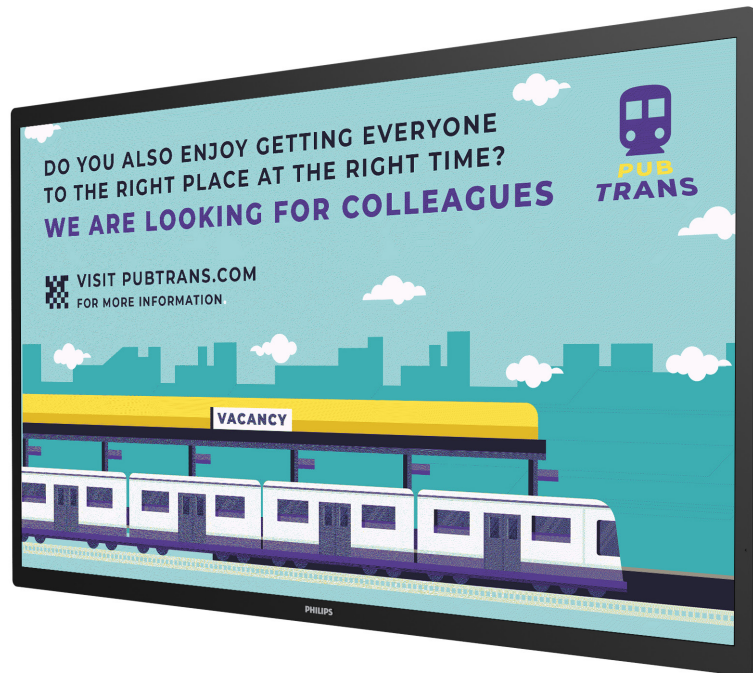


PHILIPS

ePaper Display

5000 Series Tableaux

32BDL5150I



User Manual (English)

Safety Instructions

Warnings and Precautions

KNOW THESE SAFETY SYMBOLS



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates high voltage is present inside. It is dangerous to make any kind of contact with any inside part of this product.



The electronic paper screen is composed of plastic film and ultra-thin glass, which is different from the LCD screen normally used. It cannot withstand any external impact, such as single-point or heavy object pressure, which may cause damage or breakage of the screen; please pay special attention to its use. The warranty does not cover screen breakage.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

CAUTION: FCC/CSA regulations state that any unauthorized changes or modifications to this equipment may void the user's authority to operate it.

CAUTION: To prevent electric shock, match the wide blade of plug to the wide slot, and fully insert the plug.

TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The Socket-outlet should be installed near the apparatus and be easily accessible.



Read and follow these instructions when connecting and using your ePaper 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.
- Keep the display away from oil, otherwise the plastic cover may be damaged.
- Remove any object that could fall into the vents or prevent proper cooling of the display's electronics.
- Keep the display dry. To avoid electric shock, do not expose it to rain or excessive moisture.
- If turning off the display by detaching the power cable, wait for 6 seconds before re-attaching the power cable 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.
- Display performance maintain
- **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 Microcapsule 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.

Panel Cosmetic Defects and Classification

Unless otherwise agreed by E Ink in writing, the cosmetic defects solely mean the items listed below.

(1)Major Defects:

Item	Description	Classification.
No display	No display show on screen due to malfunction	Major
Abnormal display	Unusual pattern or function displayed	Major

(2)Minor Defects:

(a) General Minor Defects

Item		Criteria		Specific Zone	
Name	Causes				
Spot	spot in module	Spot Size		A Zone	B Zone
		$D \leq 0.65 \text{ mm}$		Ignore	Ignore
		$0.65 \text{ mm} < D \leq 1 \text{ mm}$		≤ 4	
		$D > 1.0 \text{ mm}$		0	
Scratch or line defect	Scratch on module	Length	Width	A Zone	B Zone
		$L \leq 2.0 \text{ mm}$	$W \leq 0.2 \text{ mm}$	Ignore	Ignore
		$2.0 \text{ mm} < L \leq 10 \text{ mm}$	$0.2 \text{ mm} < W \leq 0.5 \text{ mm}$	≤ 8	
		$L > 10 \text{ mm}$	$W > 0.5 \text{ mm}$	0	
Air bubble	Air bubble	$D1, D2 \leq 0.5 \text{ mm}$		Ignore	Ignore
		$0.5 \text{ mm} \leq D1, D2 \leq 1.5 \text{ mm}$		≤ 4	
		spacing $> 40 \text{ mm}$			
		$D1, D2 > 1.5 \text{ mm}$		0	

