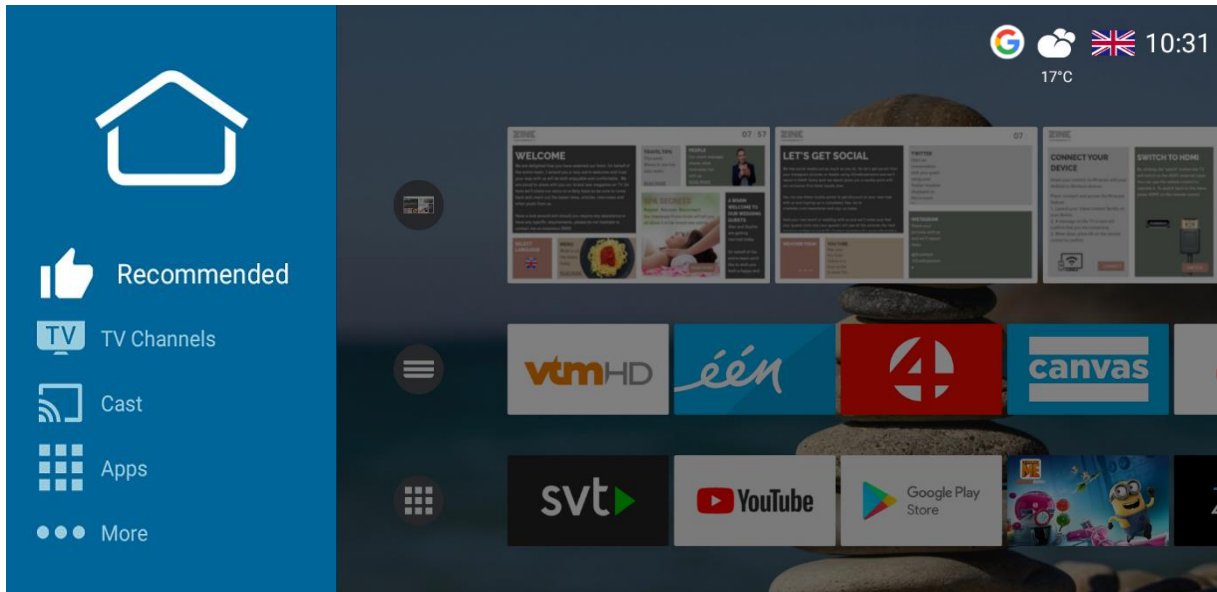
8. User Menu

The user menu is the menu the user sees when his TV is on. Depending on the settings and installation, you will see the menu as explained in next chapters.

8.1 Recommended

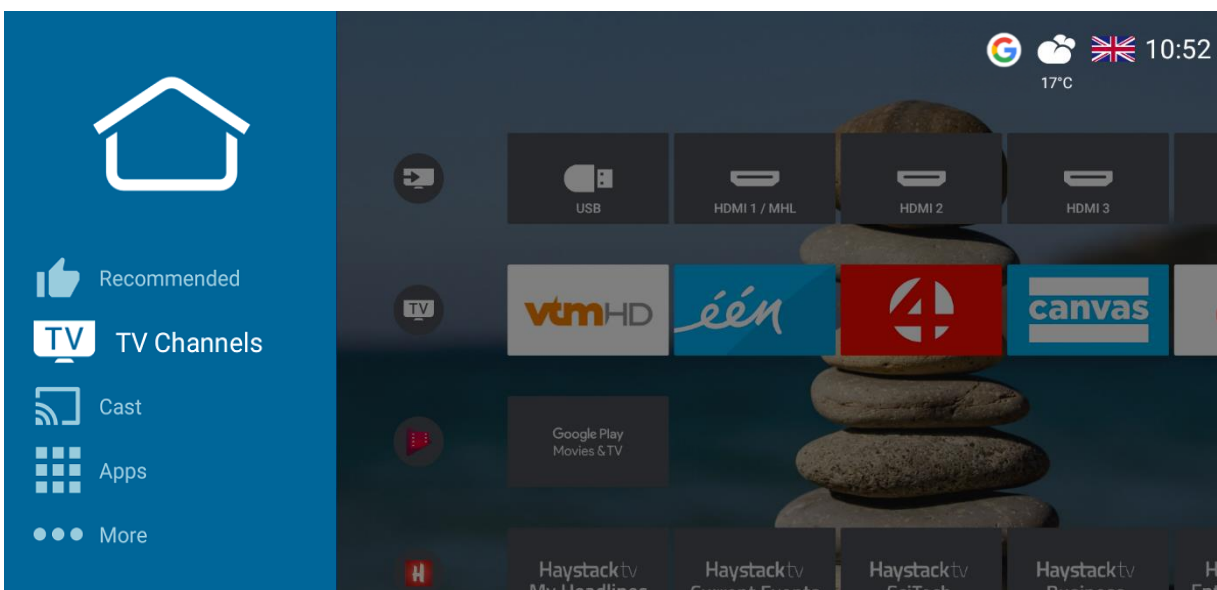
In the recommended page you will see (depending on the settings and installed content):

- Information (derived from SmartInfo)
- Channel list (the selected one from the switch on settings)
- Apps (as set in the recommended apps)



8.2 TV Channels

In the TV Channels page, you will see a list with all installed channel lists. The amount of channel lists available will depend on your settings.



8.3 Cast

In the Cast page you will have the possibility to cast from external devices to the TV. See below for more details.



8.3.1 What is Chromecast built-in?

Chromecast built-in is a platform that lets you cast your favorite entertainment from your phone, tablet or laptop right to your TV. You can connect the devices you already know to your TV. Casting is as simple as pressing a button from your favorite app. Watch your favorites on the TV while switching to another app, listen to your top tunes while taking a phone call or sending a text, all without interrupting what is playing on TV.

For more information on Chromecast please go to: <https://www.google.com/chromecast/built-in/>

8.3.2 TV implementation

There are several ways of setting up Chromecast built-in. Below you can find a short summary of the different ways Chromecast can be implemented in a professional environment.

- The easiest integration is letting the TV be in charge of the whole process from creating the P2P hotspot and enabling Chromecast playback between TV and connecting devices.
- Second is to use the setting Wi-Fi Login. This will allow you to display the SSID the user will need to connect to. However, authentication and creation of the VLAN containing the TV and the connected device will be the SI's responsibility.
- Last option is to make use of a gateway. This will replace the TV's own UI with an HTML page that contains an explanation for the user how to authenticate, connect and set up the Chromecast ecosystem, also this has to be implemented by the SI.

8.3.2.1 Chromecast: Full TV control

From Installer point of view this option is the simplest to achieve. In the [Professional Settings][Features][Sharing], [Google Cast] needs to be [On] to enable Chromecast.

This setting only enables the feature but the feature cannot function without setting up the way to authenticate or to set up the P2P environment. Therefore, the second setting that is needed is to switch **[Secure Sharing]** to **[On]**.

Once this is set the user will already be able to connect to the TV and use casting to share his apps or screen with the TV.

From a user perspective, below screen will show on TV after pressing the cast button on the remote or by opening the cast application on the dashboard.



This screen shows the instructions to be followed by the user to initiate the casting process. In case the connecting device doesn't support the 5 GHz band it will be necessary to enable compatibility mode with the slider seen on the right of the screen. This will switch the P2P AP from 5 GHz to 2,4Ghz.

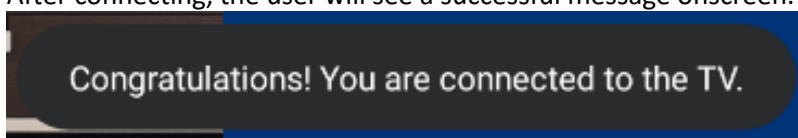
Note: This compatibility mode can only be changed if **[Professional Settings][Switch on Settings][Hotspot Default Frequency]** is set to **[5 GHz]**.

As seen on the picture the TV will ask the user to connect to the P2P access point that it created for the purpose of casting.

