

PHILIPS 24BDL4151T

V1.00



www.philips.com/welcome

User Manual (English)

Safety Instructions

Safety precautions and maintenance



WARNING: Use of controls, adjustments or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards and/or mechanical hazards.

Read and follow these instructions when connecting and using your display:

Operation:

- Keep the display out of direct sunlight and away from stoves or any other heat sources.
- Remove any object that could fall into ventilation holes or prevent proper cooling of the display's electronics.
- Do not block the ventilation holes on the cabinet.
- When positioning the display, make sure the power plug and outlet are easily accessible.
- When turning off the display by detaching the power cord, wait 6 seconds before re-attaching the power cord for normal operation.
- Ensure the use of an approved power cord provided by Philips at all times. If your power cord is missing, please contact your local service center.
- Do not subject the display to severe vibration or high impact conditions during operation.
- Do not knock or drop the display during operation or transportation.
- The eye bolt is for usage in short-time maintenance and installation. We suggest not to use the eye bolt for more than 1 hour. Prolong usage is prohibited. Please keep a clear safety area under the display while using the eye bolt.

Maintenance:

- To protect your display from possible damage, do not put excessive pressure on the LCD panel. When moving your display, grasp the frame to lift; do not lift the display by placing your hand or fingers on the LCD panel.
- Unplug the display if you are not going to use it for an extensive period of time.
- Unplug the display if you need to clean it with a slightly damp cloth. The screen may be wiped with a dry cloth when the power is off. However, never use organic solvent, such as, alcohol, or ammonia-based liquids to clean your display.
- To avoid the risk of shock or permanent damage to the set, do not expose the display to dust, rain, water or an excessively moist environment.
- If your display becomes wet, wipe it with dry cloth as soon as possible.
- If a foreign substance or water gets in your display, turn the power off immediately and disconnect the power cord. Then remove the foreign substance or water, and send the unit to the maintenance center.
- Do not store or use the display in locations exposed to heat, direct sunlight or extreme cold.
- In order to maintain the best performance of your display and ensure a longer lifetime, we strongly recommend using the display in a location that falls within the following temperature and humidity ranges.
 - Temperature: 0-40°C 32-104°F
 - Humidity: 20-80% RH
- LCD panel temperature need to be 25 degrees Celsius at all time for better luminance performance.

IMPORTANT: Always activate a moving screen saver program when you leave your display unattended. Always activate a periodic screen refresh application if the unit will display unchanging static content. Uninterrupted display of still or static images over an extended period may cause "burn in", also known as "after-imaging" or "ghost imaging", on your screen. This is a well-known phenomenon in LCD panel technology. In most cases, the "burned in" or "after-imaging" or "ghost imaging" will disappear gradually over a period of time after the power has been switched off.

WARNING: Severe "burn-in" or "after-image" or "ghost image" symptoms will not disappear and cannot be repaired. This is also not covered under the terms of your warranty.

Service:

- The casing cover should be opened only by qualified service personnel.
- If there is any need for repair or integration, please contact your local service center.
- Do not leave your display under direct sunlight.



If your display does not operate normally, having followed the instructions set out in this document, please contact a technician or your local service center.

Read and follow these instructions when connecting and using your display:



- Unplug the display if you are not going to use it for an extensive period of time.
- Unplug the display if you need to clean it with a slightly damp cloth. The screen may be wiped with a dry cloth when the power is off. However, never use alcohol, solvents or ammonia-based liquids.
- Consult a service technician if the display does not operate normally when you have followed the instructions in this manual.
- The casing cover should be opened only by qualified service personnel.
- Keep the display out of direct sunlight and away from stoves or any other heat sources.
- Remove any object that could fall into the vents or prevent proper cooling of the display's electronics.
- Do not block the ventilation holes on the cabinet.
- Keep the display dry. To avoid electric shock, do not expose it to rain or excessive moisture.
- When turning off the display by detaching the power cable or DC power cord, wait for 6 seconds before re-attaching the power cable or DC power cord for normal operation..
- To avoid the risk of shock or permanent damage to the set do not expose the display to rain or excessive moisture.
- When positioning the display, make sure the power plug and outlet are easily accessible.
- **IMPORTANT:** Always activate a screen saver program during your application. If a still image in high contrast remains on the screen for an extended period of time, it may leave an 'after-image' or 'ghost image' on the front of the screen. This is a well-known phenomenon that is caused by the shortcomings inherent in LCD technology. In most cases the afterimage will disappear gradually over a period of time after the power has been switched off. Be aware that the after-image symptom cannot be repaired and is not covered under warranty.

EU Declaration of Conformity

This device complies with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (2014/30/EU), Low-voltage Directive (2014/35/EU), RoHS directive (2011/65/EU), and Radio Equipment Directive (2014/53/EU).

This product has been tested and found to comply with the harmonized standards for Information Technology Equipment, these harmonized standards published under Directives of Official Journal of the European Union.

ESD Warnings

When user close to the monitor may cause the equipment discharge and reboot to the display of main menu.

Warning:

This equipment is compliant with Class A of EN55032/CISPR 32. In a residential environment this equipment may cause radio interference.

Federal Communications Commission (FCC) Notice (U.S. Only)



NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Use only an RF shielded cable that was supplied with the display when connecting this display to a computer device.

To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or excessive moisture.

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

Envision Peripherals Inc.
47409 Seabridge Drive
Fremont, CA 94538
Tel. 510-770-9988

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the Radio Equipment Directive (2014/53/EU). The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the Radio Equipment Directive (2014/53/EU):

- EN60950-1/EN62311/EN300328/EN301893/EN301489

Europe Statement

IMPORTANT NOTE:

The device is restricted to indoor use only when operating in the 5150 to 5350MHz frequency range.

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

Radiation Exposure Statement:

This equipment complies with CE radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & body.

The frequency, mode and the maximum transmitted power in EU are listed below:

2412-2472MHz(802.11g 6Mbps): 19.98dBm

2402-2480MHz (EDR 3Mbps): 9.65dBm

2402-2480MHz (LE 1Mbps): 9.80dBm

5180-5240/5260-5320/5500-5700MHz (802.11 ac VHT40 MCS0/NSS1): 22.95dBm

Taiwan:

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Operations in the 5GHz products are restricted to indoor usage only.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Canada:

Industry Canada statement:

This device complies with RSS-247 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ce dispositif est conforme à la norme CNR-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement:

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

Polish Center for Testing and Certification Notice

The equipment should draw power from a socket with an attached protection circuit (a three-prong socket). All equipment that works together (computer, display, printer, and so on) should have the same power supply source.

The phasing conductor of the room's electrical installation should have a reserve short-circuit protection device in the form of a fuse with a nominal value no larger than 16 amperes (A).

To completely switch off the equipment, the power supply cable must be removed from the power supply socket, which should be located near the equipment and easily accessible.

A protection mark "B" confirms that the equipment is in compliance with the protection usage requirements of standards PN-93/T-42107 and PN-89/E-06251.

Wymagania Polskiego Centrum Badań i Certyfikacji

Urządzenie powinno być zasilane z gniazda z przyłączonym obwodem ochronnym (gniazdo z kolkiem). Współpracujące ze sobą urządzenia (komputer, monitor, drukarka) powinny być zasilane z tego samego źródła.

Instalacja elektryczna pomieszczenia powinna zawierać w przewodzie fazowym rezerwową ochronę przed zwarciami, w postaci bezpiecznika o wartości znamionowej nie większej niż 16A (amperów).

W celu całkowitego wyłączenia urządzenia z sieci zasilania, należy wyjąć wtyczkę kabla zasilającego z gniazdka, które powinno znajdować się w pobliżu urządzenia i być łatwo dostępne.

Znak bezpieczeństwa "B" potwierdza zgodność urządzenia z wymaganiami bezpieczeństwa użytkownika zawartymi w PN-93/T-42107 i PN-89/E-06251.

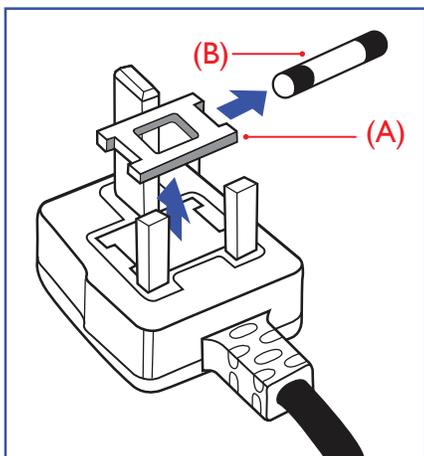
Pozostałe instrukcje bezpieczeństwa

- Nie należy używać wtyczek adapterowych lub usuwać kolka obwodu ochronnego z wtyczki. Jeżeli konieczne jest użycie przedłużacza to należy użyć przedłużacza 3-żyłowego z prawidłowo połączonym przewodem ochronnym.
- System komputerowy należy zabezpieczyć przed nagłymi, chwilowymi wzrostami lub spadkami napięcia, używając eliminatora przepięć, urządzenia dopasowującego lub bezzakłóceniewego źródła zasilania.
- Należy upewnić się, aby nie leżało na kablach systemu komputerowego, oraz aby kable nie były umieszczone w miejscu, gdzie można byłoby na nie nadeptywać lub potykać się o nie.
- Nie należy rozlewać napojów ani innych płynów na system komputerowy.
- Nie należy wpychać żadnych przedmiotów do otworów systemu komputerowego, gdyż może to spowodować pożar lub porażenie prądem, poprzez zwarcie elementów wewnętrznych.
- System komputerowy powinien znajdować się z dala od grzejników i źródeł ciepła. Ponadto, nie należy blokować otworów wentylacyjnych. Należy unikać kładzenia luźnych papierów pod komputer oraz umieszczania komputera w ciasnym miejscu bez możliwości cyrkulacji powietrza wokół niego.

Electric, Magnetic and Electromagnetic Fields ("EMF")

1. We manufacture and sell many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals.
2. One of our leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the EMF standards applicable at the time of producing the products.
3. We are committed to develop, produce and market products that cause no adverse health effects.
4. We confirm that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.
5. We play an active role in the development of international EMF and safety standards, enabling us to anticipate further developments in standardization for early integration in its products.

Information for U.K. only



WARNING - THIS APPLIANCE MUST BE EARTHED.

Important:

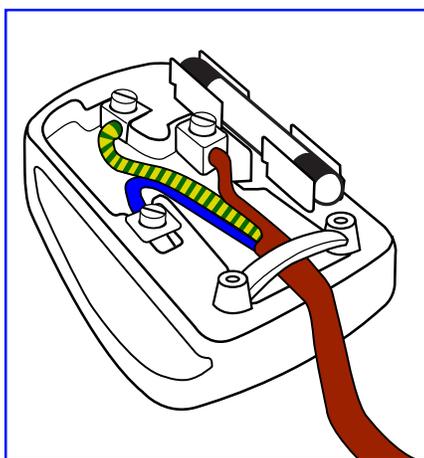
This apparatus is supplied with an approved moulded 13A plug. To change a fuse in this type of plug proceed as follows:+

1. Remove fuse cover and fuse.
2. Fit new fuse which should be a BS 1362 5A, A.S.T.A. or BSI approved type.
3. Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate 3-pin plug fitted in its place.

If the mains plug contains a fuse, this should have a value of 5A. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5A.

NOTE: The severed plug must be destroyed to avoid a possible shock hazard should it be inserted into a 13A socket elsewhere.



How to connect a plug

The wires in the mains lead are coloured in accordance with the following code:

BLUE - "NEUTRAL" ("N")

BROWN - "LIVE" ("L")

GREEN & YELLOW - "EARTH" ("E")

1. The GREEN & YELLOW wire must be connected to the terminal in the plug which is marked with the letter "E" or by the Earth symbol or coloured GREEN or GREEN & YELLOW.
2. The BLUE wire must be connected to the terminal which is marked with the letter "N" or coloured BLACK.
3. The BROWN wire must be connected to the terminal which marked with the letter "L" or coloured RED.

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the three wires.

North Europe (Nordic Countries) Information

Placering/Ventilation

VARNING:

FÖRSÄKRA DIG OM ATT HUVUDBRYTARE OCH UTTAG ÄR LÄTÅTKOMLIGA, NÄR DU STÄLLER DIN UTRUSTNING PÅPLATS.

Placering/Ventilation

ADVARSEL:

SØRG VED PLACERINGSFOR, AT NETLEDNINGENS STIK OG STIKKONTAKT ER NEMT TILGÆNGLIGE.

Paikka/Ilmankierto

VAROITUS:

SIIJOITA LAITE SITEN, ETTÄ VERKKOJOHTO VOIDAAN TARVITTAESSA HELPOSTI IRROTTAA PISTORASIESTA.

Plassering/Ventilasjon

ADVARSEL:

NÅR DETTE UTSTYRET PLASSERES, MÅ DU PASSE PÅ AT KONTAKTENE FOR STØMTILFØRSEL ER LETTE Å NÅ.

China RoHS

根据中国大陆《电子电气产品有害物质限制使用标识要求》，以下部分列出了本产品中可能包含的有害物质的名称和含量。

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
外壳	○	○	○	○	○	○
液晶显示屏	×	○	○	○	○	○
电路板组件*	×	○	○	○	○	○
电源适配器	×	○	○	○	○	○
电源线/连接线	×	○	○	○	○	○

本表格依据SJ/T 11364 的规定编制。

*: 电路板组件包括印刷电路板及其构成的零部件，如电阻、电容、集成电路、连接器等。

○: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572规定的限量要求以下。

×: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。

上表中打“×”的部件，应功能需要，部分有害物质含量超出GB/T 26572规定的限量要求，但符合欧盟RoHS法规要求（属于豁免部分）。

备注：上表仅做为范例，实际标示时应依照各产品的实际部件及所含有害物质进行标示。



环保使用期限

此标识指期限(十年)，电子电气产品中含有的有害物质在正常使用的条件下不会发生外泄或突变，电子电气产品用户使用该电子电气产品不会对环境造成严重污染或对其人身、财产造成严重损害的期限。

《废弃电器电子产品回收处理管理条例》提示性说明

为了更好地关爱及保护地球，当用户不再需要此产品或产品寿命终止时，请遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。

警告

此为A级产品。在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对干扰采取切实可行的措施。

單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr ⁺⁶)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
塑料外框	○	○	○	○	○	○
後殼	○	○	○	○	○	○
液晶面板	—	○	○	○	○	○
電路板組件	—	○	○	○	○	○
底座	○	○	○	○	○	○
電源線	—	○	○	○	○	○
其他線材	—	○	○	○	○	○
遙控器	—	○	○	○	○	○
喇叭（選配）	—	○	○	○	○	○
風扇（選配）	—	○	○	○	○	○

備考1. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。
備考2. “—” 係指該項限用物質為排除項目。

警語：使用過度恐傷害視力。

注意事項：

- (1) 使用30分鐘請休息10分鐘。
- (2) 未滿2歲幼兒不看螢幕，2歲以上每天看螢幕不要超過1小時。

警告使用者：

此為甲類資訊技術設備，於居住環境中使用時，可能會造成射頻擾動，在此種情況下，使用者會被要求採取某些適當的對策。

Turkey RoHS:

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Ukraine RoHS:

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

End-of-Life Disposal

Your new Public Information Display contains materials that can be recycled and reused. Specialized companies can recycle your product to increase the amount of reusable materials and to minimize the amount to be disposed of.

Please find out about the local regulations on how to dispose of your old display from your local Philips dealer.

(For customers in Canada and U.S.A.)

This product may contain lead and/or mercury. Dispose of in accordance to local-state and federal regulations. For additional information on recycling contact www.eia.org (Consumer Education Initiative)

Waste Electrical and Electronic Equipment-WEEE

Attention users in European Union private households



This marking on the product or on its packaging illustrates that, under European Directive 2012/19/EU governing used electrical and electronic appliances, this product may not be disposed of with normal household waste. You are responsible for disposal of this equipment through a designated waste electrical and electronic equipment collection. To determine the locations for dropping off such waste electrical and electronic, contact your local government office, the waste disposal organization that serves your household or the store at which you purchased the product.

Attention users in United States:

Please dispose of according to all Local, State and Federal Laws. For the disposal or recycling information, contact: www.mygreenelectronics.com or www.eiae.org.

End of Life Directives-Recycling



Your new Public Information Display contains several materials that can be recycled for new users.

Please dispose of according to all Local, State, and Federal laws.

Restriction on Hazardous Substances statement (India)

This product complies with the "E-Waste (Management) Rules, 2016" CHAPTER V, rule 16, sub-rule (1) .Whereas New Electrical and Electronic Equipment and their components or consumables or parts or spares do not contain Lead, Mercury, Cadmium, Hexavalent Chromium, polybrominated biphenyls and polybrominated diphenyl ethers beyond a maximum concentration value of 0.1% by weight in homogenous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers and of 0.01% by weight in homogenous materials for cadmium. except of exemptions set in Schedule 2 of the Rule.

E-Waste Declaration for India



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment .The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about E -waste please visit <http://www.india.philips.com/about/sustainability/recycling/index.page> and to know where you can drop off your waste equipment for recycling in India please contact on below given contact details.