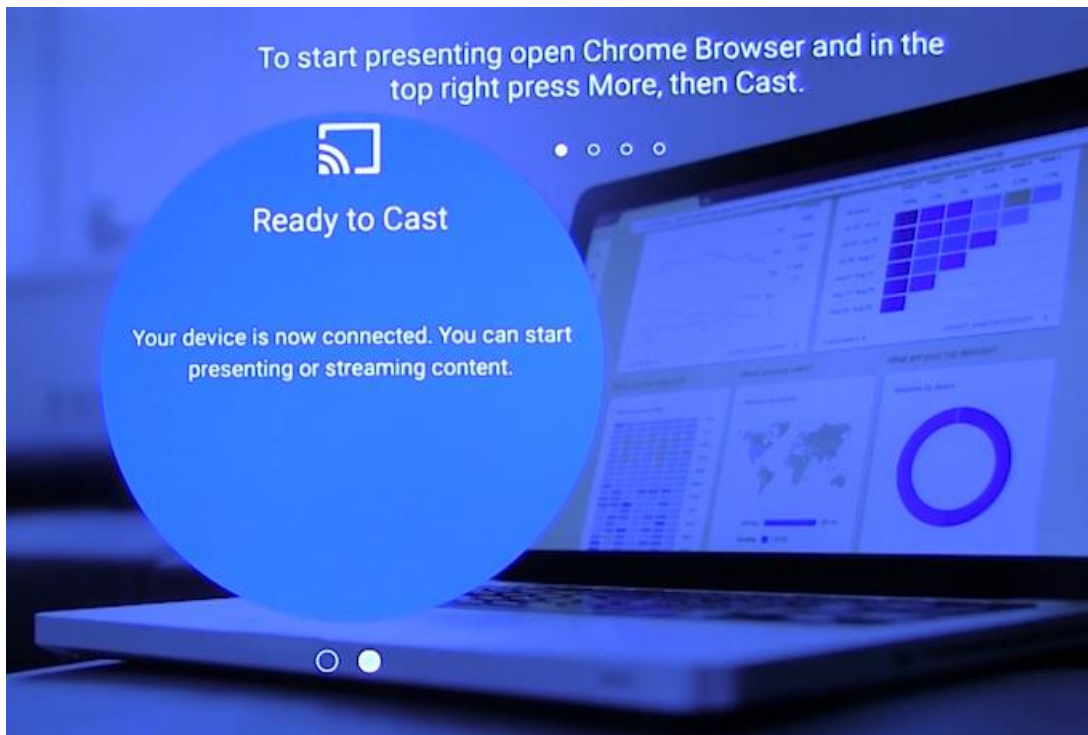
This can either be done manually by the user by changing the Wi-Fi network on his device to the mentioned SSID and give in the mentioned password.

Or this can be done automatically (on most phones) by using a QR scanner and scanning the QR code onscreen. This will give an instruction to the device to connect to the mentioned network.

After connecting, the user will see a successful message onscreen.



Followed by the instruction to open the application supporting the cast protocol and starting playback.



8.3.2.2 Chromecast: Installer backend solution

The second option to configure Chromecast is to set **[Secure Sharing]** to **[Off]**. In this case the TV will be used to display instructions and the installer will be responsible for creating the network topology fit for Chromecast.

There are two options for configuration under **[Professional Settings]** **[Features]****[Sharing]****[Secure Sharing OFF Settings]****[Google Cast]**.

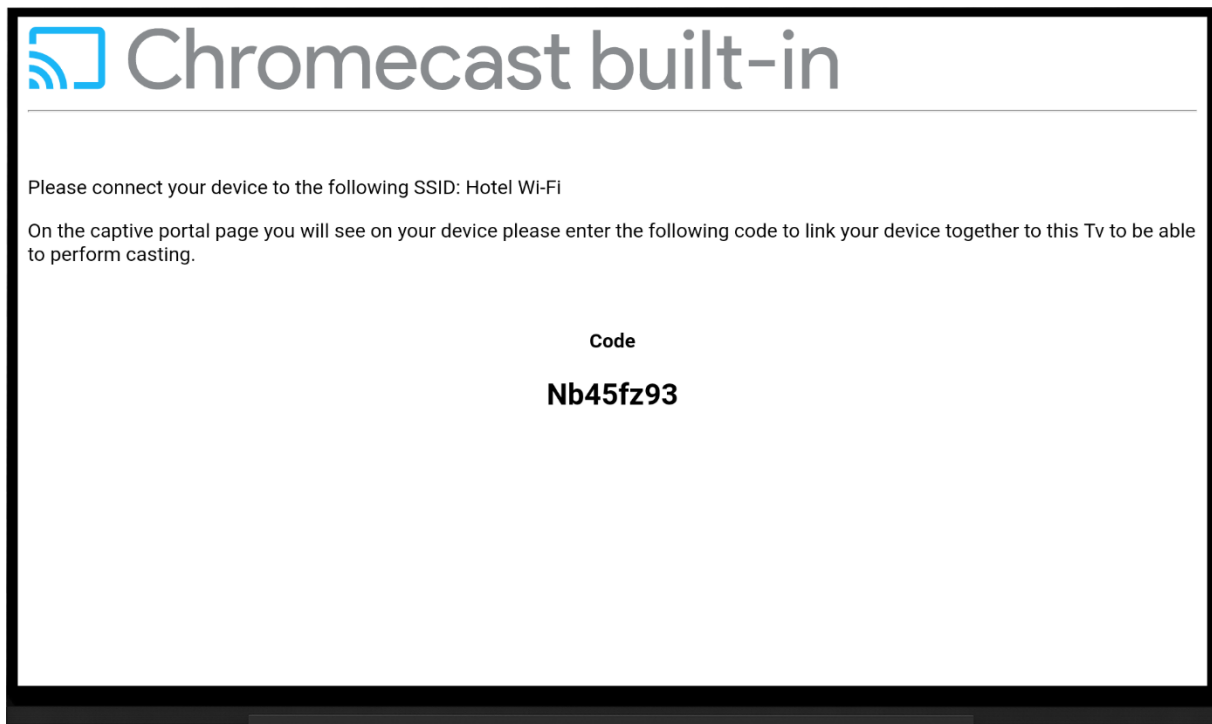
[Wi-Fi Login] is partially reusing the TV's casting interface to display the information on the SSID that the user will need to connect to.

Upon connecting to the network, the user will receive a captive portal page containing the request to enter his last name and room number. Once the user logs into this page the installer can use this information to create a VLAN or define another method to link the device from the user in the same network as the TV in his/her room.



In the above example, the SSID that the user needs to connect to is called “WLAN-PUB”. Once connected the client device will be able to see the TV and casting can be initiated.

The other option is to perform the casting completely yourself. When the [Secure Sharing OFF Settings][Google Cast] is set to [Gateway], the TV will display an HTML page upon pressing the cast button.



On this website the installer can implement his own solution on how to connect the TV and the client device together so they are able to communicate directly. The page can be used as an instruction or as the actual method of connecting client device to the TV.

These two implementations require installer interaction and will require the installer to consider privacy issues as misconfiguration of the backend can lead to devices ending up in the same network and being able to see if someone is casting or even take over the TV.

8.3.3 Dependencies

For the full Chromecast experience there are a couple of dependencies. Please check that below is configured to enjoy the full Chromecast experience.

1. Chromecast is set up by Google to only be available when it has access to the Internet. So it is required to connect your TV to the internet to be able to use Chromecast
2. It is necessary to install the latest Google Libraries for best experience. The libraries will be automatically updated when the TV goes to standby and there is an active internet connection.
3. To ensure that people have Internet available on their connecting device you will need to go to **[Professional Settings] [Features] [Sharing]** and turn **[Internet Hotspot]** to **[On]**.
Once turned **[On]** this will allow the TV to share its own Internet through the P2P connection to the connecting user device.
When **[Internet Hotspot]** is turned **[Off]** it is possible that the connecting user device doesn't have any Internet connection. Not all devices support concurrent connections to an infrastructure network and a P2P network.

8.3.4 Impact

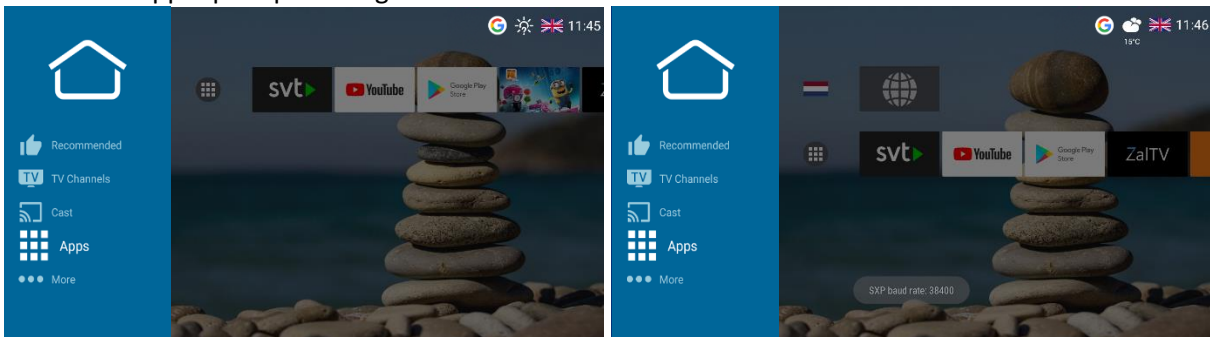
The way casting works will have an impact on the premise's infrastructure. When content is pushed to the TV from an app supporting the casting button, the network traffic generated by the request will go through the network to which the TVs are connected.

Depending on the apps installed on the TV this will generate a different amount of traffic. Short local news clips generated by an app will generate a lot less traffic than when YouTube is enabled. Keep this in mind when you are installing these sets on a location.

8.4 Apps

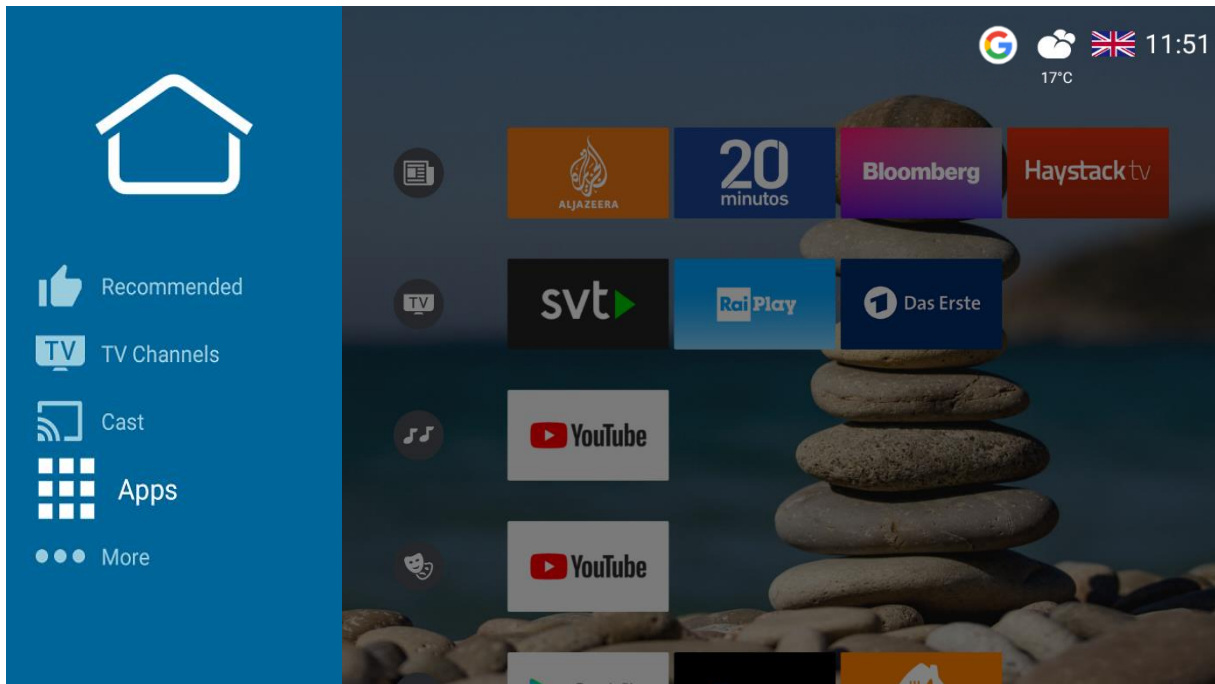
In the Apps page you will see the apps that have been installed by the SI. By default, some google apps will be installed. Depending on your settings you can show:

- All apps on one line
- All apps with country filter
- All apps split up in categories



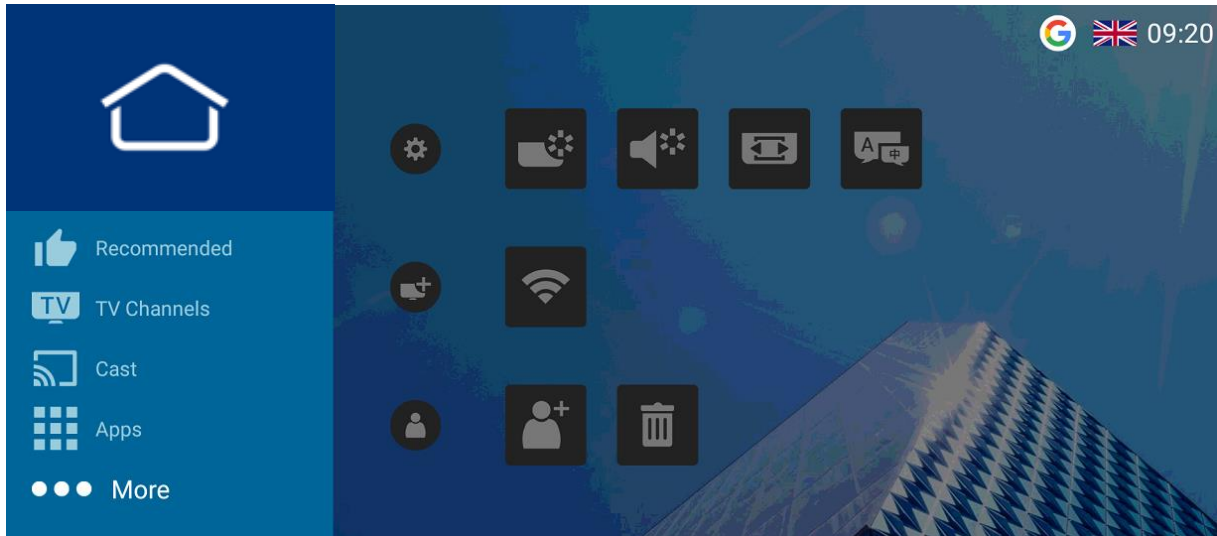


PHILIPS



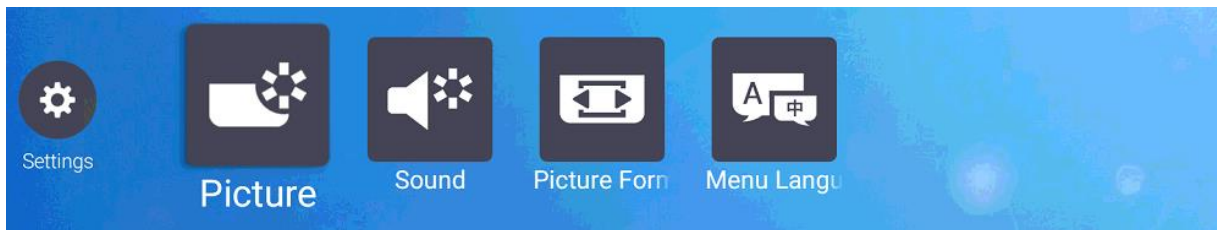
8.5 More

The amount of menu items you will see will depend on your settings.