Helpline number: 1800-425-6396 (Monday to Saturday, 9 a.m. to 5:30 pm)

Centralized E-waste collection center

Address:TPV Technology India Private Limited,

59, Maheswari Nagar, 1st Main Road, Mahadevapura Post, Whitefield Road

Bangalore, Karnataka, PIN: 560048, Tel: 080-3023-1000

E-mail: india.callcentre@tpv-tech.com

Information for EAC	
Month and year of manufacturing	please refer information in Rating label.
Name and location of manufacturer	ООО "Профтехника" Адрес: 3-й Проезд Марьиной роши, 40/1 офис 1. Москва, 127018, Россия
Importer and information	Наименование организации: ООО "Профтехника" Адрес: 3-й Проезд Марьиной роши, 40/1 офис 1. Москва, 127018, Россия Контактное лицо: Наталья Астафьева, +7 495 640 20 20 nat@profdisplays.ru

NOTICE**SOFTWARE END USER LICENSE AGREEMENT**

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Settings -> About -> Legal information -> Open source licenses

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- [/data/benchmarktest/libjavacore-benchmarks/libjavacore-benchmarks32](#)
- [/data/benchmarktest64/libjavacore-benchmarks/libjavacore-benchmarks64](#)
- [/data/nativetest/libjavacore-unit-tests/libjavacore-unit-tests](#)
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- [/kernel](#)
- [/recovery/root/sbin/fsck.f2fs](#)
- [/recovery/root/sbin/fsck.f2fs](#)
- [/recovery/root/sbin/mkfs.f2fs](#)
- [/recovery/root/sbin/recovery](#)
- [/root/file_contexts.bin](#)
- [/root/init](#)
- [/root/property_contexts](#)
- [/root/sbin/adbd](#)
- [/root/sbin/slideshow](#)
- [/root/seapp_contexts](#)
- [/root/selinux_version](#)
- [/root/sepolicy](#)
- [/root/service_contexts](#)
- [/system/app/CertInstaller/CertInstaller.apk](#)
- [/system/app/ExtShared/ExtShared.apk](#)
- [/system/app/FTPService/FTPService.apk](#)
- [/system/app/HTMLViewer/HTMLViewer.apk](#)
- [/system/app/LiveWallpapersPicker/LiveWallpapersPicker.apk](#)
- [/system/app/Music/Music.apk](#)
- [/system/app/OpenWnn/OpenWnn.apk](#)
- [/system/app/PrintRecommendationService/PrintRecommendationService.apk](#)
- [/system/app/UserDictionaryProvider/UserDictionaryProvider.apk](#)
- [/system/app/WAPPushManager/WAPPushManager.apk](#)
- [/system/app/tpvStorage/tpvStorage.apk](#)
- [/system/bin/am](#)
- [/system/bin/app_process32](#)
- [/system/bin/app_process64](#)
- [/system/bin/applvpatch](#)
- [/system/bin/appops](#)
- [/system/bin/appwldget](#)
- [/system/bin/arping](#)
- [/system/bin/atrace](#)
- [/system/bin/bu](#)
- [/system/bin/clatd](#)
- [/system/bin/cmd](#)

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1. Unpacking and Installation

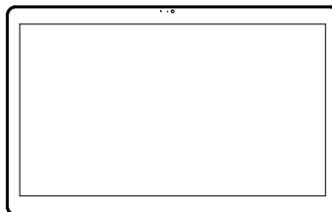
1.1. Unpacking

- This product is packed in a carton, together with the standard accessories.
- Any other optional accessories will be packed separately.
- After opening the carton, ensure that the contents are complete and in good condition.

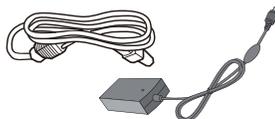
1.2. Package Contents

Please verify that you received the following items with your package content:

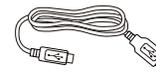
- LCD display
- Quick start guide
- DC Power adapter
- Power plug
- USB cable
- HDMI cable
- Stand
- Screws for Stand (4PCS)
- Wire Clamper (2PCS)
- Screws for 4G Board (2PCS)



Quick start guide



HDMI Cable



USB Cable



Stand



Screws for
Stand (4PCS)



Wire Clamper
(2PCS)



Screws for 4G
Board (2PCS)

* Differences according to regions

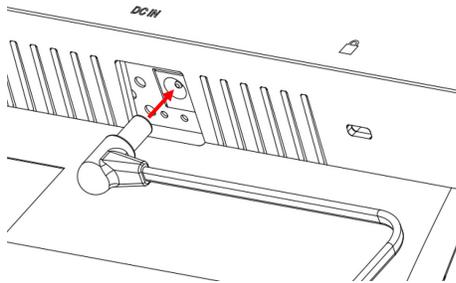
Display design and accessories may differ from those illustrated above.

NOTES:

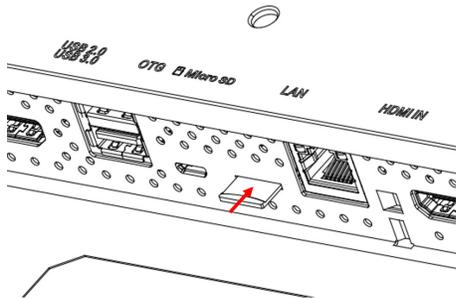
- Use only the AC/DC adapter model: Philips ADPC2065.
- For all other regions, apply a power cord that conforms to the AC voltage of the power socket and has been approved by and complies with the safety regulations of the particular country (Type H05W-F, 2G or 3G, 0.75 or 1 mm² should be used).
- You might like to save the package box and packing material for shipping the display.

1.3. Installation

1.3.1. Securing the power cable.

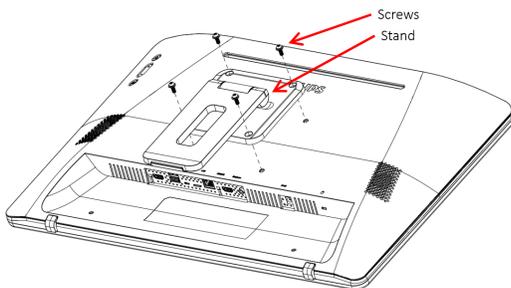


1.3.2. Securing Micro SD card.

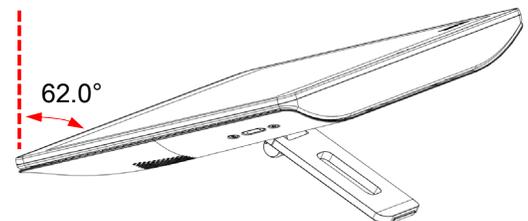
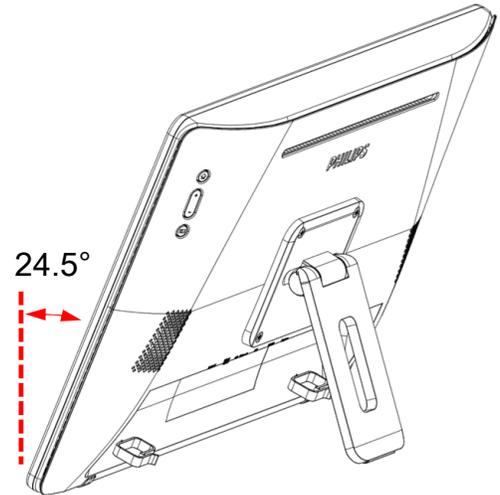
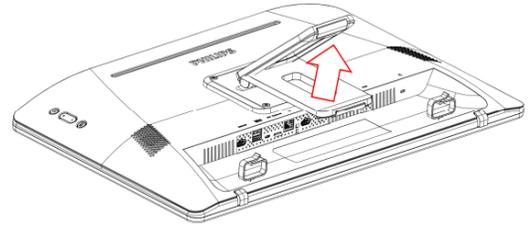


1.3.3. Installing the stand.

1. Ensure the display is powered off.
2. Spread a protective sheet on a flat surface.
3. Place the display face-down on the protective sheet.
4. Installing the stand with the screws.

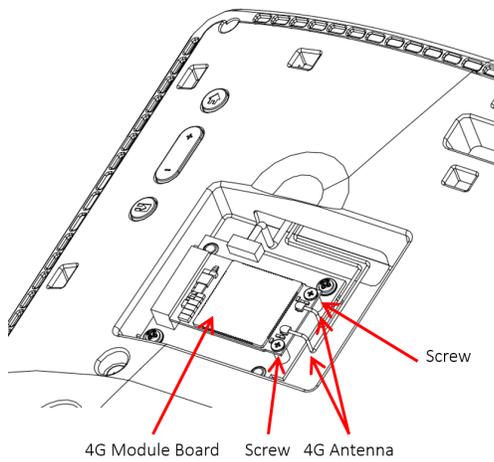
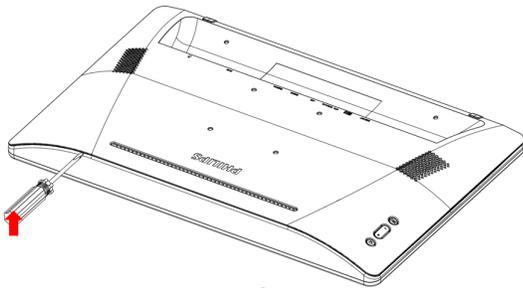


5. Unfold the stand until hear the click sound.
There are two available tile angles (24.5° & 62.0°).
Please let the display stay on above tile angles to keep stable.



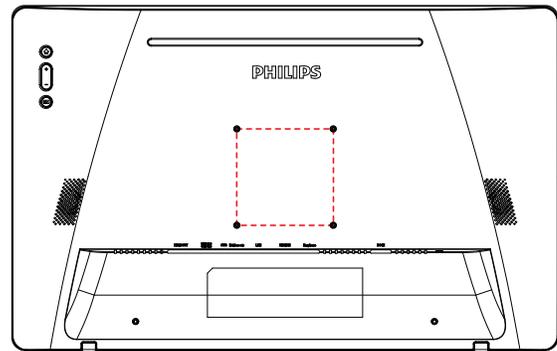
1.3.4. Installing the 4G Module.

1. Insert the flat head screwdriver to the gap of rear cover slightly as shown.
2. Open the rear cover slightly.
3. Installing the 4G module board with 2PCS of screws.
4. Connect the 4G antenna cables to the connectors on the board.
5. Installing back the rear cover:

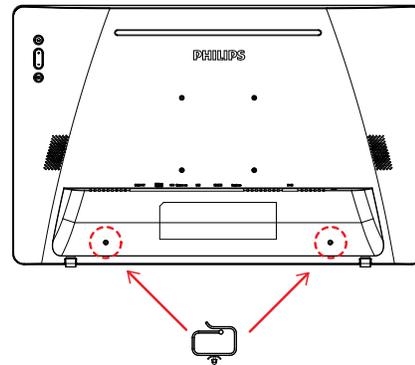


1.3.5. Mounting the display to the wall.

1. Wall mount holes grid: 100mm(H) × 100mm(V)
2. Wall mount screw: M4x(14+X) (X=thickness of wall mount plate)

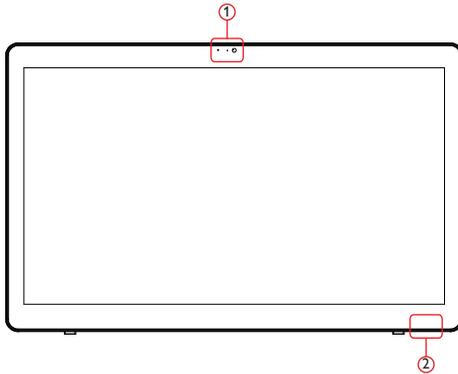


1.3.6. Using of the wire clampers.



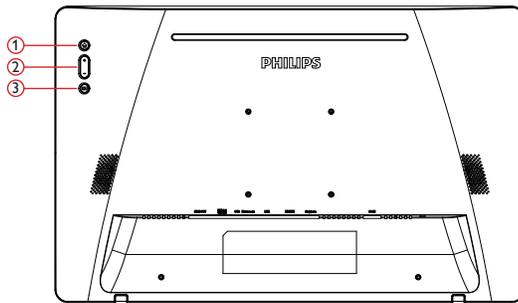
2. Physical view and features

2.1. Front View



- ① Front camera and microphone receiver
- ② Power status indicator

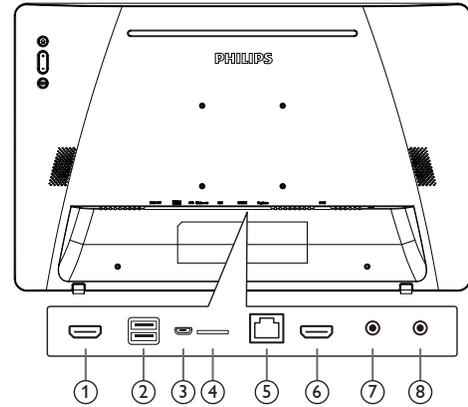
2.2. Rear View



- ① Menu: To activate the menu.
- ② Volume +/-: Volume up and down.
- ③ Input: Choose the input source.

Press these keys	To do this
Menu + Volume-	Launch Admin mode app
Menu + Volume+	Launch Quick Information app
Menu + Menu + Volume+ + Volume- + Volume- + Volume+	Enable touch function
Menu + Menu + Volume- + Volume-	Turn on the screen
Input	HDMI/Android source Switch
Volume+	Launch Volume OSD
Volume-	Launch Volume OSD
Menu + Menu + Menu + Menu + Menu + Menu	Enable IME

2.3. Input/Output Terminals



- ① **HDMI OUT**
HDMI video/audio output.
- ② **USB PORT**
Connect your USB storage device.
- ③ **OTG**
Connect to USB storage for main board Firmware update.
NOTE: It's for updating firmware only.
USB touch will switch to PC USB upstream when HDMI Source.
- ④ **Micro SD**
Connect your Micro SD card.
- ⑤ **LAN**
 - LAN control function for the use of remote control signal from control center;
 - PoE+ (power over Ethernet)
 NOTE:
 1. The PoE device should comply with the requirements of IEC60950-1 LPS.
 2. To use the function of PoE, please use the shielded cable.
- ⑥ **HDMI IN**
HDMI video/audio input.
- ⑦ **Earphone**
3.5mm Ear Jack (CTIA standard).
- ⑧ **DC IN**
Switch the AC adapter on/off.

3. Operation

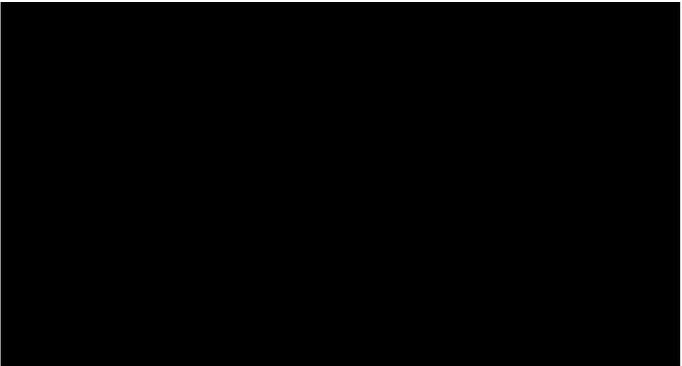
NOTE: The control button described in this section is mainly on the remote control unless specified otherwise.

3.1. Watch the Connected Video Source

1. Press [SOURCE] SOURCE button to switch source between HDMI and Android.

3.2. Overview

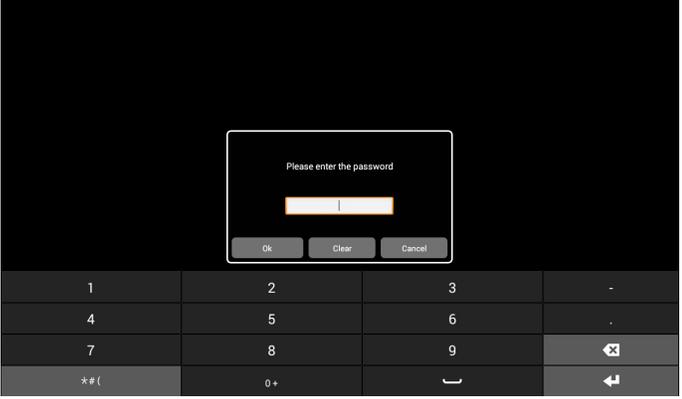
1. Launcher:
 - Platform launcher is black page as below:



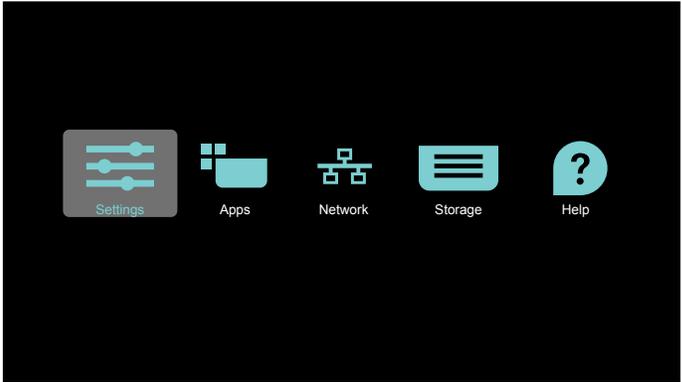
- Every apps leave by press back key, the screen will go to android PD launcher.

2. Admin mode:

Admin mode let user setup and control device. Pressing "Menu, Volume Down" on keypad to startup admin mode. Screen show up a dialog request enter Admin password, default password is "1234". User can change password in "Settings -> Signage Display -> System Tools -> Change the Administrator Password".



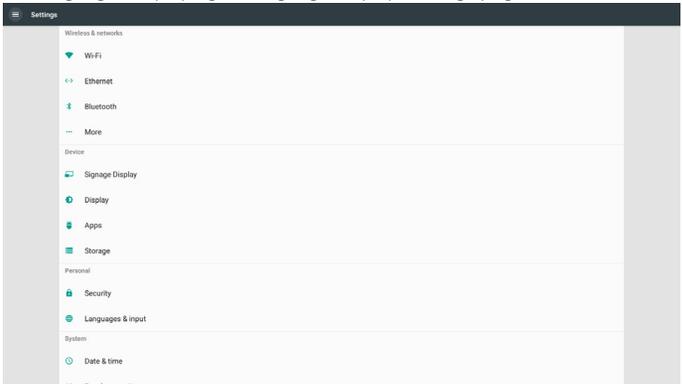
Admin mode will show five icons: "Settings", "Apps", "Network", "Storage" and "Help".



1. Settings: lunch Settings app.
2. Applications: show all apps.
3. Network: setup Wi-Fi, Ethernet and mobile network
4. Storage: simple file manager for user view the list of file in system.
5. Help: provide link for user get help from Philips official website.

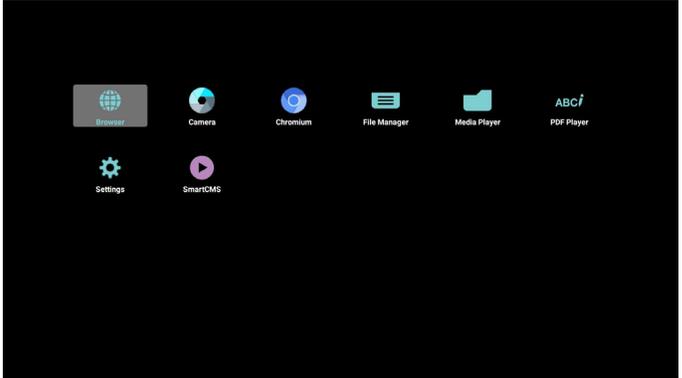
NOTE: When user leaving admin mode, system will back to boot on source.

- 1) Settings page:
 Settings : go to settings page.
 Signage Display : go to signage display settings page.



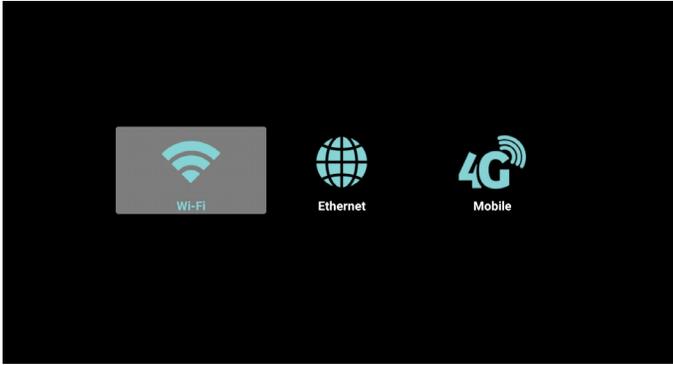
- 2.) Application page:

List all application in this page, including user self-installed applications.

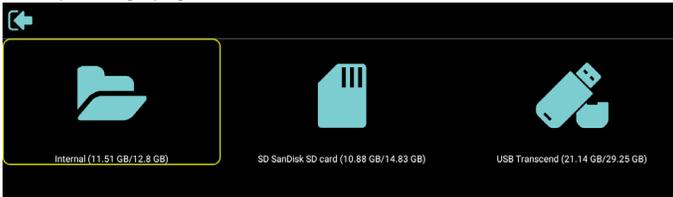


3) Network page

Wi-Fi and Mobile will only show up if system having available Wi-Fi module and mobile module.



4) Storage page:



5) Help page:

Showing support website in link and QRcode.



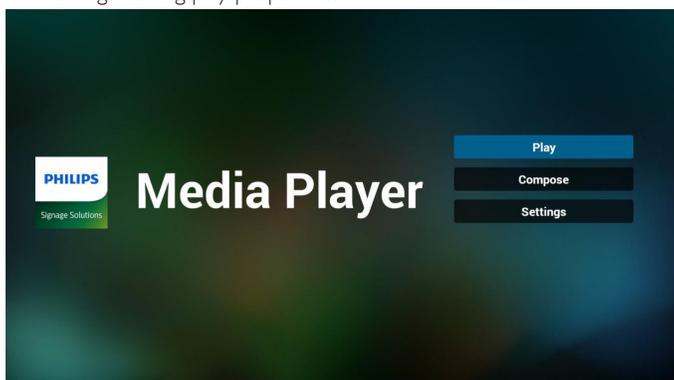
3.3. Media Player

3.3.1. OSD menu interaction with media player:

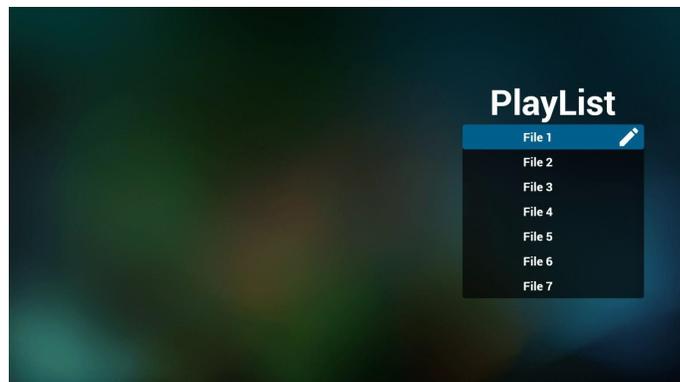
1. Boot on source:
 - Input:
 - If you select Media player source, platform will go to media player automatically after the boot complete.
 - Playlist:
 - Main page : go to home page of media player.
 - Playlist 1 - Playlist 7 : go to media player and playback File1 - File7 of playlist automatically.
2. Schedule:
 - Schedule list:
 - You can set 7 schedule.
 - Enable:
 - Enable/disable schedule.
 - Start time:
 - Set start time.
 - End time:
 - Set end time.
 - Play list :
 - 1 - 7 : go to media player and playback File1 - File7 of playlist automatically.
 - Days of the week:
 - Set Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.
 - Every week :
 - Set lifecycle.
 - Save
 - Store schedule.

3.3.2. Media Player introduction:

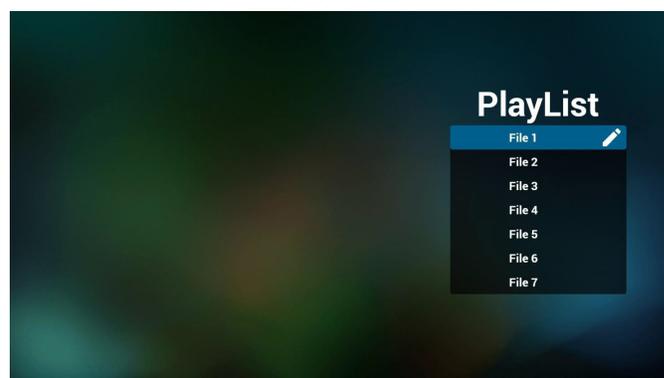
1. Home page of Media Player app, this page has three items: "Play", "Compose" and "Settings".
 Play : select playlist to play.
 Compose: edit playlist.
 Settings: setting play properties.



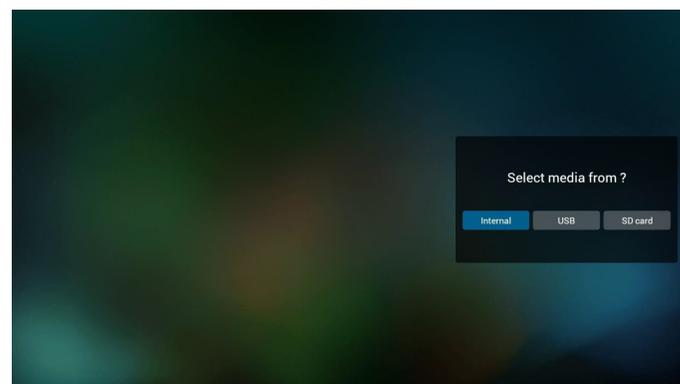
2. Select "Play" on home page, first you should choose one playlist to play between FILE 1 and FILE 7.
 The pencil icon means the playlist is non-empty.



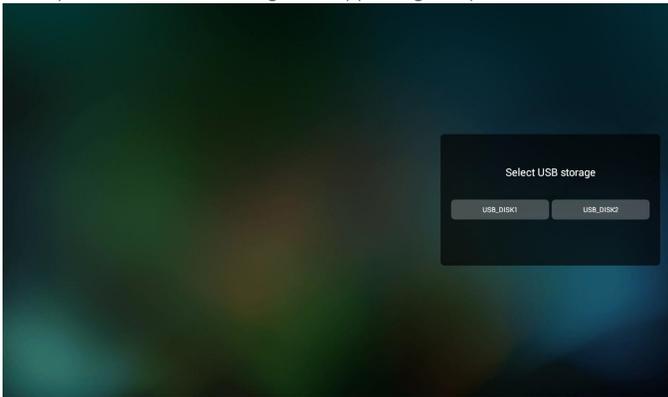
3. Select "Compose" on home page, first you should choose one playlist to edit between FILE 1 and FILE 7.
 The pencil icon means the playlist is non-empty.



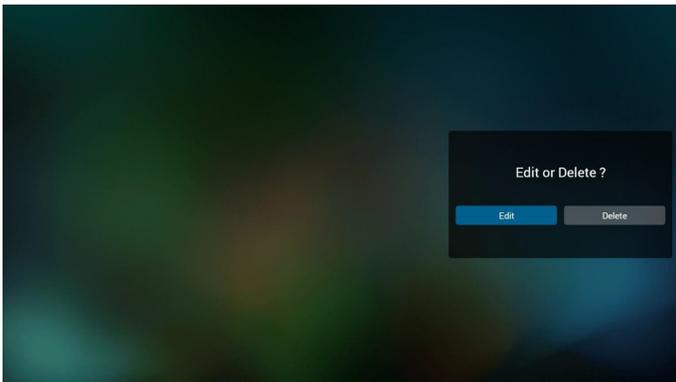
4. If an empty playlist is chosen, the app will guide you to select the media source.
 All media files should be placed in /philips/ of root directory.
 For example,
videos: {root dir of storage}/philips/video/
photos: {root dir of storage}/philips/photo/
music : {root dir of storage}/philips/music/



5. If you select "USB" storage, the app will guide you select USB device.



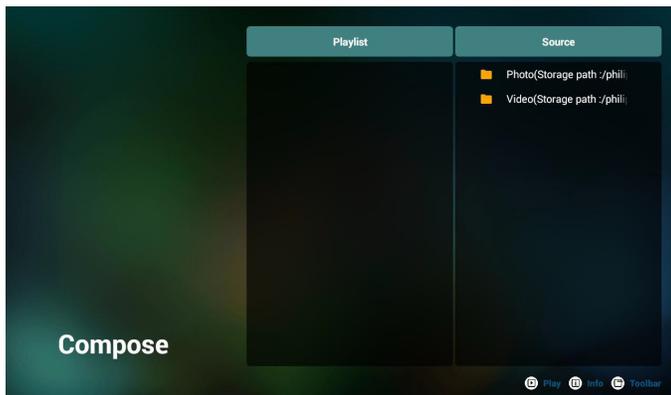
6. You could edit or delete a non-empty playlist, just choose the desired playlist which is with pencil icon.



7. Once you start to edit a playlist, you will see below screen.
- Source - files in storage.
 - Playlist – files in playlist.
 - There are 4 icons which map to the keys of remote controller:
 - Option key – launch sidebar
 - Play key – play media file.
 - Info key – show media info.
 - Touch file key – select/unselect file.

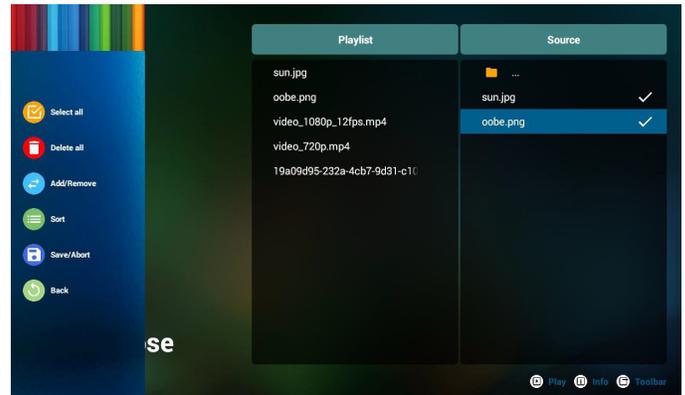
Note:

When long press on one of the directory in Source, full path will be display on the light bar.

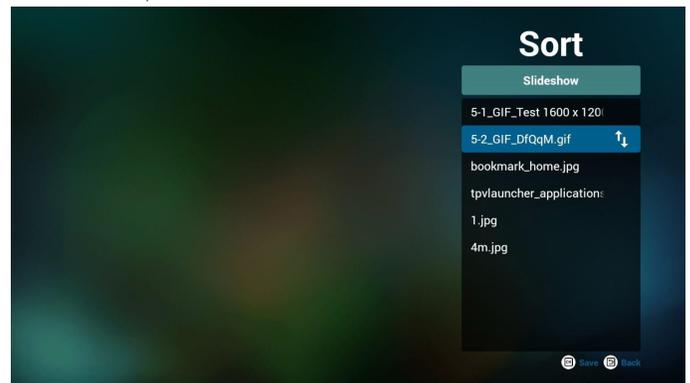


6-1 In the slide bar, it helps you to do the following:

- select all : select all storage files.
- delete all : delete all playlist files.
- add/remove : update playlist from source.
- sort : sort playlist.
- save/abort : save or abort playlist.
- back : return.



8. If you choose "Sort" in the slide bar, you can change the order of files one by one.



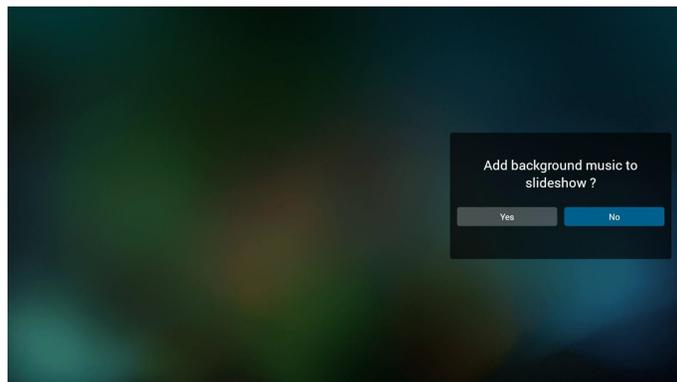
9. Press info key after you choose desired file, you will get the detail information.



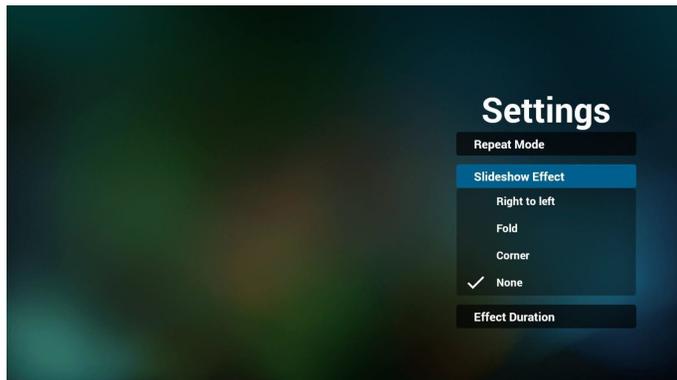
10. Press play key after you choose desired file, you will play the media file directly.



11. If you make a playlist with all images files, before saving, the app will ask you if you want to have background music while playing slideshow.



12. Select "Settings" on home page, this page has three parts, "Repeat Mode", "Slideshow Effect" and "Effect Duration".
Repeat Mode : play mode.
Slideshow Effect : photo slideshow effect.
Effect Duration : photo effect duration.



13. Media format please refer to **Page 25 Supported Media Formats**.

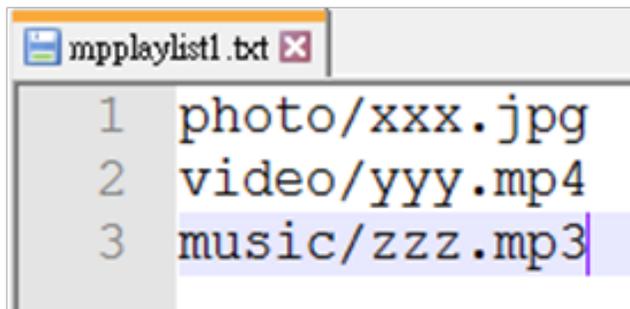
14. How to edit playlist via FTP.