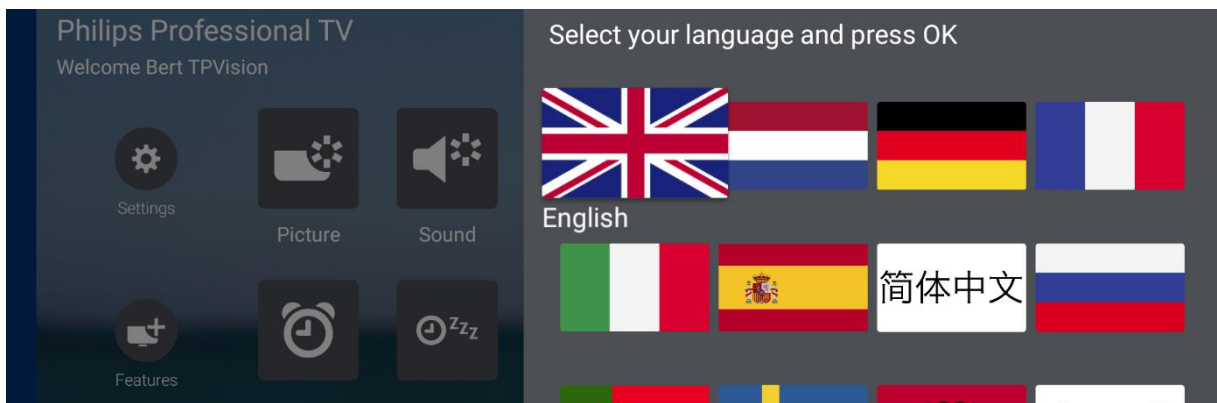
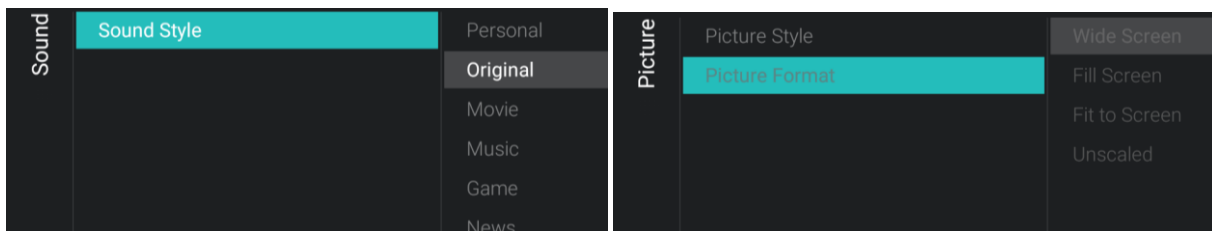


8.5.1 Settings

The first shelf is settings. Here you can change picture settings, sound settings, picture format and the menu language.



When opening one of the menu items, a detailed menu to change the setting will open.



8.5.2 Features

The second shelf is all about features.



Here you can start the internet hotspot to make a connection, check the weather forecast. The hotspot will bring up exact the same screen as the casting screen.

Some of the features can be enabled or disabled in the professional menu under **[Features]**

8.5.2.1 Internet Hotspot



8.5.2.2 Weather



8.5.2.3 Talkback

Talkback is an accessibility service that helps vision-impaired users to interact with the TV. It uses spoken word and other audible feedback to let you know what's on your screen. You can enable talkback using "OK" and disable by pressing again "OK" on the same icon.

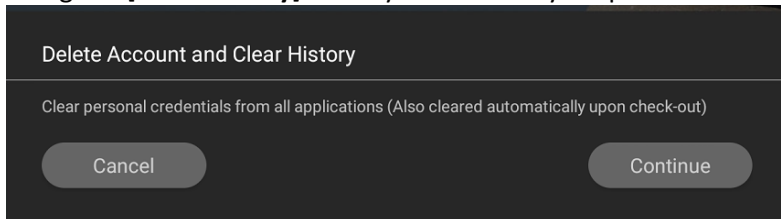
Note: There is a talkback button on some of the accessory remotes so you can (de-)activate this feature with 1 button press

8.5.3 Personal

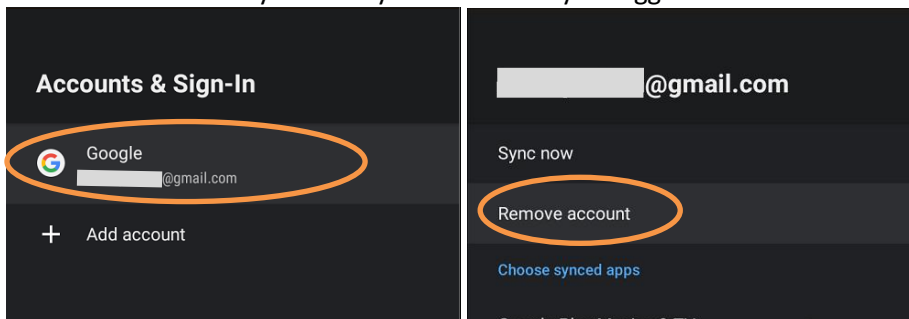
The last shelf is linked to your personal account. You can login and logout using this menu.



Using the [Clear History] menu you can clear your personal credentials from all applications.



You can also manually remove your account if you logged in before.



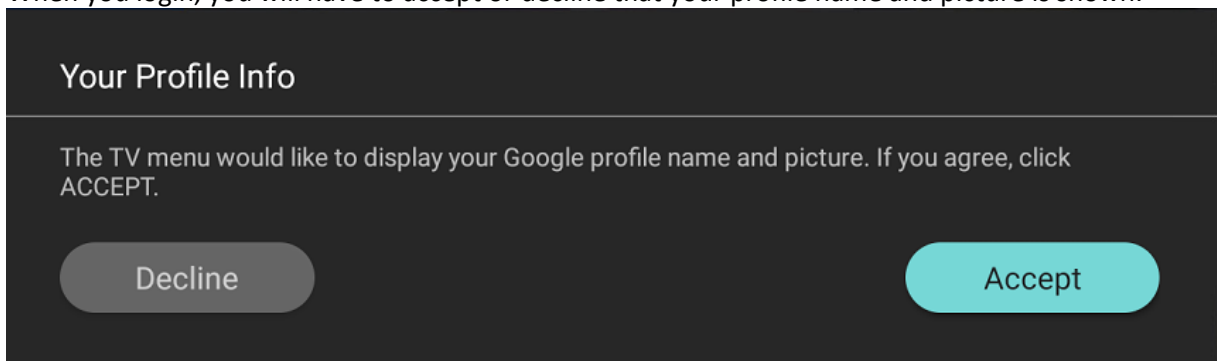
8.6 Top icons

8.6.1 Google account

The user can login to a personal google account and pick up where he/she left off at home using this button.



When you login, you will have to accept or decline that your profile name and picture is shown.



8.6.2 Weather

You can open the weather screen using this button.

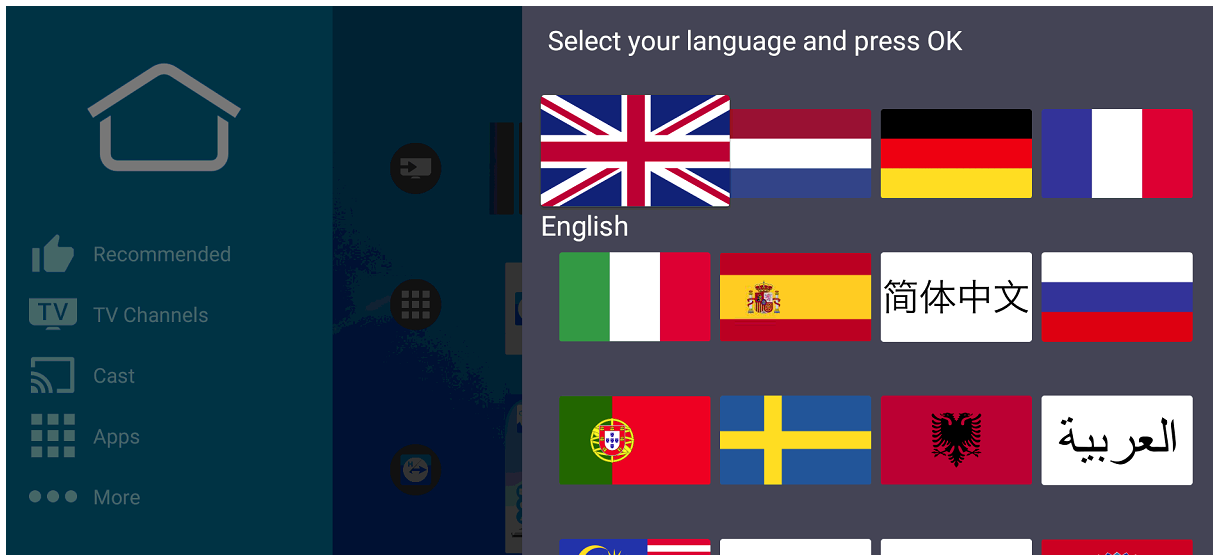


Note: The weather information show is linked to the [Professional menu][Identification Settings] [Premises Geonames ID] setting

8.6.3 Menu language

You can change the menu language using this button.





8.7 SmartInfo

The SmartInfo feature can be used as a Browser or as an Application. SmartInfo can be set as Switch On Feature. This means that the TV will start up on the SmartInfo you have created and loaded in TV. SmartInfo can also be opened using the info button on the RC.

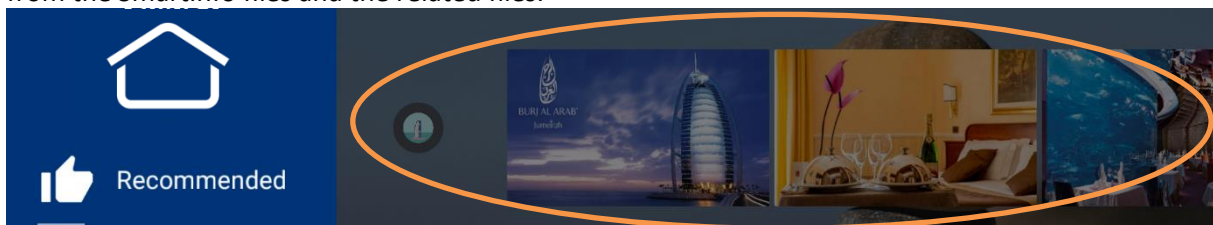
8.7.1 SmartInfo Browser

When **[Professional Settings][Features][SmartInfo][Mode]** is set to **[Browser]** the TV will run an HTML5 capable browser to render your created SmartInfo Pages.

These pages can be used to display information about the installed location. For example, you can display the restaurant's menu, give the user an overview of the installed channels on the TV, explain the hotels' services and so on.

The easiest way to create SmartInfo pages is through CMND. It can also be done with any HTML5 compliant design tool.

You can adapt the tiles using CMND or manually by editing the SmartInfoBrowserMetaData.xml file from the SmartInfo files and the related files.



To use the SmartInfo Pages, the content needs to be stored in the clone file in the following location:
 ...\\MasterCloneData\\SmartInfoBrowser\\

The SmartInfo Pages can be hosted on 3 different locations:

- **USB:**

The first option is to store your SmartInfo Pages on a USB drive connected to the TV. This scenario is more likely to be used in a central location like the reception where they need to change content on a regular basis.

Due to possible theft of the USB drives when connected in user rooms we wouldn't recommend this option for a complete installation.

- **Local:**

Second option is to store the content locally on the TV's flash memory. This is the preferred option and this can easily be changed using CMND.

Note: always check the maximum file size to keep some free space in the TV's memory after configuring the complete TV

- **Server:**

The third option would be to use a server setup. This will allow you to host one page for all the TV'S on the premise.

This option is can be of interest for the following installations:

- In case you want to add functionality based on using the JAPIT API
- Ease of maintenance, it just requires to change the server page to deploy a new version of the page towards all the devices

One thing to keep in mind in this scenario is the network. Make sure it can cope with the traffic. In case there is a loss of network for any reason whatsoever then the TV will not be able to display the SmartInfo page anymore.

8.7.2 SmartInfo Application

When **[Professional Settings][Features][SmartInfo][Mode]** is set to **[Apps]** you will be able to run your own created SmartInfo application.

The application itself is a combination of standard Android programming for Android for TV and our own proprietary API called JEDI. All details are explained in the JEDI documentation that can be obtained after signing an NDA *through a salesperson*.

You can declare your app as a SmartInfo application by using the following intent:

"com.philips.professionaldisplaysolutions.jedi.category.SMART_INFO".

Once the APK is created, you need to load it as a local app through CMND and it will get installed in the correct location. You can also do it using USB cloning.

To change the SmartInfo application on the TV it is sufficient to select it in **[Professional Settings][Features][SmartInfo][Apps]** after it got installed.

9. IP TV installation

9.1 Setup

It's strongly advised to use fast mode in combination with IPTV because the boot time otherwise will be too slow.

There are some limitations for the multicast stream that can be tuned:

- TS stream needs to be compatible with DVB standard
- Maximum bit rate 18Mbps

- Encapsulation of 7TS packets per IP frame. Preferably, each UDP packet must contain exactly 7 data chunks otherwise the packet is not parsed and it will get lost
- Multicast addresses need to be within following range: from 224.0.0.0 to 239.255.255.255
- Duplex mode on the switches can be set to full duplex but automatic is recommended, as older products do not support full-duplex mode. When the duplex mode is set to automatic, the mode is determined after negotiation between the TV and switch

9.2 Settings for installing IPTV

To set up an IPTV installation you need to go through the virgin installation as described in the chapter 'Virgin installation wizard'.

After this you need to apply following settings as described in the chapter 'Professional settings':

- **[Dashboard] [Select Dashboard] → [Philips Home]**
Philips Home is comparable with the default dashboard from previous products.
 - **[Date and Time] [Source] → [Automatic NTP/Channels]**
 - **[Advanced] [Professional Mode] → [On]** (never turn this **[OFF]**)
 - **[Advanced] [Power] [Standby Mode] → [Fast]**
Setting up this option on Green will reduce the energy consumption in standby, but will increase the startup time dramatically
 - **[Channel][Channel Settings][IGMP Version for Multicast Channels]**
By default, IGMP version 2 will be used. When the switches are configured to a different IGMP version, it is recommended to set the correct version in this menu, as this will improve the zap time.
 - **[Wireless and Networks] [Control TV Over IP] [WebServices]**
 - *Note: Below settings are to be able to control the TV's using CMND*
 - **[Server URL]:** Set the URL correct to get the TV's detected in CMND
 - **[TVDiscoveryService] → [On]**
This is the web service through which a web server will detect the presence of TVs in the IP network using the TV serial number or production code (and other data). This is achieved by the TV polling the web service server periodically. For the server to identify the TV uniquely, the TV details or parameters are being passed to the server
 - **[ProfessionalSettingsService] → [On]**
This allows changing or requesting the current professional settings parameters. It is similar to WixP's professional settings control, except that mechanism used here is web services, instead of WixP
 - **[IPUpgradeService] → [On]**
This will allow cloning and software update of the TV over IP via CMND
- Note: There is no longer need to change your setting for upgrade over IP or RF. Both will be checked automatically.*

9.3 Installing IP Channels

Open the ChannelList.xml file as described in the chapter 'ChannelList.xml in the clone file'.