Step 1. Create media player text file.

- File name : mpplaylistX.txt, "X" means playlist number(1,2,3,4,5,6,7).

Ex. mpplaylist1.txt, mpplaylist2.txt

- Content :



Note : if playlist file contains video and music, when the pd plays music file, the screen will be black.

Step 2. Copy mpplaylistX.txt to "philips" folder of internal storage. You may use FTP to do this.

- File path : /storage/emulated/legacy/philips

Ex. /storage/emulated/legacy/philips/mpplaylist1.txt

Step 3. Prepare media files to "photo", "video" and "music" folder under "philips" folder; internal storage only.

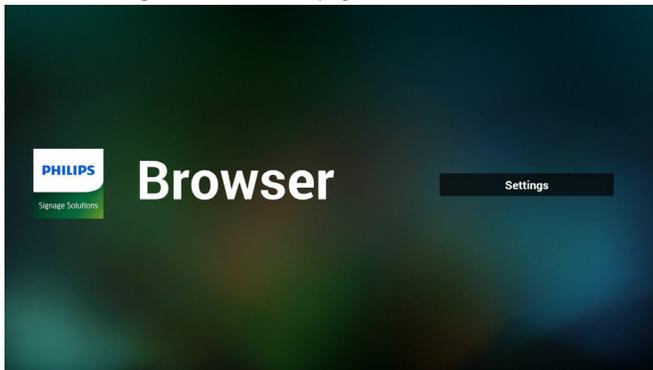
- Ex. /storage/emulated/legacy/philips/photo/xxx.jpg
/storage/emulated/legacy/philips/video/yyy.mp4
/storage/emulated/legacy/philips/photo/zzz.mp3

Step 4. Start media player app, it will auto import media player text file.

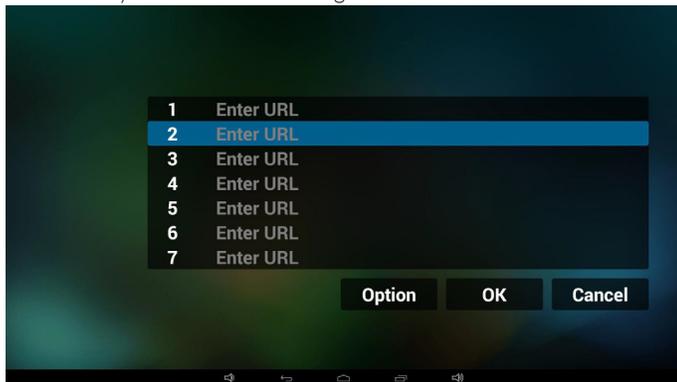
PS. Once the playlist file (text) is imported, if an user change playlist by remote controller; this change will not be written to playlist text file.

3.4. Browser manual

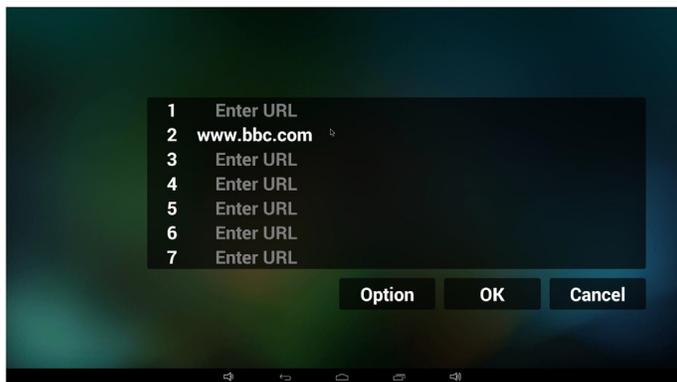
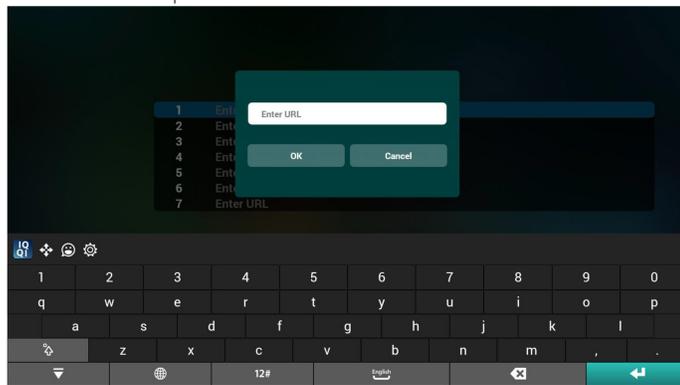
1. Home page of Browser app, this page has one item: "Settings". Press Settings then enter next page.



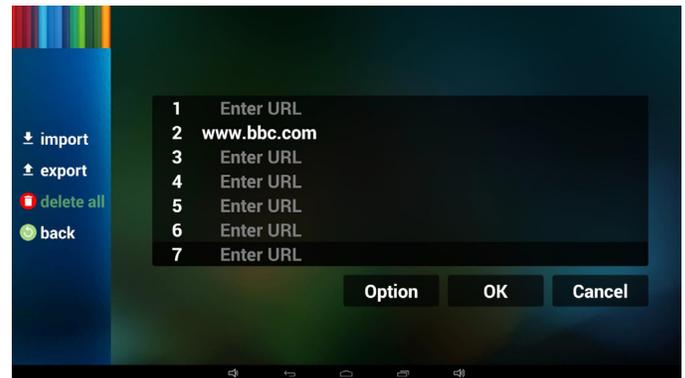
2. Users can choose 1~7. Press any one will show a dialog.



3. Enter url and press OK then data will save on List

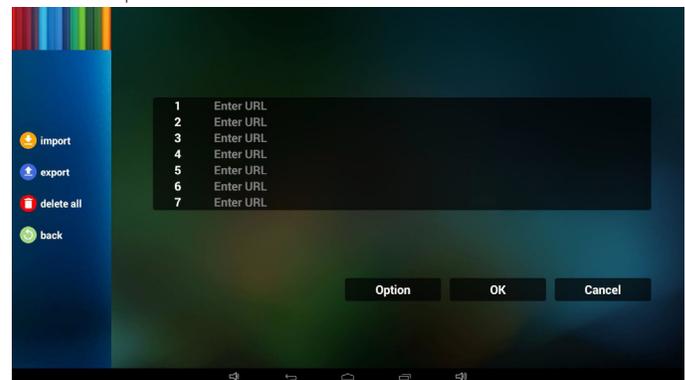


4. Press "Option" then left side will pop up a list
 - Import : Import url list file
 - Export : Export url list file
 - Delete all : Delete all url record on right side
 - Back : left side list will be closed.

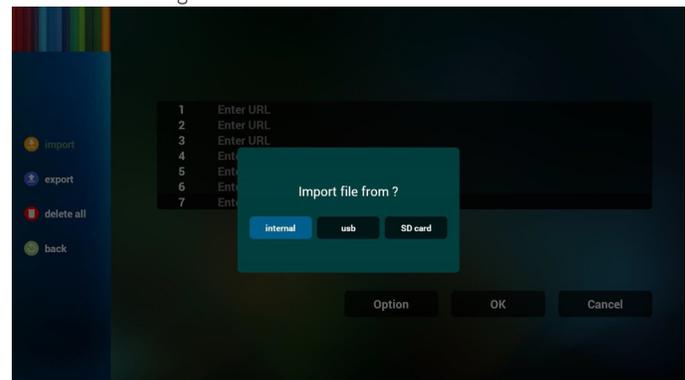


4.1 Import

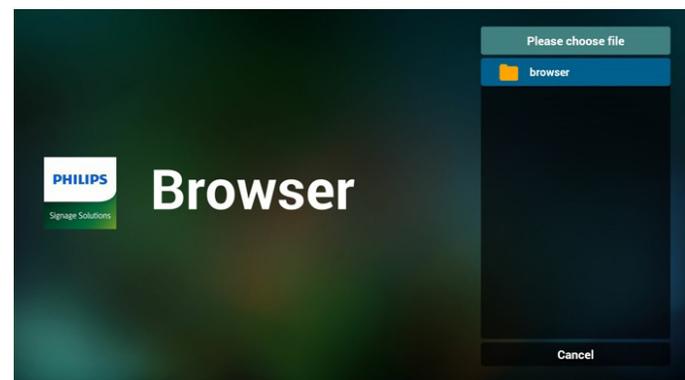
- Click import



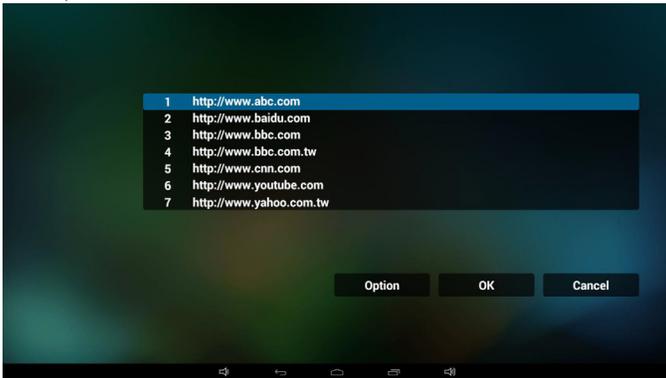
- Choose storage



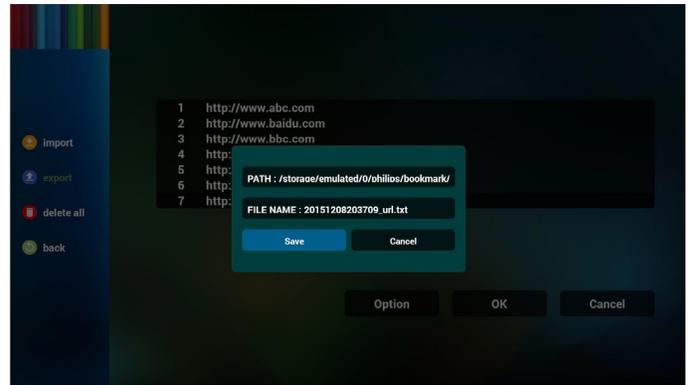
- Choose file contains urls



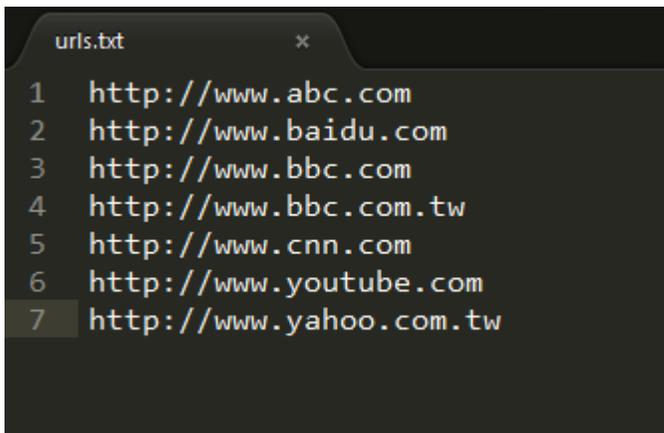
- Import file and url will show on list



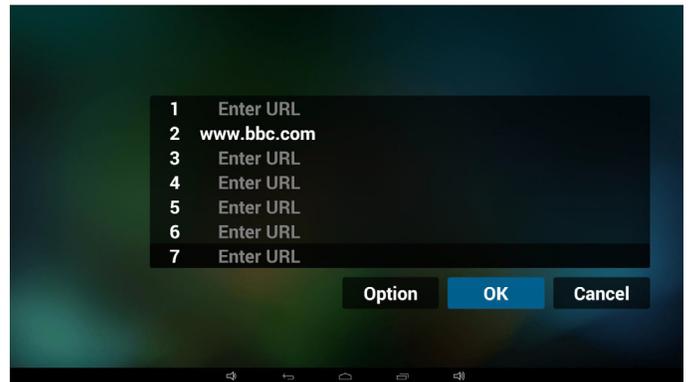
- Dialog shows path file will be saved and file's name. Press "save" button then urls on list will be saved.



- File format for import
Format should be like below with file extension "txt"

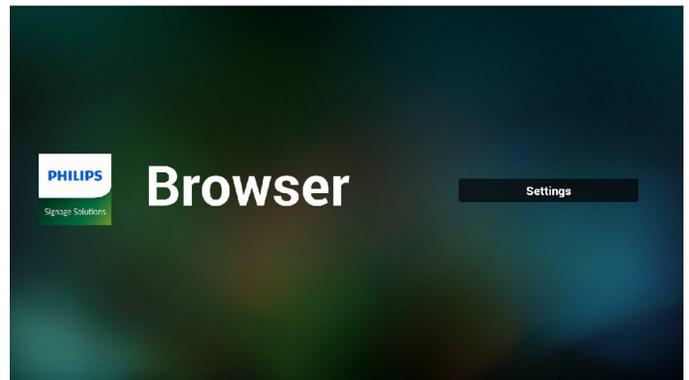
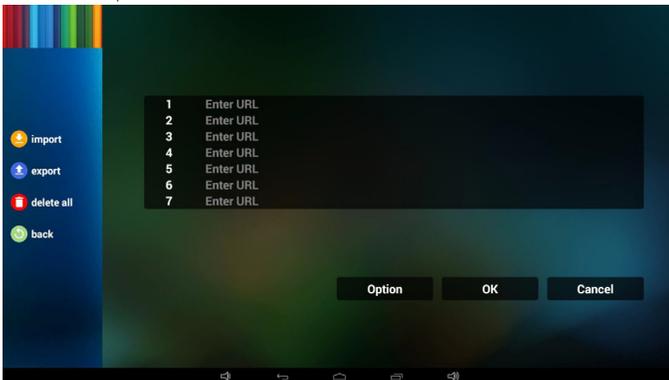


- 5. Press OK then url records will be saved



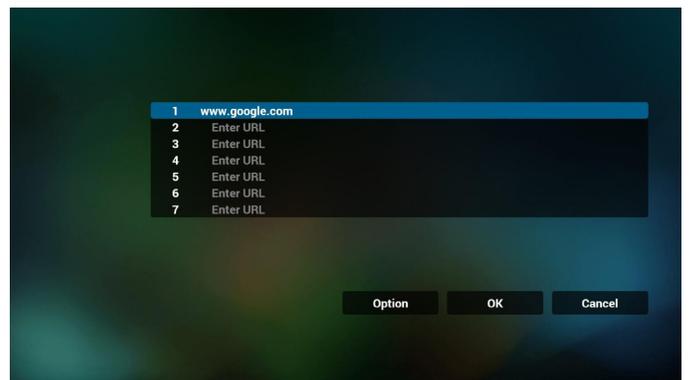
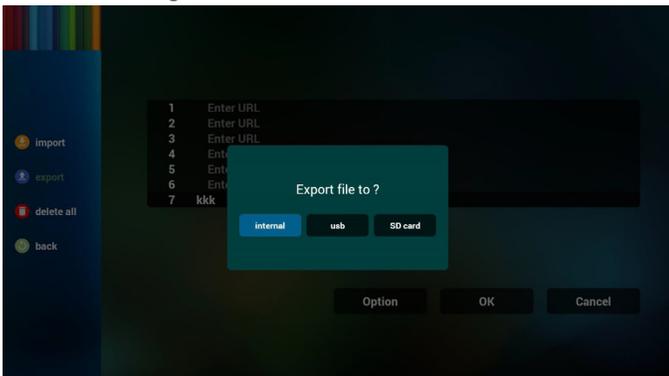
4.2 Export:

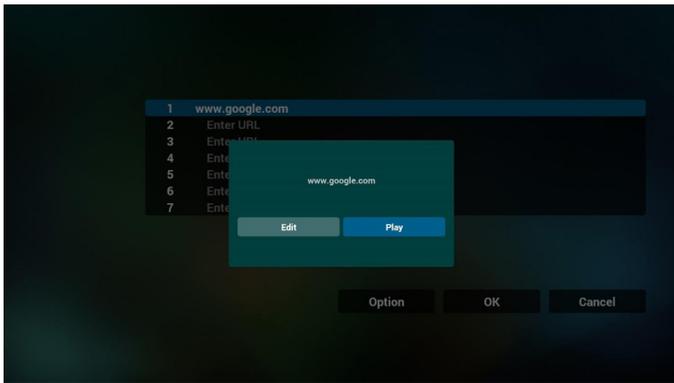
- Click export



- 6. On url list page, if you select non-empty item, it will show a dialog to ask edit or play url. If press "Edit", it will show edit url dialog, if press "Play", it will show web page of item's url.

- Choose storage





7. OSD menu interaction with Browser

7.1 Boot on source

- Settings -> Signage Display -> General Settings -> Boot on source -> Input be BROWSER Play List be 0. Then PD will show Browser after reboot.
- Settings -> Signage Display -> General Settings -> Boot on source -> Input be BROWSER Play List be 1. Then PD will show web page with 1st Url in Browser app.

7.2 Schedule

Settings -> Signage Display -> General Settings -> Schedule -> On time1, Off time2, Input be BROWSER, any day you want of week, and Play List.