For each IP channel in your network, an xml element needs to be inserted within the `<ChannelMap></ChannelMap>` brackets with the following format: (The green elements are the ones that need editing)

```
<Channel>
  <Multicast url="[cast mode]://[ipaddress]:[port]/0/0/0/VBR"></Multicast>
  <Setup presetnumber="[number]" name="[channel name]" blank="0" skip="0" FreePKG="0" PayPKG1="0" PayPKG2="0" logo=""
  TTV1="0" TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"></Setup>
```

</Channel>

The fields to be filled in are:

- [cast mode]: used mode to receive the stream, the possible modes are: "multicast", "unicast".
- [ipaddress]: A standard IPv4 address
- [port]: The port number in decimal form
For example: *url="multicast://239.232.209.122:50000/0/0/0/VBR"*
- [number]: The channel number in decimal form, make sure you don't have duplicate channel numbers
For example: *presetnumber="1"*
- [channel name]: The channel name as a string in text form
For example: *name="Een"*

As an end result you have for example:

```
<Channel>
<Multicast url="multicast://239.232.209.122:50000/0/0/0/VBR "></Multicast>
<Setup presetnumber="1" name="Een" blank="0" skip="0" FreePKG="0" PayPKG1="0" PayPKG2="0" logo="file://default/3727.png"
TTV1="0" TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"></Setup><</Setup>
</Channel>
```

After you have made your channel list, you have to clone USB to TV again.

Note: This can also be done using CMND channel editor.

In case you are missing channel logo's you can do an RF channel installation without having a cable connected. You will be able to set the country in order to maybe have more logo's available.

If you are still missing logo's after this you can manually add them as explained in the chapter "Examples".

9.4 IP over RF cable using DOCSIS

The DOCSIS Cable Modem is the perfect choice for delivering high-speed Internet access to the TV without any major renovation. By reusing the existing RF Cable infrastructure to distribute IP network signals to the TV, the installation is quick, straight-forward and does not force you to shut down a part of your operations for a longer period. In combination with our Professional TV series, you instantly upgrade the room to the highest level of digital interaction.

For more details you can contact your Philips country sales manager and ask for more details about this DOCSIS 22AV1970A/12 model.

10. Make TV visible in CMND

This chapter describes the TV settings to connect to a CMND server over IP or RF. For the CMND settings please refer to the CMND manual on <http://www.cmnd.io>. You at least need CMND 7.

10.1 Connect the TV via IP

10.1.1 Change the TV settings

The TV can connect to the CMND server via IP by setting the correct Server URL. This URL can be set on the TV by going to the Professional Settings and navigating to **[Wireless and Networks] [Control TV over IP] [Server URL]**.

By default, the Server URL will be “http://SmartInstall.org:8080/webservices.jsp”. To connect the TV to CMND this URL must be changed by replacing “SmartInstall.org” with the IP address of the CMND server. For example, when the IP address of the CMND server is “192.168.1.50”, the resulting Server URL will be “http://192.168.1.50:8080/webservices.jsp”.

Once this Server URL is correct and below recommended settings are used, the TV will appear in CMND. Recommended Professional Settings:

- **[Upgrade and Clone][Auto Upgrade Settings][Auto Upgrade and Clone] = [On]**
- **[Advanced][Professional Mode] = [On]** (never turn this **[OFF]**)
- **[Advanced][Power][Standby Mode] = [Fast]**
- **[Wireless and Networks] [Control TV Over IP]**
 - **[WebServices] [TVDiscoveryService] = [On]**
 - **[WebServices] [ProfessionalSettingsService] = [On]**
 - **[WebServices] [IPUpgradeService] = [On]**
 - **[WebServices] [SystemStatusService] = [On]**
 - **[WebListeningService] [PowerService] = [On]**
 - **[WebListeningService] [TVDiscoveryService] = [On]**
 - **[WebListeningService] [IPUpgradeService] = [On]**
 - **[WebListeningService] [Port Settings] [WLS Port] = [9079]** (default)

10.1.2 Use a DNS server

It is not mandatory to change the Server URL as mentioned above. As the default Server URL is “http://SmartInstall.org:8080/webservices.jsp” it is possible to redirect the TV to “http://192.168.1.50:8080/webservices.jsp” by resolving the “SmartInstall.org” domain to the CMND IP address via a local DNS server, when one is available.

10.1.3 URL fallback mechanism

The URL fallback mechanism is a new mechanism to find the CMND server, which is triggered when the TV is unable to receive a valid CMND response when it is using the URL of [Server URL]. When triggered, the TV will try to find the CMND server by using the first 10 and last 10 IP addresses of the TV range.

For example, when the TV has the following IP configuration:

- IPv4 address: 192.168.103.115
- Subnet mask: 255.255.255.0
- Default gateway: 192.168.103.1
- The resulting fallback URLs will be:

First 10	Last 10
http://192.168.103.1:8080/webservices.jsp	http://192.168.103.245:8080/webservices.jsp
http://192.168.103.2:8080/webservices.jsp	http://192.168.103.246:8080/webservices.jsp
http://192.168.103.3:8080/webservices.jsp	http://192.168.103.247:8080/webservices.jsp
http://192.168.103.4:8080/webservices.jsp	http://192.168.103.248:8080/webservices.jsp
http://192.168.103.5:8080/webservices.jsp	http://192.168.103.249:8080/webservices.jsp
http://192.168.103.6:8080/webservices.jsp	http://192.168.103.250:8080/webservices.jsp
http://192.168.103.7:8080/webservices.jsp	http://192.168.103.251:8080/webservices.jsp
http://192.168.103.8:8080/webservices.jsp	http://192.168.103.252:8080/webservices.jsp
http://192.168.103.9:8080/webservices.jsp	http://192.168.103.253:8080/webservices.jsp
http://192.168.103.10:8080/webservices.jsp	http://192.168.103.254:8080/webservices.jsp

Note: when the CMND server is found via the URL fallback mechanism, the [Server URL] is not modified, this can only be done via the Professional Settings menu or via clone update.

10.2 Connect the TV via RF

Via RF, the TV does not report to the CMND server similar to IP because of the one-way communication from CMND to TV. However, there is one important setting on the TV, namely the frequency on which TV will start the update scan (this needs to match with CMND server). This frequency can be set in the [Professional Settings] [Upgrade and Clone] [RF Upgrade Settings] [Frequency] and by default, it is 498MHz.

Recommended Professional Settings:

- [Upgrade and Clone] [Auto Upgrade Settings] [Auto Upgrade and Clone] = [On]
- [Advanced] [Professional Mode] = [On] (never turn this [OFF])

With above settings, the TV will check on the frequency set in the RF upgrade settings (498MHz). When a CMND stream is detected, the TV will download the data and when a CMND stream is not detected, the TV will do a frequency sweep to find the CMND stream.

Check the [Professional Settings] [Upgrade and Clone] [RF Upgrade Settings] [ScanMode] for more details when exactly the scanning is happening.

11. Custom Dashboard

A custom dashboard or CDB is a method to replace the default UI of the TV with a custom UI. With a custom dashboard, it is possible to create a look and feel that matches the theme of the hotel/hospital/... or to add extra features like video on demand. The custom dashboard can be a webpage or an Android app.

11.1 Browser based custom dashboard

A browser based custom dashboard, is a webpage that is hosted on a server or stored locally on the TV. To develop such a webpage, the same skill set is required as with any other website development. The TV can be controlled from the webpage, to tune to a channel for example, via JSON commands. These JSON commands are described in the JAPIT documentation. All details are explained in the CDB documentation that can be obtained after signing an NDA through a salesperson. For more information, please contact us through the ticketing system.

11.2 App based custom dashboard

An app based custom dashboard, is an Android app installed on the TV. To develop such an app, the same skill set is required as with any other Android app development. The TV can be controlled from the Android app via the Java Enterprise Display Interface or JEDI. All details are explained in the JEDI documentation that can be obtained after signing an NDA through a salesperson. For more information, please contact us through the ticketing system.

12. Examples

12.1 Custom channel logos

12.1.1 How to extract the channel logos







You can extract the channel logos from the TV in following way:

- Insert an empty USB stick into the TV and enter the Professional Settings
- In the Professional Settings, navigate to **[Upgrade and Clone][Clone TV to USB][Clone All]** and start the clone out

Note: As all the apps and channel logos will be copied to the USB stick, the clone out will take more time to complete

- When the clone out has finished, close the dialog and extract the USB stick
- Open the clone folder on the USB stick and go to the ChannelList folder:
`\TPM181HE_CloneData\MasterCloneData\ChannelList\`

The ChannelList folder will contain the following folders and files:

 ChannelLogos	Contains the channel logos
 ThemeIcons	Contains the ThemeTV logos
 ChannelList.xml	Contains all the details of each channel and must be modified when adding a custom channel logo or theme icon
 ChannelList_History.xml	Contains the time/date and software version when the channels were installed or updated.
 ChannelList_Identifier.txt	Single line of text to identify the channel list
 channellist.db	Database file, which is required for TIF channels

12.1.2 How to add custom channel logos

The easiest way to change a custom logo in the channel list is by using CMND. You can find the details in the CMND manual. Below you can find how to do this manually.