Finally check the right box.

Then PD will show web page with Url in Browser app at time1 and finish at time2.

8. How to edit url list via FTP

Step 1. Create media player text file.

- File name : bookmarklist.txt.
- Content :



Step 2. Copy bookmarklist.txt to "philips" folder of internal storage. You may use FTP to do this.

- File path : /storage/emulated/legacy/philips (for DL, PL)
Ex. /storage/emulated/legacy/philips/bookmarklist.txt

Step 3. Start browser app, it will auto import browser text file.

PS. Once the playlist file (text) is imported, if an user change playlist by remote controller; this change will not be written to playlist text file.

3.5. PDF Player

3.5.1. OSD menu interaction with pdf player:

1. Boot on source:
 - Input:
 - If you select PDF player source, PD will go to PDF player automatically after the boot complete.
 - Playlist:
 - 0 : go to home page of PDF player.
 - 1 - 7 : go to PDF player and playback File1 - File7 of playlist automatically.
2. Schedule:
 - Today :
 - Show date and time.
 - 1 - 7 :
 - You can set 7 schedule.
 - On/Off :
 - Set start time and end time.
 - Input :
 - Select PDF player source, PD will go to PDF player automatically when times up.
 - MON,TUE,WED,THU, FRI, SAT,SUN, Every week :
 - Set lifecycle.
 - Play list :
 - 0 : go to home page of PDF player.
 - 1 - 7 : go to PDF player and playback File1 - File7 of playlist automatically.
 - Clear all

3.5.2. PDF Player introduction:

1. Home page of PDF Player; this page has three items: "Play", "Compose" and "Settings".

Play : select playlist to play.

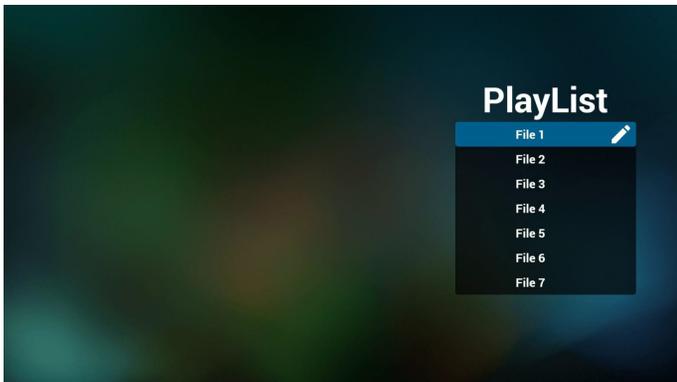
Compose: edit playlist.

Settings: setting play properties.



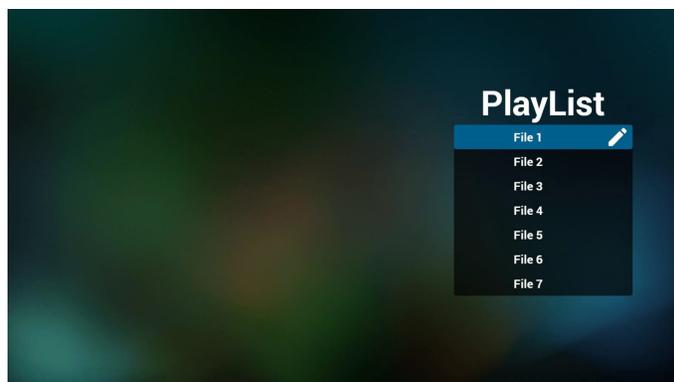
2. Select "Play" on home page, first you should choose one playlist to play between FILE 1 and FILE 7.

The pencil icon means the playlist is non-empty.



3. Select "Compose" on home page, first you should choose one playlist to edit between FILE 1 and FILE 7.

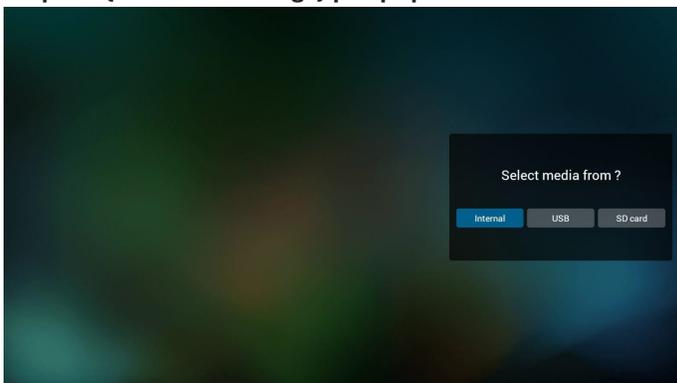
The pencil icon means the playlist is non-empty.



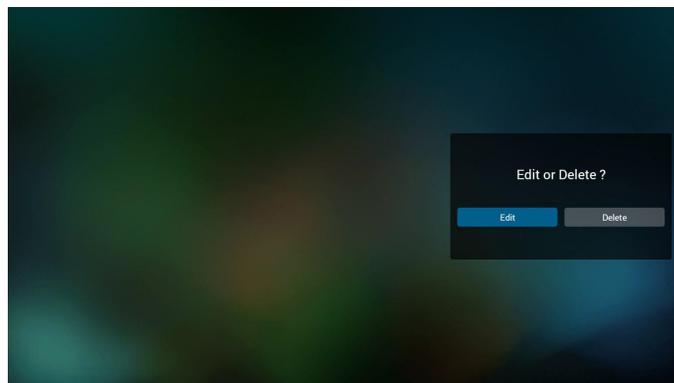
4. If an empty playlist is chosen, the app will guide you to select the media source.

All media files should be placed in /philips/ of root directory. For example,

pdfs : {root dir of storage}/philips/pdf/



5. You could edit or delete a non-empty playlist, just choose the desired playlist which is with pencil icon.



6. Once you start to edit a playlist, you will see below screen.

Source - files in storage.

Playlist - files in playlist.

There are 4 icons which map to the keys of remote controller:

Option key - launch slide bar

Play key - play media file.

Info key - show media info.

Ok key - select/unselect file.

6-1. In the slide bar, it helps you to do the following:

- select all : select all storage files.

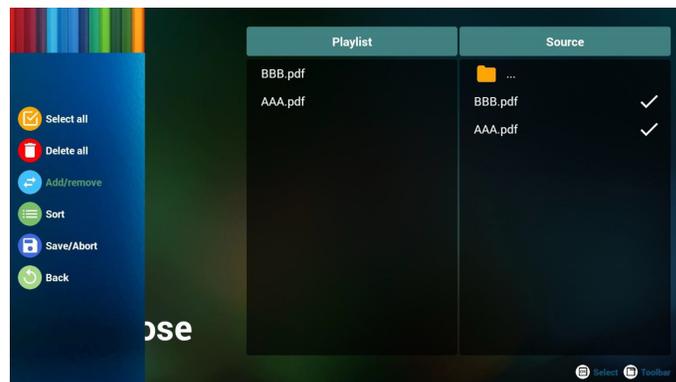
- delete all : delete all playlist files.

- add/remove : update playlist from source.

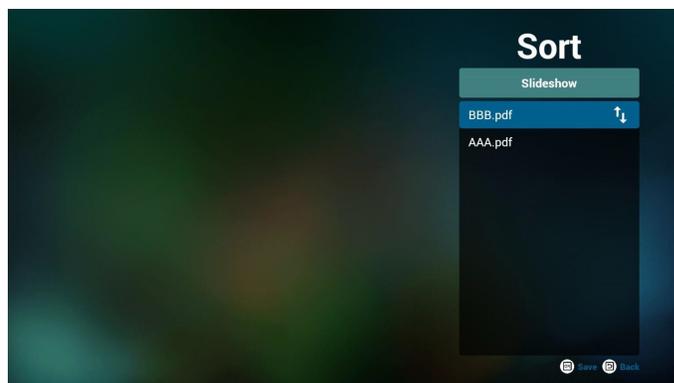
- sort : sort playlist.

- save/abort : save or abort playlist.

- back : return.



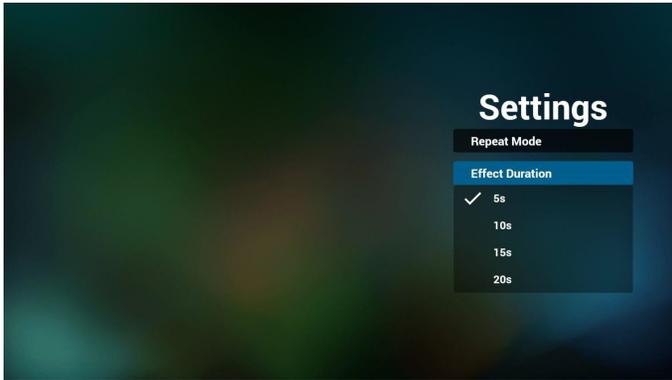
7. If you choose "Sort" in the slide bar; you can change the order of files one by one.



8. Select "Settings" on home page, this page has two parts, "Repeat Mode" and "Effect Duration".

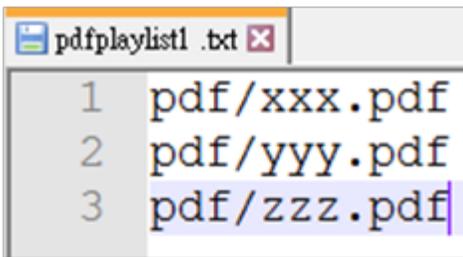
Repeat Mode : play mode.

Effect Duration : photo effect duration.



9. How to edit pdf list via FTP.
Step 1. Create pdf player text file.

- File name : pdfplaylistX.txt, "X" means playlist number(1,2,3,4,5,6,7).
Ex. pdfplaylist1.txt, pdfplaylist2.txt
- Content :



Step 2. Copy pdfplaylistX.txt to "philips" folder of internal storage. You may use FTP to do this.

- File path : /storage/emulated/legacy/philips (for DL, PL)
Ex. /storage/emulated/legacy/philips/pdfplaylist1.txt

Step 3. Prepare pdf files to "pdf" folder under "philips" folder; internal storage only.

- Ex. /storage/emulated/legacy/philips/pdf/xxx.pdf
/storage/emulated/legacy/philips/pdf/yyy.pdf
/storage/emulated/legacy/philips/pdf/zzz.pdf

Step 4. Start pdf player app, it will auto import pdf player text file.

PS. Once the playlist file (text) is imported, if an user change playlist by remote controller, this change will not be written to playlist text file.

3.6. CMND & Play

1) Server

Setup CMND & Play server address

2) Account

Setup CMND & Play account

3) PIN Code

Setup CMND & Play PIN code

(4) Version

There are two options, Ver:2 and Ver:3

Ver: 2

use 2.0/2.2 agreement

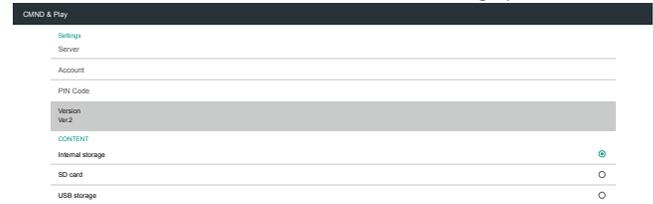
Ver: 3

use 3.0/3.1 agreement

(5) Content

There are internal storage/SD card/USB storage 3 options for selecting.

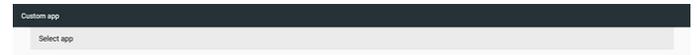
When Ver:2, Server/Account/PIN code will be gray and unavailable.



3.7. Custom App

Settings -> Signage Display -> Source settings -> Custom app

User set up customer source APK. The selected APK will be launch when switch into customer input source. If user does not set up customer source APK, system will show black screen when switch into customer input source.



If user set up APK for custom app source, it will show APK name. If not, means that user does not set up custom app.

Select APP dialog



Note:

System pre-installed APKs will not be shown in list. Only list the APKs that user manually installed.

Save

Click SAVE to choose selected APK as custom source application. Gray if no available application can be selected.

Forget

Clear custom source application. Gray if user does not set customer source application.

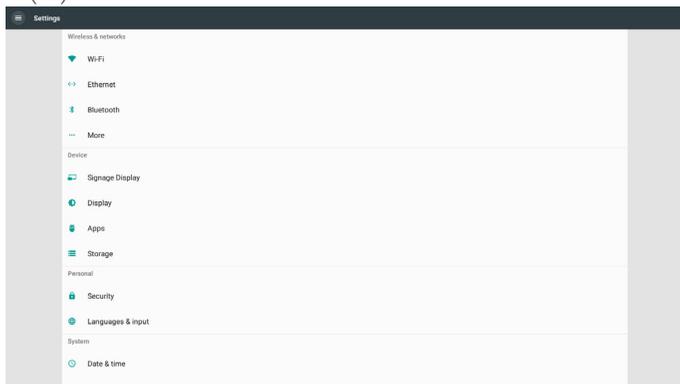
Cancel

Do nothing and close dialog.

4. Setting

Main items:

- (1) Wi-Fi
- (2) Ethernet
- (3) Bluetooth
- (4) Signage Display
- (5) Display
- (6) Apps
- (7) Storage
- (8) Security
- (9) Language & input
- (10) Date & time
- (11) Developer options
- (12) About



4.1. Wi-Fi

Enable/disable Wi-Fi connection through main switch in Setting -> Wi-Fi. Screen will show this list of availed Wi-Fi AP (Access Point) in below after enabled Wi-Fi.

Note :

When Wi-Fi is enabled, Ethernet will be disabled automatically.

4.2. Ethernet

Enable/Disable to turn on/off Ethernet

Ethernet configuration options list in below of main switch.

- (1) Connection Type (Choose connection type: DHCP or Static IP)

A. DHCP

Cannot modify IP Address, Netmask, DNS Address and Gateway.

If connect successfully, it will display current network configuration.

B. Static IP

In Static IP mode, user can input IP Address, Netmask, DNS address and Gateway

Note:

IP address, netmask, DNS address and gateway address input limitation

- (1)Format: number 0-9, decimal point ""

- (2) Mac Address (Show Ethernet MAC address, cannot be changed)

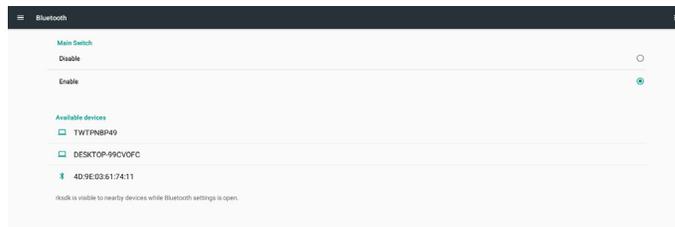
Note :

Ethernet will be disable automatically if Wi-Fi turn on and connect to network.

4.3. Bluetooth

Enable/disable Bluetooth through main switch in Settings -> Bluetooth. Switch the enable/disable switch to enable to turn on Bluetooth, then device will start scanning other discoverable Bluetooth devices and list in available devices. To turn Bluetooth off, switch then enable/disable switch to disable.

To initiate a connection to other Bluetooth devices, click the item in available devices. If system ask for PIN for pairing the device; enter the PIN code.



4.4. Signage Display

Signage Display to setup most features of signage display.



4.4.1. General Settings

Set up Signage Display name, ID, logo, boot on source and schedule.

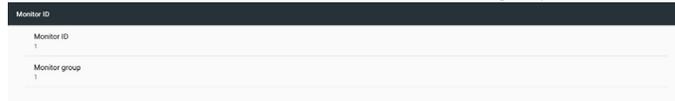
1. Signage Display Name

Set up PD name, default name Ethernet MAC address with prefix "PD_". For example, "PD_000b12223398". The max length of name is 36 chars in UTF8 format. Click to rename it.



2. Monitor ID

Monitor ID in range 1 to 255 decimal and Monitor Group in range 1 to 254 decimal. Default monitor ID and monitor group are both 1.



3. Boot Logo

User can set up device boot up logo (boot animation) mode. Default is ON.

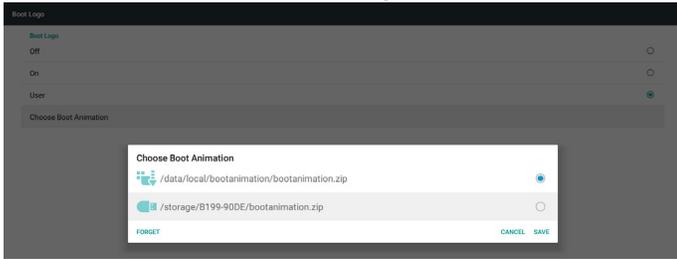


- A. Off: Turn off boot animation.
- B. On: Turn on boot animation, using PHILIPS default logo.

C. User

Turn on boot animation, using user choose boot animation file. The boot animation file name is "bootanimation.zip".

Click "Choose Boot Animation" will pop up a dialog for user select boot animation file. System will auto scan the files under SD card and USB storage.



Function introduction:

a. Option description



File under /data/local/bootanimation/
Use customized boot animation file which is copied from SD card or USB



File under /storage/{USB_STORAGE_ID}/:
Use boot animations file under SD card



File under /storage/{SD_STORAGE_ID}/:
Use boot animations file under USB

b. Save

If the option focus on  or , press Save key to save

bootanimzation.zip from the SD card or USB to /data/local and set it as boot logo.

c. Forget

Press Forget key to delete /data/local bootanimation.zip and not show boot logo.

d. Cancel

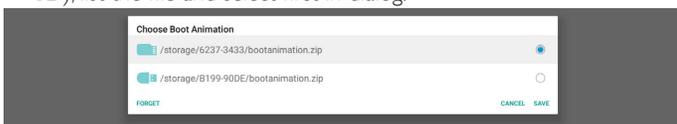
Do nothing, close dialog.

When system does not found any bootanimation.zip file under external storage (USB, SD) and /data, the file list is empty. The "SAVE" and "FORGET" options are gray and user should check external storage (USB, SD) has correct file in it. Close the dialog, plug in external storage and try again.

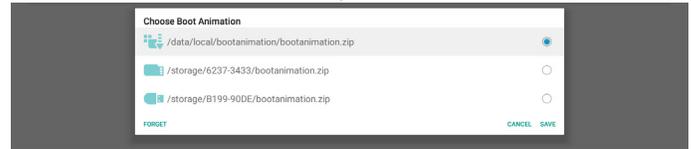


If /data/local/bootanimation/ folder is empty, it means that user did not save bootanimation.zip file before. User logo will not be shown during system power up.

When system find bootanimation.zip file under external storage (USB, SD), list the file and select first in dialog.



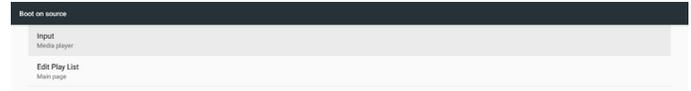
If /data/local/bootanimation/ folder is not empty, and system find a bootanimation.zip in it. The dialog will show the file in first option and select it. That means user copy (SAVE) the bootanimation.zip file before. System will boot up with boot animation in /data/local/bootanimation/bootanimation.zip.



User can replace the boot animation file by using "SAVE" button.

4. Boot on source

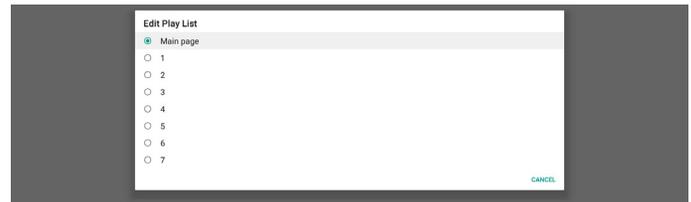
Boot on source for user set up the default source when device power on.



Input: System will boot to selected source automatically after boot complete.



Playlist: If input source is Media Play, Browser or PDF Player, user can select the play list for auto playback or boot to source main page.



Please note that if user chose "Custom app" as boot on source, the user specified application (APK) must be selected in Settings -> Signage Display -> Source Settings -> Custom APP.

5. Schedule

Set up auto playback schedule.

Note:

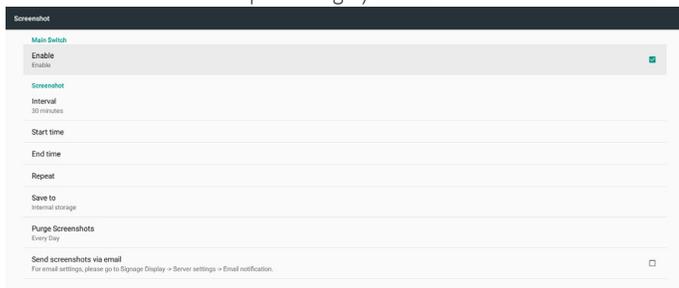
- Schedule priority is higher than Display -> Sleep and Display -> Screen save. When schedule is started, system will keep auto playback until schedule end, not effect by sleep time.
- When schedule off (end time), device can only be wakeup by next schedule start time, hot key or network SICP command to wake up system. After waking up system, the system is black screen since playback applications are finished. User can call back navigation bar by finger scroll up (if touch not disabled) or enter Admin mode, quick info by hot key.
- The hot key is available when system sleep. User can enter Admin mode or showing quick info dialog by using hot key.



- (1) Schedule list: You can set up total 7 schedules. Each schedule setting are independent.
- (2) Enable: Enable/disable selected schedule in schedule list. Each schedule has its own enable/disable switch.
- (3) Start time: Set up selected schedule start time.
- (4) End time: Set up selected schedule end time.
- (5) Input: set up selected schedule auto playback source during schedule start.
- (6) Play list: Select list 1 to 7. If "input" is one of Media Player, Browser, PDF player; user can select playlist and schedule will playback selected playlist automatically.
- (7) Days of the week: set Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday for selected schedule will be run.
- (8) Every week: Set selected schedule's lifecycle.
- (9) SAVE: Store settings of selected schedule. Remember click "SAVE" button, otherwise

6. Screenshot

Setup device auto screenshot. Click "Enable" to enable screenshot features. The screenshot options is gray if user not enable screenshot.



User can set up screenshot interval and saving location folder after user enable it. "Save to" notify user that screenshot images will be saved in internal storage and user cannot change manually.

NOTE:

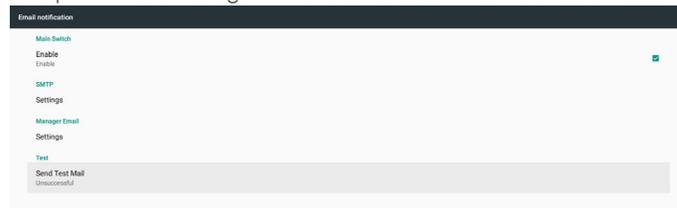
- A. Screenshot feature will auto delete screenshot photos when:
 1. At start time (0 seconds) begin screenshot feature
 2. At 40 seconds of minute starting screenshot
 3. If user select purge screenshot photos every week, the data of deleting photos will be change to the day of the date user apply any setting of screenshot feature. For example, if user set purge day is Monday of every week at first, but change other settings in screenshot feature in Friday, the purge day will be changed to Friday (day of week of system current time).
 - B. Sleep (system suspend) and screenshot feature: Screenshot feature will also suspend when system is sleep (suspend). The mail out screenshot photo feature is also suspended. Screenshot feature will be restart when system wakeup.
- (1) Interval
Set up screenshot interval, user can select 30 or 60 minutes interval between each screenshot.
 - (2) Start Time
Set up screenshot start time of a day.
 - a. User must click "SAVE" before leaving dialog, otherwise the time will not be saved.
 - b. The start time must lower than end time. A toast message will notify user when interval is wrong.

- (3) End Time
Set up screenshot end time of a day.
 - a. User must click "SAVE" before leaving dialog, otherwise the time will not be saved.
 - b. The start time must lower than end time. A toast message will notify user when interval is wrong.
- (4) Repeat
Set up auto screenshot day of week interval, user can select when screenshot will work.
- (5) Save to
System saves screenshot images into internal storage. System will create philips/screenshot/ folder in internal storage and saving images under this folder.
- (6) Purge Screenshots
Set up the interval of purging (deleting) screenshot images. User can set delete image in every day or every week.
- (7) Send screenshots via email
Enable device send out screenshot image by E-mail for every screenshot. User must set up mail information first in "Settings -> Signage Display -> Server Settings -> Email notification" (reference Email Notification section).

4.4.2. Server Settings

1. Email Notification

Click checkbox to enable/disable E-mail notification feature. User can set up SMTP and manager E-mail after enable E-mail notification feature.

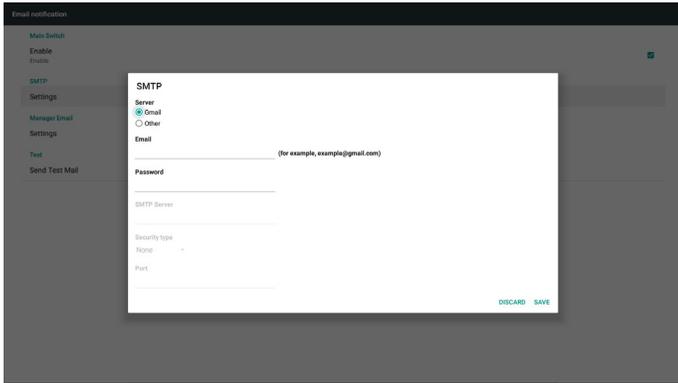


1) SMTP

Setup sender E-mail address and SMTP server information. There are two types of SMTP server for user set up: "Gmail" and "Other". By using "Other" option, user can manually setup SMTP server; security type and server port.

Note:

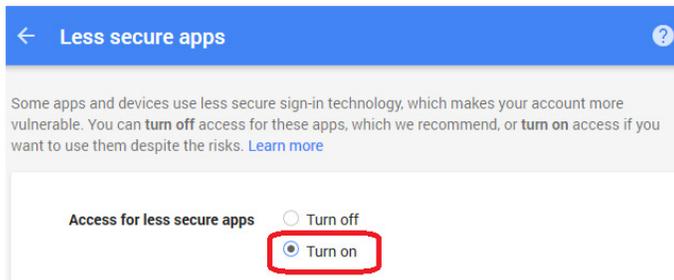
- a. Password length limit into range 6~20 chars in UTF8 format.
- b. And user cannot set port 5000 (SICP default port) and 2121 (FTP server default port).
 - i. SICP network port setting in "Settings -> Signage Display -> Network Application -> SICP network port".
 - ii. FTP network port settings in "Settings -> Signage Display -> Server settings -> FTP -> Port".



Gmail safety setting

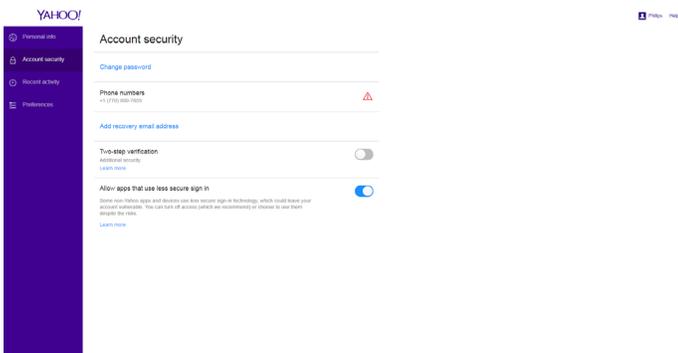
If you are using Gmail but cannot sent out E-mail, please check Google Account Security Setting in website:

<https://www.google.com/settings/security/lesssecureapps>. And turn on "Access for less secure apps".



Yahoo Account Security Settings

In Yahoo Account Security option, users should enable "Allow apps that use less secure sign in" option.



2) Manager Email

Setup manager's (receiver's) E-mail address. Device will send E-mail to this account.



3) Test

Click "Send Test Mail" will send out a test mail to check if settings are correct.

2. FTP

Click the checkbox to enable/disable FTP server feature. After enable, user can setup account, password and port number:

- Account: The username for login FTP server. The length of name in range 4~20 characters, and only allow [a-z][A-Z][0-9].
- Password: The password for login FTP server. Password length in range 6~20 characters, and only allow [a-z][A-Z][0-9]. The password will show "*" only after set up.
- Storage path: The FTP server will access internal storage only. Cannot be changed by user.
- Port: The port number for FTP server. Available port number range from 1025 to 65535, default is 2121.

The following port number cannot be used:

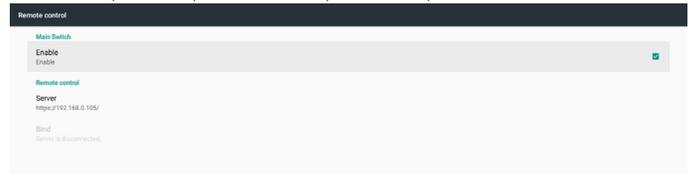
8000 / 9988 / 15220 / 28123 / 28124 and SICP network port (default 5000).



3. Remote Control

Click Enable checkbox to enable/disable remote control client service, default is disabled. To use remote control must bind device with remote control server.

"Server" for user input remote control server URL address (with https:// prefix). If device does not bind with remote control server before, please input PIN code provided by server.



Bind status:

- When device does not have network, showing "Network is disconnected".
- If device has network, but not connected with remote control server, showing "Server is disconnected".
- If server is connected but not bind with server, showing "Server is unbinded".
- If device bind with server successfully, showing "Server is binded".
- If PIN code is not correctly, showing "Error PIN code".

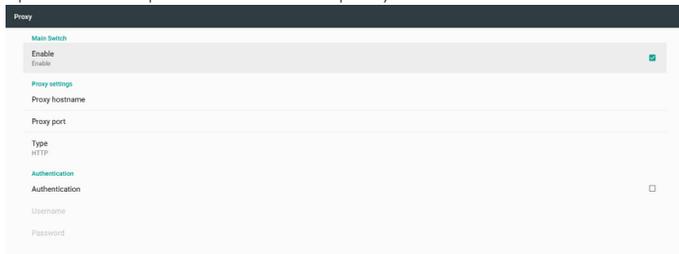
4.4.3. Source Settings

1. Media Player (Please refer to the instructions of 3.3. Media Player)
2. Browser (Please refer to the instructions of 3.4. Browser manual)
3. CMND & Play (Please refer to the instructions of 3.6. CMND & Play)
4. PDF Player (Please refer to the instructions of 3.5. PDF Player)
5. Custom App (Please refer to the instructions of 3.7. Custom App)

4.4.4. Network application

1. Proxy

Enable/disable network proxy by click "Enable" checkbox. User can set up host IP and port number of the proxy server. Default is disabled.



Device support proxy type: HTTP, HTTPS, SOCKS4, SOCKS5. Choose one for your proxy server:



If proxy server request authorization by login name and password, enable Authentication and enter Username and Password.



2. Platform Web API

Enable/disable Platform Web API by clicking checkbox. Default is disabled.



3. SICP network port

Set up SICP default port and enable/disable network SICP. Default SICP is enabled and using port 5000.

Note:

Port number range from 1025 ~ 65535.

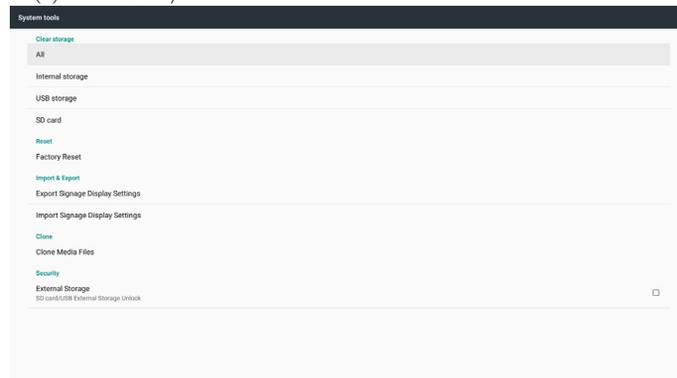
Following port already been used, cannot assign: 8000, 9988, 15220, 28123, 28124 and FTP default port (2121).



4.4.5. System Tools

There are six major features in signage display system tools:

- (1) Navigation Bar
- (2) Clear Storage
- (3) Reset
- (4) Import & Export
- (5) Clone
- (6) Security



6.4.5.1 Navigation Bar

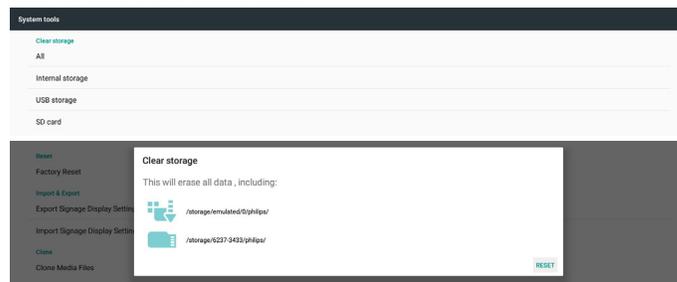
Set up to enable or disable navigation bar during touch gesture.

6.4.5.2 Clear Storage

Used to clear data under Philips/ folder in internal and external storage

- (1) All
Clear Philips/ folder in internal storage, USB and SD card.
- (2) Internal Storage
Clear Philips/ folder in internal storage only.
- (3) USB Storage
Clear Philips/ folder in USB storage only.
- (4) SD Card
Clear Philips/ folder in SD card only.

A dialog will list all folders that system going to clear. Press "RESET" to clear all data under listed folder.



6.4.5.3 Reset

Doing factory reset to clear all user data and settings. System will auto reboot and jump to OOB after finished.

Important Note:

1. All data in system will be erased and cannot revert; including device settings, installed APPs, APPs' data, download files, music, photos and all data under /data. But data in USB storage and SD card will not be clear; only clear the data in internal storage.
2. Make sure AC adapter and power must always exist during factory reset.



Doing factory reset by click "FACTORY RESET", system pop up a dialog and ask again. Please make sure you understand what you are doing, then press "OK" to perform reset action. Note that this action cannot reverse and erase all data in internal storage.



6.4.5.4 Import & Export

Use export/import signage display setting for user easy copy settings and 3rd part APK to other device. And note that:

Notes.