Channel logo requirement:

- Resolution: 320x180
- File type: PNG or JPG

You can add a custom channel logo in TV in the following way:

- Extract the clone from the TV to a USB stick
- When the clone out has finished, close the dialog, extract the USB stick
- Copy the custom channel logo PNG into the clone. In this example the “Philips.png” file was copied to
`“\TPM181HE_CloneData\MasterCloneData\ChannelList\ChannelLogos\custom\Philips.png”`
- Open the ChannelList.xml in a text editor (like Notepad++) and modify the ChannelList.xml to link the preset to the custom channel logo, by changing the logo attribute and make sure the

correct path is used. See below example, preset 1 contains a default channel logo and preset 2 contains a custom channel logo, notice the different paths

Preset	Channel name	Logo path	Logo
1	één HD	logo="file://default/3727.png"	
2	Philips	logo="file://custom/Philips.png"	

Below screenshot is a typical example how the ChannelList.xml will look like.

```
<Channel>
  <Broadcast medium="dvbc" frequency="298000" system="WestEurope" serviceID="1103" ONID="1" TSID="11" PLP="0"
modulation="auto" symbolrate="6875000" bandwidth="Auto" servicetype="TV" />
  <Setup presetnumber="2" name="één HD" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0"
logo="file://default/3917.png" TTV1="0" TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
</Channel>
<Channel>
  <Broadcast medium="dvbc" frequency="298000" system="WestEurope" serviceID="1103" ONID="1" TSID="11" PLP="0"
modulation="auto" symbolrate="6875000" bandwidth="Auto" servicetype="TV" />
  <Setup presetnumber="2" name="één HD" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0"
logo="file://custom/Philips.png" TTV1="0" TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"
/>
</Channel>
```

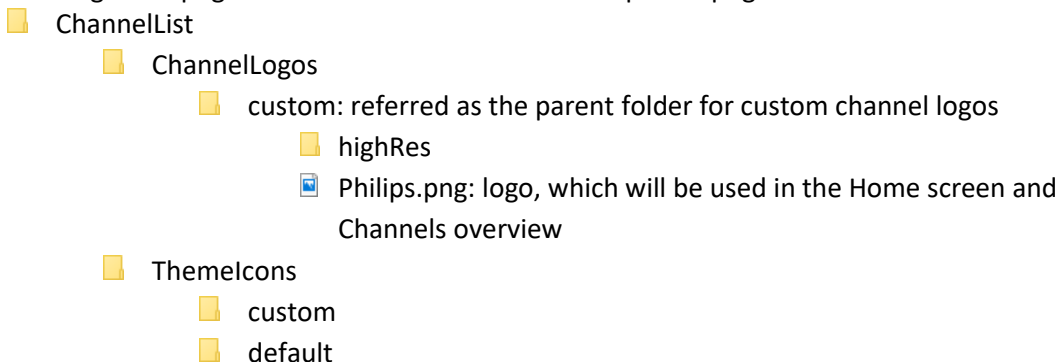
- Make sure all changes are saved and Clone in the new clone file in the TV
- When the clone in has finished, close the dialog, extract the USB stick and view the new channel logos.

12.1.3 Proper scaled channel logo in the Channels overview

The Home screen and Channels overview use the same channel logo file but for the Channels overview, the logo is downscaled to 136x104. This automatic down scaling can lead to improper logos in the Channels overview, which can be avoid by adding a custom downscaled channel logo.

To do this the channel logo file must be in both the parent and “highRes” folder of the “ChannelLogos” folder. See below example:

- The “Philips.png” file is not available in the “highRes” folder of the custom channel logos folder and thus the TV will down scale the “Philips.png” file found in the parent folder for the Channels overview
- If the png file is available in both the parent and “highRes” folders and thus the TV will use the “highRes” png file for the Home screen and the parent png file for the Channels overview



12.2 ChannelList.xml in the clone file

After you have set your settings correctly you can clone TV to USB to change the channel list. The channellist can be edited via CMND or you can do this using an xml editor tool.

The folder name used in the root of the USB device containing the clone data:

TPM181HE_CloneData/MasterCloneData/

Go to the ChannelList.xml file: .../MasterCloneData/ChannelList/ChannelList.xml to edit the channel list manually.

In below example, the file after a virgin installation:

```
<?xml version='1.0' encoding='UTF-8' standalone='yes' ?>
<TvContents>
  <SchemaVersion MajorVerNo="2" MinorVerNo="0" />
  <ChannelMap>
    <Channel>
      <Source type="HDMI1" />
      <Setup presetnumber="1" name="HDMI 1 / MHL" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" logo="" TTV1="0"
TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
    </Channel>
    <Channel>
      <Source type="HDMI2" />
      <Setup presetnumber="2" name="HDMI 2" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" logo="" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
    </Channel>
    <Channel>
      <Source type="HDMI3" />
      <Setup presetnumber="3" name="HDMI 3" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" logo="" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
    </Channel>
    <Channel>
      <Source type="VGA" />
      <Setup presetnumber="4" name="VGA" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" logo="" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
    </Channel>
  </ChannelMap>
  <ApplicationMap>
    <Application>
      <App Type="Native" AppName="SmartTV" />
      <Setup name="Enjoy Apps" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
    <Application>
      <App Type="Native" AppName="DirectShare" />
      <Setup name="Media Server" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
    <Application>
      <App Type="Native" AppName="Googlecast" />
      <Setup name="Cast" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
    <Application>
      <App Type="Native" AppName="Internet" />
      <Setup name="InternetApp" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
    <Application>
      <App Type="Native" AppName="InternetHotSpot" />
      <Setup name="InternetHotSpot" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
    <Application>
      <App Type="Native" AppName="MediaBrowser" />
      <Setup name="USB Devices" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
    <Application>
      <App Type="Native" AppName="YouTube" />
      <Setup name="YouTube" FreePKG="1" PayPKG1="0" PayPKG2="0" />
    </Application>
  </ApplicationMap>
  <ThemeTV />
</TvContents>
```

12.2.1 Add an RF channel in the ChannelList.xml

Open the ChannelList.xml file as described in the chapter 'ChannelList.xml in the clone file'. For each RF channel you want to add you need to add an xml element within the <Channel></Channel> bracket.

Some examples:

```
<Channel>
  <Broadcast medium="analog" frequency="203250" system="west" serviceID="41795" ONID="65535" TSID="17056"
modulation="auto" symbolrate="0" bandwidth="Auto" servicetype="TV" />
  <Setup presetnumber="10" name="EEN" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0" TTV2="0" TTV3="0"
TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
</Channel>
<Channel>
  <Broadcast medium="dvbc" frequency="825937" system="west" serviceID="1" ONID="1" TSID="6" modulation="auto"
symbolrate="6876000" bandwidth="Auto" servicetype="TV" />
  <Setup presetnumber="11" name="één HD" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
</Channel>
<Channel>
  <Broadcast medium="dvbc" frequency="801937" system="west" serviceID="927" ONID="1" TSID="3" modulation="auto"
symbolrate="6877000" bandwidth="Auto" servicetype="Radio" />
  <Setup presetnumber="12" name="Rock Alternative" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0"
TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0" />
</Channel>
<Channel>
  <Broadcast medium="dvbt" frequency="490000" system="west" serviceID="1537" ONID="8442" TSID="6" modulation="auto"
symbolrate="0" bandwidth="8MHz" servicetype="TV"></Broadcast>
  <Setup presetnumber="13" name="TF1" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0" TTV2="0" TTV3="0"
TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"></Setup>
</Channel>
```

12.2.2 Add a media channel in the ChannelList.xml

Open the ChannelList.xml file as described in the chapter 'ChannelList.xml in the clone file'. For each media channel you want to add your need to add an xml element within the <Channel></Channel> bracket.

Make sure you place the media files you want to use in the correct folder of your clone file: TPM181HE_CloneData/MasterCloneData/MediaChannels/

Or in a subfolder: TPM181HE_CloneData/MasterCloneData/MediaChannels/subfolder/

You need to respect the available space in the TV, depending on your set type. You can check this in the professional menu under [Android Settings] [Storage & reset].

You can check if the codec of the file is supported via the USB media browser. If you are able to play the files you want to use as media channel then you should be able to use them as media channel.

Some examples:

```
<Channel>
  <Media url="file://video.mpg"/>
  <Setup presetnumber="21" name="video1" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"/>
</Channel>
<Channel>
  <Media url="file://video.mp4"/>
  <Setup presetnumber="22" name="video2" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"/>
</Channel>
<Channel>
  <Media url="file://subfolder/picture.jpg"/>
  <Setup presetnumber="23" name="picture" blank="0" skip="0" FreePKG="1" PayPKG1="0" PayPKG2="0" TTV1="0" TTV2="0"
TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"/>
</Channel>
```

Note: When you use “./MediaChannels/file.ext” as url, this will not be detected. This old syntax is no longer supported.

12.2.3 Add an IP channel in the ChannelList.xml

Open the ChannelList.xml file as described in the chapter ‘ChannelList.xml in the clone file’. For each IP channel you want to add you need to add an xml element within the <Channel></Channel> bracket.

```
<Channel>  
<Multicast url="multicast://239.232.209.112:50000/0/0/0/VBR "></Multicast>  
<Setup presetnumber="1" name="Een" blank="0" skip="0" FreePKG="0" PayPKG1="0" PayPKG2="0" logo="file://default/3727.png"  
TTV1="0" TTV2="0" TTV3="0" TTV4="0" TTV5="0" TTV6="0" TTV7="0" TTV8="0" TTV9="0" TTV10="0"></Setup>  
</Channel>
```

12.3 RoomSpecificSettings in the clone file

RoomSpecificSettings are used to automatically set the RoomID and Multi RC setting based on TV serialnumber. This file needs to be created, but after that the same clone can be used on the same location.

The folder name used in the root of the USB device containing the clone data:

TPM181HE_CloneData/MasterCloneData/

Go to the room specific via .../MasterCloneData/RoomSpecificSettings/RoomSpecificSettings.xml

In below example, you see 3 TV's in the list, all with a different settings linked to the serial number. Note that you see 2 times the same room number but with a different MultiRemoteControl code.

```
<?xml version='1.0' encoding='UTF-8' ?>
<RoomSpecificSettings>
  <SchemaVersion MajorVerNo="1" MinorVerNo="0" />
  <TV>
    <SerialNumber>FZ1A1925000001</SerialNumber>
    <item>
      <Name>Professional Settings.Advanced.Identification Settings.RoomID</Name>
      <Value>00100</Value>
    </item>
    <item>
      <Name>Professional Settings. Input Control.Multi Remote Control</Name>
      <Value>off</Value>
    </item>
  </TV>
  <TV>
    <SerialNumber>FZ1A1925000002</SerialNumber>
    <item>
      <Name>Professional Settings.Advanced.Identification Settings.RoomID</Name>
      <Value>00101</Value>
    </item>
    <item>
      <Name>Professional Settings.Input Control.Multi Remote Control</Name>
      <Value>0</Value>
    </item>
  </TV>
  <TV>
    <SerialNumber>FZ1A1925000003</SerialNumber>
    <item>
      <Name>Professional Settings.Advanced.Identification Settings.RoomID</Name>
      <Value>00101</Value>
    </item>
    <item>
      <Name>Professional Settings.Input Control.Multi Remote Control</Name>
      <Value>1</Value>
    </item>
  </TV>
</RoomSpecificSettings>
```

12.4 LocalCustomDashboard in the clone file

After you have set your settings correctly you can clone TV to USB to add your local custom dashboard.

The folder name used in the root of the USB device containing the clone data:

TPM181HE_CloneData/MasterCloneData/

Go to the local custom dashboard via .../MasterCloneData/LocalCustomDashboard/

In the [**Professional Settings**], when [**Dashboard**][**Select Dashboard**] is set to [**Custom Dashboard (Browser Based)**] you can set [**Source**] to [**Local**]. In this case the TV shall load the custom dashboard from the flash memory if available.

By default, the TV shall not have any pages in the flash when coming out of factory.

If in the [**Professional Settings**], [**Dashboard**][**Fallback**] is set to [**Off**], then the TV shall fall back to the default dashboard if there is no network connection to the server.

If it is set to [**On**], the LocalCDB will be loaded when Server cannot be reached.

If in the [**Professional Settings**], [**Dashboard**][**Select Dashboard**][**Custom Dashboard (Browser Based)**][**Source**] is set to [**Server**] and the TV is unable to connect to the configured server then it shall fall back to the custom dashboard stored locally, [**Dashboard**][**Fallback**] is set to [**On**] along with valid fallback files.

You need to make sure that the files in the /LocalCustomDashboard/ folder are HTML5 compliant along with the JAPIT WIXP plugin.

12.5 Edit the T&C for hotspot

For the hotspot functionality, you can enable a T&C to be shown or not. You can edit the text as you want using CMND or by editing following file in your clone:

TPM181HE_CloneData/MasterCloneData/TVSettings/CustomTermsAndCondition.json

You only need to Change the 'MessageTitle' content and the 'MessageBody' content according your needs. You can also add an extra language by duplicating the message part in the json file as in below example.

By default, only the English text is there. You can add a language by changing and/or adding the message. The language tag ('eng' for English in below example) is following the ISO639-2/T and ISO-639-2/B standards.


```

{
  "Svc": "OfflineServices",
  "SvcVer": "4.0",
  "Cookie": 299,
  "CmdType": "Change",
  "Fun": "ApplicationControl",
  "CommandDetails": {
    "ApplicationDetails": {
      "ApplicationName": "Googlecast",
      "ApplicationAttributes": {
        "Messages": [
          {
            "Language": "eng",
            "MessageTitle": "Example Hotel T&C",
            "MessageBody": "By continuing, you agree with the terms and
conditions as mentioned on http://www.examplehotel.com/wifiaccess"
          },
          {
            "Language": "fre",
            "MessageTitle": "Exemple d'hôtel T&C",
            "MessageBody": "En continuant, vous acceptez les termes et
conditions mentionnés sur http://www.examplehotel.com/wifiaccess"
          }
        ]
      }
    }
  }
}

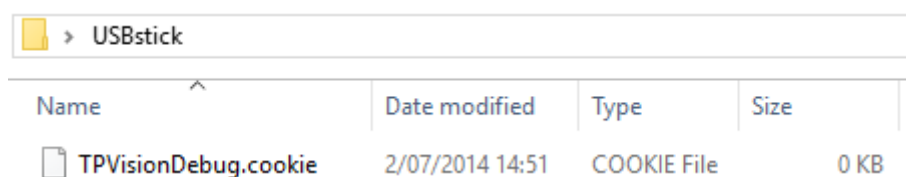
```

12.6 Capture logs from TV on USB

Sometimes if you would have a problem, it can be requested by the technical team to share a clone file and logs of the issue you have reported.

To make logs you need to do following steps:

- Create a new text file on a FAT32 formatted USB stick
- Rename the "New Text Document.txt" file to "TPVisionDebug.cookie" (including renaming the .txt into .cookie)
- Connect the USB to TV
- Reproduce the problem you have
- Send 456789 info (notification should be seen that it's save to disconnect the USB), in case you do not have a RC with digits or the info button you put the TV to STBY and power off the TV before disconnecting the USB.
- After reproduction is done, disconnect the USB stick again from TV and zip the "TPVisionDebug" folder and share it with the technical team



Name	Date modified	Type	Size
TPVisionDebug.cookie	2/07/2014 14:51	COOKIE File	0 KB



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