- (1) The name of export database are:
 - A. Settings_global.xml
 - B. Settings_secure.xml
 - C. Settings_system.xml
 - D. Signage_settings.db
 - E. AndroidPDMediaPlayerData.db
 - F. AndroidPDPdfData.db
 - G. AndroidPDUrListData.db
 - H. Smartcms.db

- (2) Export files to Philips/ folder in selected storage
- (3) "Signage Display Name" will not be imported/exported.

Export Signage Display Settings

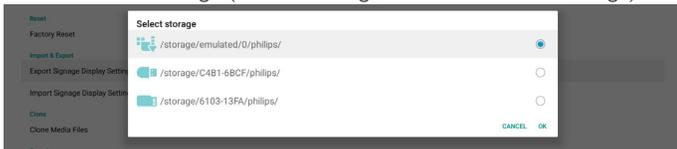
Will export database data and 3rd party APKs into Philips/ folder in selected storage (internal, SD card or USB storage).

- (1) Export Database (.xml files and .db files)
- (2) Export 3rd party APK to Philips/app/ folder

Note:

If selected storage (internal storage, USB or SD card external storage) does not have Philips/ folder, system will create automatically.

List all available storage (internal storage, SD card and USB storage)



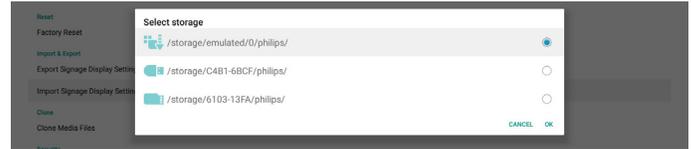
Import Signage Display Settings

Import database data from Philips/ folder of selected storage (internal Storage, SD Card or USB storage).

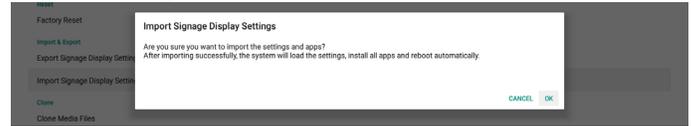
- (1) Import Database (.xml files and .db files)
- (2) Import 3rd party APK under Philips/app/ folder

List all available storage (internal storage, USB and SD card)

System pop up notification dialog before import settings and APKs. Click "OK" to start import data.



System pop up notification dialog before import settings and APKs. Click "OK" to start import data.

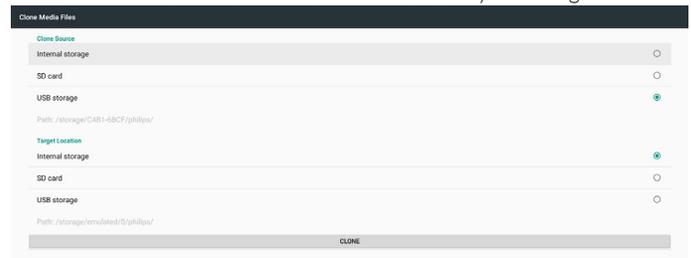


6.4.5.5 Clone

Clone Media Files

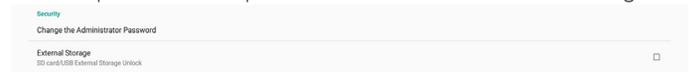
This tool clone media files from selected source storage to target storage.

1. Following list of folder will be cloned (under Philips/ folder)
 - (1) philips/photo
 - (2) philips/music
 - (3) philips/video
 - (4) philips/cms
 - (5) philips/pdf
 - (6) philips/browser
2. Clone CMS files (file extension is ".cms")
 - a. Source storage
 - i. Source is internal storage
 1. Check if there is CMS file in FTP
 2. If no CMS file in FTP, check Philips/ folder in source storage
 - ii. Source is external storage (SD card or USB storage)
 1. Check CMS file in root directory of storage
 - b. Target storage
 - i. Target is internal storage
 1. CMS file will save to Philips/ folder
 - ii. Target is external storage (SD card or USB storage)
 1. CMS file will save to root directory of storage



6.4.5.6 Security

Set up Admin mode password and lock/unlock external storage.



Change the Administrator Password

Change the password login to Admin mode. Before change administrator password, follow below steps:

- (1) Enter current password first. Default password is "1234".
- (2) Enter new password.



If change password successfully, you will see an Android toast "Successfully" message.

External Storage

Click the checkbox to lock or unlock external storage (SD card and USB storage). Default is unlocked.



- (1) Unlicked (Disable): SD card/USB External Storage Unlock.
- (2) Clicked (Enable): SD card/USB External Storage Lock.

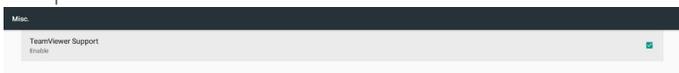
Note:

When you disable external storage lock for enable state, please unplug and plugin external storage again (for both SD card and USB storage). After that, system can detect external storage again.

4.4.6. Misc.

TeamViewer Support

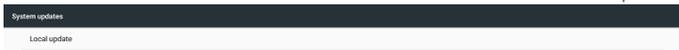
Click the checkbox to enable or disable TeamViewer support. Default is enabled. TeamViewer will send a virtual HOME key to open Admin mode.



4.4.7. System update

Local update

System will auto search "update.zip" in root folder of USB disk and SD card. If system found "update.zip" in external storage, pop-up a selectable list for user select which file user wants to use for update.

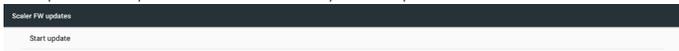


After select the file in list, system will reboot and do system update. Please note that:

1. Keep system power alive during system update, do not remove power adapter.
2. Currently system only support full Android update.
3. The update file should be named "update.zip" only.
4. The "update.zip" file should be only put in root folder of external storage.

Scaler FW updates

Tap "Start update" for Android system update scaler firmware.



If system cannot find "scaler.bin" file in internal storage, system will pop-up a dialog notify user:



Please note that:

1. The update file should be named "scaler.bin" only.
2. The "scaler.bin" file should be only put in "Philips/scaler/" folder of internal storage.

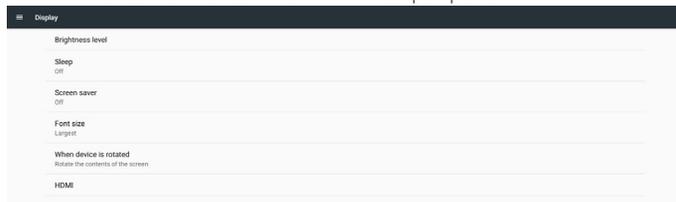
3. After select ok to start update scaler firmware, keep system power alive during system update, do not remove power adapter.
4. Wait for about 3 minutes, Android will reboot.
5. After reboot, suggest remove AC power cord and plug-in it again.
6. To check Scaler FW version via quick info "menu + volume up" -> Monitor Information.



4.5. Display

There are following features in Display.

- (1) Brightness level: The adjust bar will be show on top of the screen. Drag adjust bar to set brightness.
- (2) Sleep: Set up the time system go into sleep. Option "off" means that system will not go into sleep, screen will always on. Default is "off".
- (3) Screen saver: User can choose one of screen saver mode: Colors, Photo Frame and Photo Table.
- (4) Font size: Adjust system font size by dragging adjust bar; default is "Largest".
- (5) When device is rotated: There are two options for rotation settings:
 - a. Rotate the contents of the screen
 - b. Stay in current orientation
- (6) HDMI: HDMI will automatically output when use connect external monitor with HDMI output port.



4.6. Apps

Display installed APKs information.



4.7. Storage

Showing device storage usage in this activity.

If device has plug-in external storage devices (SD card or USB disk), the size of external storage will be list in "Portable storage" below.

4.8. Security

Device administrators

List available device administrators for enterprises and related settings.

Credential storage

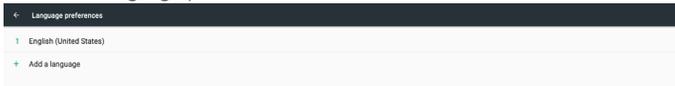
List installed CA certificates pre-install in system. User cannot install user CA certificates.

4.9. Languages & input

User can set system language and change IME settings here.

Languages

Setup system language. The first language list in "Language preferences" is user selected language in first page of OOBE. The first language will be system language and user can change it by re-order language preferences list.



On-screen keyboard enable

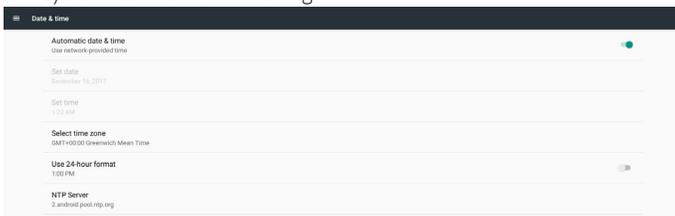
Used to enable/disable system pre-install software keyboard. User can press "menu" 6 times to enable on- screen software keyboard when it is disabled. By default, on-screen keyboard is enabled.

Email auto-complete

Enable auto-complete email text input. If enable, a list of recorded e-mail address will pop up for user selected for faster text input.

4.10. Date & time

System date and time setting.



If "Automatic date & time" is on, system will get date and time from NTP server. If "automatic data & time" is disabled, user can change date and time by "Set date" and "Set time".

User can change time zone in "Select time zone". And use can also change 24-hour format in "1:00 PM" or "13:00".

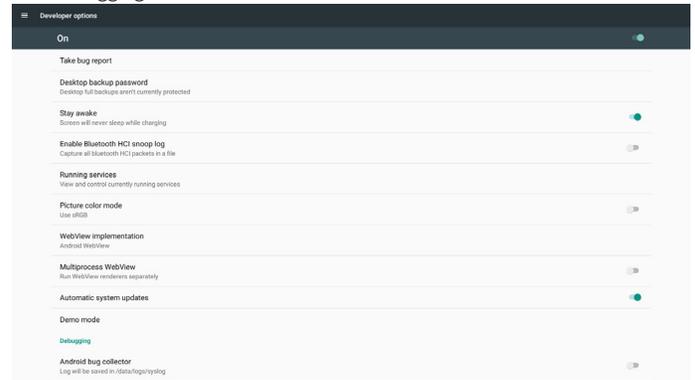
Change NTP Server

Display current NTP server, default is "2.android.pool.ntp.org". User can change system default NTP server by click "NTP Server", then enter the IP address or URL in input text dialog.



4.11. Developer options

Android developer options for developers, default is on and USB debugging is default on.



4.12. About

Following list will be show in Settings -> About

- (1) Status
- (2) Legal information, Open source licenses will be list in here.
- (3) Model name
- (4) Android version
- (5) Kernel version
- (6) Build number



4.13. Supplementary

4.13.1. Quick Info

You can press "Menu + Volume+" to startup quick info.

Quick info will show "Network" and "Monitor Information", as below:

Note:

Operation hours : It is updated every minute.

Heat status : It is updated every 5 seconds.



4.13.2. How to custom an Android boot animation?

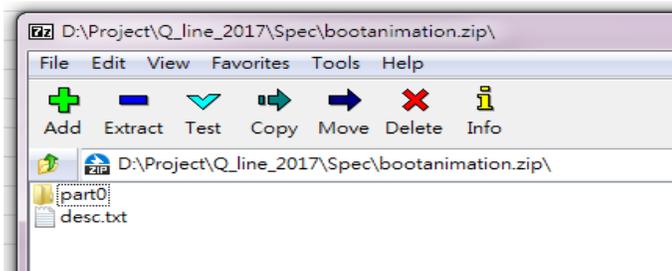
1. Overview

The Android boot animation is used script to load PNG files when the device boots. It is contained within an **uncompressed zip file** called **bootanimation.zip**.

2. Inside the bootanimation.zip file

The bootanimation.zip as follow:

- The image folder (Contains PNG images named in incremental numbers)
- The desc.txt file



(1) The image folder

These contain PNG images named in numbers, starting from something like 0000.png or 0001.png and proceeding with increments of 1. There has to be at least one folder and there is no known upper limit to the number of folders.

(2) The desc.txt file

This file defines how the images in the folder(s) are displayed during the boot animation, in the following format:

- Width Height Frame-rate
- mode Loop delay-time Folder1
- mode Loop delay-time Folder2

An example of a desc.txt file is:

- 1920 1080 30
- p 1 0 part0
- p 0 0 part1

a. The first line

1920 and 1080 define the width and height of the screen resolution.

30 is the frame rate in fps (frames per second) i.e. number of images to display per second.

b. The second and third lines have a same format.

The first 'p' defines play mode is immediately stop playing when boot complete.

The number after 'p' defines repeat mode

- specifying 0 would make the part loop indefinitely till the device has boot complete.
- specifying 1 would make the part playback once.

The next number defines the delay time(ms). For example, if set 10, when all image files has been playback, system will delay 10ms.

The part0 and part1 are image folder name.

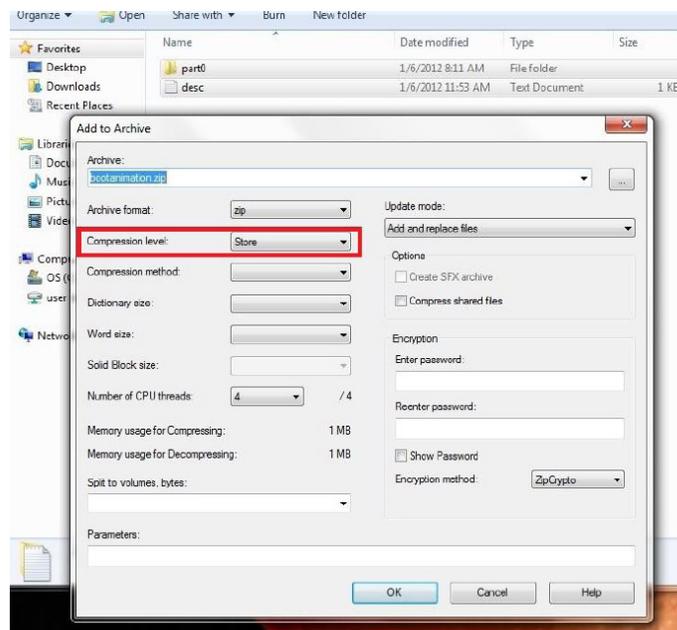
The above example, the boot animation will play at a resolution of 1920 by 1080 pixels, at a frame rate of 30 fps, starting with the contents of part0 folder and after playing them in one loop, switching to contents

of part1 folder and playing them continuously till the device boot complete.

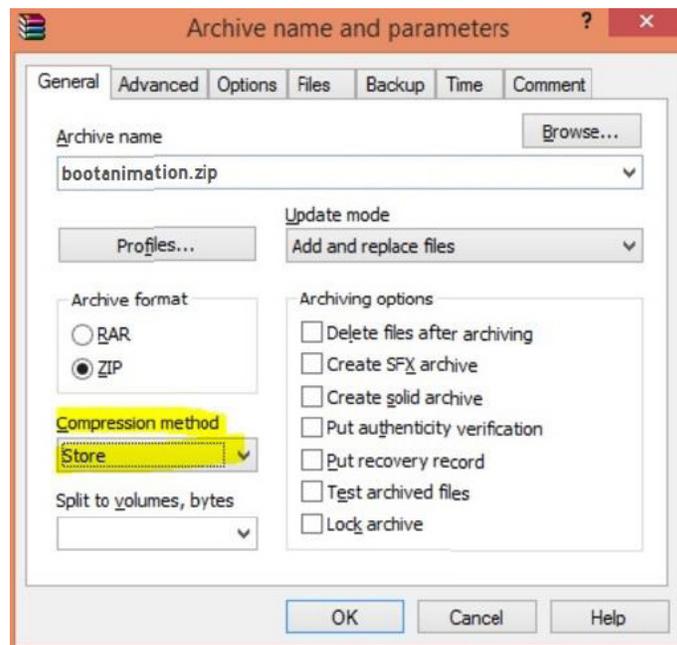
3. Zip file:

Select everything (image folders and desc.txt) inside the Bootanimation folder and zip them into a new **uncompressed zip archive** using your favorite compression utility like 7zip or WinRAR and so on.

If using 7zip, set compression level to "Store"



If using WinRAR, set "Compression method" to "Store"



or else bootanimation WON'T work

4. Apply the custom bootanimation

Procedure:

(1). Put your custom bootanimztion.zip file into external SD card or USB and plug into Phillips PD platform.

(2.) Make sure the Logo option is enabled.

Press Home key on RCU: OSD menu -> Configuration 2 -> Logo -> set "User"

(3.) Press combination key "Menu + Volume-" on RCU to go to Admin mode:

Settings -> Signage Display -> GENERAL SETTINGS -> Boot Logo

(4.) The system will find the bootanimation.zip in external SD card or USB automatically and copy it to /data/local

(5.) Once step 1~4 has been done, restart the system. The new customized boot animation should be displayed during boot time.

For example,

```
Intent intent = new Intent();
intent.setAction("php.intent.action.UPDATE_APK");
intent.putExtra("filePath", "/sdcard/Download/apk_name.apk");
intent.putExtra("keep", true);
intent.putExtra("packageName", "com.example.apk_name");
intent.putExtra("activityName", "com.example.apk_name.MainActivity");
sendBroadcast(intent);
```

4.13.3. How to Install Android app?

There are 3 ways to install your own android app.

(a) Via File Manager in Admin Mode

1. If you have apk already

1.1 Copy your apk to USB disk or SD card, and then plug them into Philips Android Signage Display.

1.2 Go to Admin Mode > Apps > File Manager

1.3 Using File Manager and find out your apk and then you can install. Just press "ok" on the selected apk.

2. Download apk by Chromium browser, and then go to <internal storage path>/Download/ by File Manager.

2.1 The rest of steps is the same as above. Please note, each model may have different <internal storage path>.

(b) Via Adb Shell

1. Make sure that your PC can connect to Philips Android Signage Display using adb.

2. Prepare your apk in a folder (for example, C:\apkfolder) on PC.

3. Execute the following instruction by command line tool.

```
C:\apkfolder> adb install -r apk_name.apk
```

(c) Via Customized Intent

1. If you develop an apk which can download any android app, then your apk can issue a customized intent.

2. Giving the apk name and the path it was stored. The system will help you to install by program.

Description	Intent	Parameters	
Sw Update	php.intent.action.UPDATE_APK	filePath	The absolute file path including the file name.
		Keep	Indicate that you want to keep the file or not after updating. The default value is false.
		packageName	The target package you want to launch automatically after updating.
		activityName	The target activity you want to launch automatically after updating. But if current top activity is not activityName, nothing happened.

5. Supported Media Formats

USB Multimedia Codec Formats

Video Decode						
Type	Video Codec	Container	Decode	Encode	Channel	Remark
MPEG1/2	MPEG1/2	MPEG program stream (.DAT, .VOB, .MPG, .MPEG) MPEG transport stream (.ts) MP4 (.mp4) AVI (.avi) MKV (.mkv)	V			Max Resolution: 1080P@60fps Max Bit Rats : 40Mbps
MPEG-4	MPEG4	MP4 (.mp4) AVI (.avi) MKV (.mkv)	V			Max Resolution: 1080P@60fps Max Bit Rats : 40Mbps
H.263	H.263	FLV (.flv) AVI (.avi)	V			Max Resolution: 1080P@60fps Max Bit Rats : 40Mbps
H.264	H.264	FLV (.flv) MP4 (.mp4) MPEG transport stream (.ts) ASF (.asf) WMV (.wmv) AVI (.avi) MKV (.mkv)	V			Max Resolution: 1080P@60fps Max Bit Rats : 135Mbps 4K2K@30fps
H.265	H.265	MP4 (.mp4) MPEG transport stream (.ts) MKV (.mkv)	V			Max Resolution: 4K2K@60fps Max Bit Rats : 100Mbps
GOOGLEVP8	VP8	MKV (.mkv) WebM (.webm)	V			Max Resolution: 1080P@30fps Max Bit Rats : 20Mbps
Motion JPEG	MJPEG	AVI (.avi) MP4 (.mp4) MKV (.mkv)	V			Max Resolution: 1920*1080 @30fps Max Bit Rats : 40Mbps

Audio Decode

Type	Audio Codec	Container	Decode	Encode	Channel	Remark
MPEG Audio	MPEG1/2/2.5 Audio Layer1/2/3	MP3	V		2	Bit Rate: 8kbps~320Kbps Sampling Rate: 16KHZ~48KHz
Windows Media Audio	WMA Version 7, 8, 9,10 pro M0, 10Pro M1,M10 Pro M2	Decode:WMA	V		2	Bit Rate: 8kbps~768Kbps Sampling Rate: 8KHZ~96(M10)KHz Non-support LBR
AAC Audio	MAIN,ADIF ,ATDS Header AAC-LC and AAC-HE	File Format: AAC, M4A	V		5.1	Bit Rate: N/A Sampling Rate: 8KHZ~48KHz

Image Decode

Type	Image Codec	Photo	Decode	Encode	Channel	Remark
JPEG	JFIF file format 1.02	File Format: JPG, JPEG	V			Max Resolution: 7000 × 7000 The limitation of max resolution depends on DRAM
BMP	BMP	File Format: BMP	V			Max Resolution: 15360 × 8640 The limitation of max resolution depends on DRAM
PNG	PNG	File Format: PNG	V			Max Resolution: 15360 × 8640 The limitation of max resolution depends on DRAM

NOTES:

- Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.
- Video content with a Bit rate or Frame rate larger than the rate specified in the table above can cause choppy video during playback.

6. Input Mode

Timing support:

Item	Mode	Resolution	H.Freq. (KHz)	V.Freq. (Hz)
1	IBM VGA 12H	640x480	31.469	59.94
2	VESA	640x480	37.861	72.809
3	VESA	800x600	35.156	56.25
4	VESA	800x600	37.879	60.317
5	VESA	800x600	48.077	72.188
6	VESA	1024x768	48.363	60.004
7	VESA	1024x768	56.476	70.069
8	CVT 2.3MA	1280 x768	47.776	59.870
9	VESA	1280x1024	63.981	60.020
10	SUN WS	1280x1024	71.691	67.189
11	CVT 2.3MA-R	1920x1080	66.587	59.934
12	VESA Standard VDMTREV	1920x1080	67.5	60.000

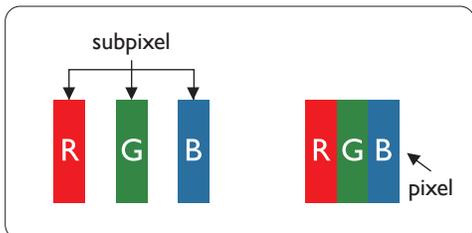
- The PC text quality is optimum in HD 1080 mode (1920 × 1080, 60Hz).
- Your PC display screen might appear different depending on the manufacturer (and your particular version of Windows).
- Check your PC instruction book for information about connecting your PC to a display.
- If a vertical and horizontal frequency-select mode exists, select 60Hz (vertical) and 31.5KHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off (or if the PC is disconnected). If so, press the **[INPUT]** button to enter the video mode. Also, make sure that the PC is connected.
- When horizontal synchronous signals seem irregular in RGB mode, check PC power saving mode or cable connections.
- The display settings table complies to the IBM/VESA standards, and based on the analog input.
- The DVI support mode is regarded as same to the PC support mode.
- The best timing for the vertical frequency to each mode is 60Hz.

7. Pixel Defect Policy

We strive to deliver the highest quality products and use some of the industry's most advanced manufacturing processes whilst practicing stringent quality control. However, pixel or sub-pixel defects on the PDP / TFT panels used in Plasma- & LCD- displays are sometimes unavoidable. No manufacturer can guarantee that all panels will be free from pixel defects, but Philips guarantees that any Plasma- & LCD- displays with an unacceptable number of defects will be repaired during the warranty period in line with your local guarantee conditions.

This notice explains the different types of pixel defects and defines the acceptable defect level for the LCD screen. In order to qualify for repair under warranty, the number of pixel defects must exceed a certain level as shown in the reference table. If the LCD screen is within specification a warranty exchange / claim back will be refused. Additionally, because some types or combinations of pixel defects are more noticeable than others, Philips sets even higher quality standards for those.

7.1. Pixels and Sub-Pixels



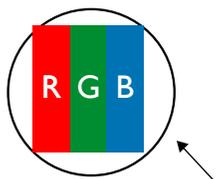
A pixel, or picture element, is composed of three sub-pixels in the primary colors of red, green and blue. Many pixels together form an image. When all sub-pixels of a pixel are lit, the three colored sub-pixels together appear as a single white pixel. When all are dark, the three colored sub-pixels together appear as a single black pixel. Other combinations of lit and dark sub-pixels appear as single pixels of other colors.

7.2. Types of Pixel Defects + Dot Definition

Pixel and sub-pixel defects appear on the screen in different ways. There are three categories of pixel defects and several types of sub-pixel defects within each category.

Dot definition = What is a defective “Dot”? :

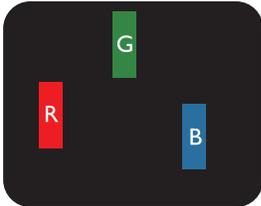
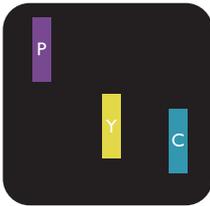
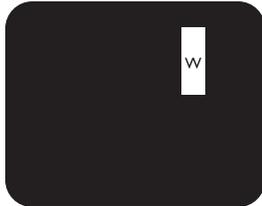
One or more defective, adjacent sub-pixel are defined as one “dot”. The no. of defective sub-pixels are not relevant to define a defective dot. This means that a defective dot can consist of one, two or three defective sub-pixels which can be dark or lit.



One dot = One Pixel; consists of three sub-pixels of Red, Green, and Blue.

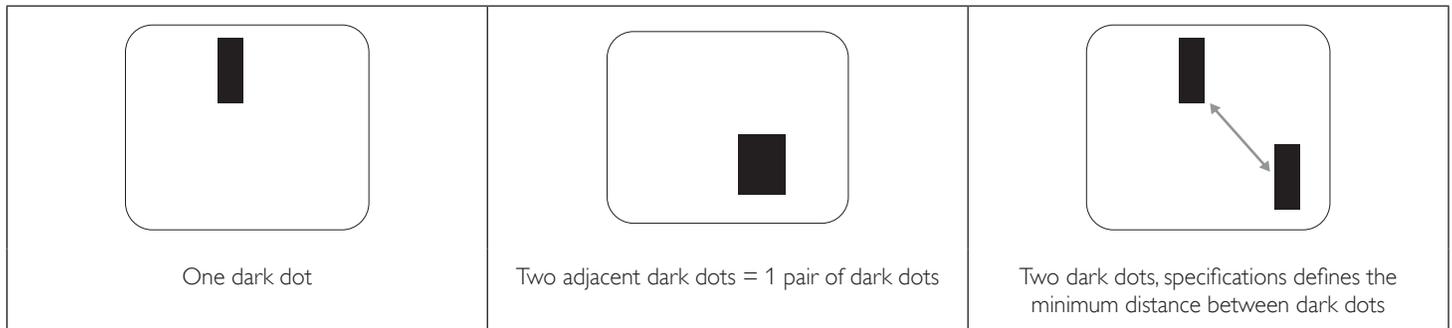
7.3. Bright Dot Defects

Bright dot defects appear as pixels or sub-pixels that are always lit or “on”. These are the examples of bright dot defects:

 <p>One lit red, green or blue sub pixel</p>	 <p>Two adjacent lit sub pixels: Red + Blue = Purple Red + Green = Yellow Green + Blue = Cyan (Light Blue)</p>	 <p>Three adjacent lit sub pixels (one white pixel)</p>
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7.4. Dark Dot Defects

Black dot defects appear as pixels or sub-pixels that are always dark or "off". These are the examples of black dot defects:



7.5. Proximity of Pixel Defects

Because pixel and sub-pixels defects of the same type that are nearby one another may be more noticeable, Philips also specifies tolerances for the proximity of pixel defects. In the table below you can find specifications about:

- Allowed amount of adjacent dark dots = (adjacent dark dots = 1 pair of dark dots)
- Minimum distance between dark dots
- Total no. of all defective dots

7.6. Pixel Defect Tolerances

In order to qualify for repair due to pixel defects during the warranty period, a PDP / TFT panel in a Philips Plasma / LCD- display must have pixel or sub-pixel defects exceeding the tolerances listed in the following table.

BRIGHT DOT EFFECT	ACCEPTABLE LEVEL
1 lit sub pixel	2
BLACK DOT EFFECT	ACCEPTABLE LEVEL
1 dark sub pixel	10
TOTAL DOT DEFECTS OF ALL TYPES	12

NOTE: * 1 or 2 adjacent sub pixel defects = 1 dot defect

7.7. MURA

Dark spots or patches may occasionally appear on some liquid crystal display (LCD) panels. This is known within the industry as Mura, which is a Japanese term for "unevenness." It is used to describe an irregular pattern or area in which uneven screen uniformity appears under certain conditions. Mura is a result of the deterioration of the liquid crystal alignment layer and is most commonly caused by long-term operation under high ambient temperatures. It is an industry- wide phenomenon and Mura is not repairable. It is also not covered by our warranty terms.

Mura has been around since the introduction of LCD technology and with screens getting bigger and in operation 24/7, many displays are running in low light conditions. This all adds to the possibility of Mura affecting displays.

HOW TO SPOT MURA

There are many symptoms of Mura and also multiple causes. Several of these are listed below:

- Impurities or foreign particles in the crystal matrix
- Uneven distribution of LCD matrix during manufacturing
- Non-uniform luminance distribution of the backlight
- Panel assembly induced stress
- Flaws within the LCD cells
- Thermal induced stress - high temperature operation over long periods of time

HOW TO AVOID MURA

Although we can not guarantee the complete eradication of Mura every time, in general the appearance of Mura can be minimized by these methods:

- Lower the backlight brightness
- Use a screen saver
- Reduce the ambient temperature around the unit

8. Cleaning and Troubleshooting

8.1. Cleaning

Caution When Using the Display

- Be sure to disconnect all cables before moving the monitor. Moving the monitor with its cables attached may damage the cables and thus cause fire or electric shock.
- Disconnect the power plug from the wall outlet as a safety precaution before carrying out any type of cleaning or maintenance procedure.

Front Panel Cleaning Instructions

- The front of the display has been specially treated. Wipe the surface gently using only a cleaning cloth or a soft, lint-free cloth.
- If the surface becomes dirty, soak a soft, lint-free cloth in a mild detergent solution. Wring the cloth to remove excess liquid. Wipe the surface of the display to remove dirt. Then use a dry cloth of the same type to dry.
- Do not scratch or hit the surface of the panel with fingers or hard objects of any kind.
- Do not use volatile substances such as insect sprays, solvents and thinners.

8.2. Troubleshooting

Symptom	Possible Cause	Remedy
No picture is displayed	1. The adapter is disconnected. 2. The monitor is standby mode	1. Make sure the power LED is green. Or plug in the adapter. 2. Menu + Menu + Volume- + Volume-, turn on the screen.
HDMI output is abnormal	1. HDMI cable is not connected properly. 2. The External device is abnormal.	1. Make sure the HDMI cables attached firmly. 2. Check the external device is ok
Micro USB HOST & Type A USB HOST & LAN interface is abnormal.	1. USB cable or output device is abnormal. 2. The cable is not connected properly.	1. Make sure USB Cable or output device is ok. 2. make sure the cable is connected properly and the RJ45 interface LED is green.
Can't read USB device and SD card.	The USB device and SD card is disabled.	Press "MENU" button, choose "setting" to enable the function.
The screen display normal but can't use touch function.	Touch function is disabled.	Menu + Menu + Volume+ + Volume- + Volume- + Volume+, enable touch function.

9. Technical Date

9.1. Specifications

Display:

Item	Specifications
Screen Size (Active Area)	521.28 (H) x 293.22 (V) mm
Aspect Ratio	16:9
Number of pixels	1920 (H) x 1080 (V)
Displayable colors	16.7M colors (6-bit +Hi-FRC)
Brightness (typical)	250 cd/m ²
Contrast ratio (typical)	1000:1
Viewing angle	Up 80 / Down 80 / Left 85 / Right 85 (typ) @ CR ≥10

In/Out Terminals:

Item	Specifications	
Input Signal	VIDEO	HDMI x1 (with HDCP)
	LAN	RJ-45 (10/100/1000 Base-T) (With PoE)
Output Signal	VIDEO	HDMI x1 (Android system output)
	AUDIO	Earphone out
Internal Speaker	2W + 2W	
Touch panel	Yes (Capacitive 10 points)	
USB Multi Media Function	Yes	

General:

Item	Specifications
Power Input	100 - 240V~, 50 - 60Hz, 1.5A
Power Input PoE	44 - 57V DC, 1.2A (POE)
Power Consumption (Max)	45 W
Power Consumption (typ.)	25 W
Power Consumption (AC Off)	0 W
Dimensions (Without Stand) [W x H x D]	566.5mm x 361.1mm x 49.2mm
Weight (Without Stand)	4.7 Kg
Gross Weight (Without Stand)	7.2 Kg

Product Fiche :

Item	Specifications
Energy Efficiency Class	A
Visible Screen Size	521.28 (H) x 293.22 (V) mm
On Mode Power Consumption (W)	24 W
Annual Energy Consumption (kWh)	35 kWh
AC Off Mode Power Consumption (W)	0 W
Display Resolution (Pixels)	1920 x 1080

Environmental Condition:

Item		Specifications
Temperature	Operational	0 ~ 40°C
	Storage	-20 ~ 60°C
Humidity	Operational	20 ~ 80% RH (No condensation)
	Storage	10 ~ 90% RH (No condensation)
Altitude	Operational	0 ~ 3,000 m
	Storage / Shipment	0 ~ 9,000 m

9.2. Disclaimer**Image Retention Disclaimer**

When an image is monitored on-screen for prolonged periods of time, you may see a faint image after it is replaced. This is expected normal behavior for monitors.

Image retention may be reduced by:

- * Avoiding still images shown on-screen for more than a few minutes
- * Using non-contrasting colors and brightness
- * Using background colors other than gray



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