Remarks:

- Back plant cosmetic is neglectable.
- Spot define: That only can be seen under test pattern.
- Any defects must be judged by OM.
- Here is definition of the "Spot" and "Scratch or line defect".
Spot: $W > 1/4L$
Scratch or line defect: $W \cong 1/4L$
- Definition for L/W and D (major axis)

**UI design notice**

1. Display performance maintain
 - The display performance of EPD/ESL is not affected by the placement angle.
 - If the Module is not refreshed every 24 hours a phenomena known as "Image Sticking/Ghosting" may occur especially to pattern with clear edge, and it is IRREVERSIBLE. It is recommended that the module should be shipped and stored with a completely white image to avoid this effect. In application, it is also recommended to refresh image every 24 hours in use with a number of "clean image". In addition, it is suggested to design battery low power detection and automatically update image to full white when running out of battery power.
2. Power Source(battery) Lifetime Extension
 - For extending power source(battery) lifetime without affecting display performance, it is recommended customers can refresh image every 72 hours longest.

Environmental absolute ratings

Item	Min.	Max.	Unit
Storage temperature	-25	60	°C
Operation temperature (POE power supply)	0	50	°C
Operation temperature (Battery power supply & Adapter power supply)	0	40	°C
Glass Surface temperature (Operation)	0	65	°C
Storage humidity	5	95	% RH
Operating humidity	20	80	% RH

- Please confirm that the power distribution system installed in the building provides a circuit breaker for a rated voltage of 120/240V and a maximum of 20A.
- If provided with a 3-pin attachment plug on the power cord, plug the cord into a grounded (earthed) 3-pin outlet. Do not disable the power cord grounding pin, for

example, by attaching a 2-pin adapter. The grounding pin is an important safety feature.

- **Stability Hazard.**

The device may fall, causing serious personal injury or death. To prevent injury, this device must be securely attached to the floor/wall in accordance with the installation instructions.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Read all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

WARNING: Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

WARNING: The batteries (batteries not included in the package contents) shall not be exposed to excessive heat such as sunshine, fire or the like.

WARNING: The mains plug or appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

WARNING: To prevent the spread of fire, keep candles or other open flames away from this product at all times.



WARNING: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

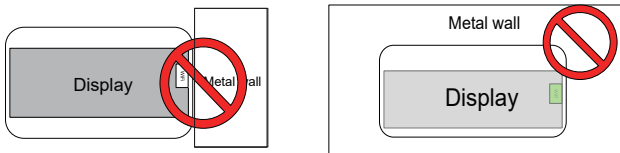
CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

CAUTION: Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphone and headphone output voltage and the sound pressure level. Therefore, to protect your hearing, adjust the equalizer to an appropriate level.

Important information

Never place a Display in an unstable location. A Display may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the Display.
- Only using furniture that can safely support the Display.
- Ensuring the Display is not overhanging the edge of the supporting furniture.
- Not placing the Display on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the Display to a suitable support.
- Not placing the Display on cloth or other materials that may be located between the Display and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the Display or its controls.
- Do not place the side Wi-Fi near any metal objects or metal walls. If the side Wi-Fi needs to be placed beside a metal object or metal wall, please keep a distance of at least 1.2 meters. Do not place it in front of any metal object, metal wall or metal desk. If it is placed directly in front of a metal object or against a metal wall, please keep a distance of at least 1.2 meters.



- It is recommended to place the router behind the electronic screen without any metal or solid wall in the middle.

- "Burn-in" may appear if the screen is not refreshed for a long time, and it is recommended to refresh the screen at least once every 24 hours.
- The optical values of EPD will be different in the temperature ranges of 0~50°C, resulting in slight discoloration of the displayed color, which belongs to the EPD characteristics with high sensitivity to temperature. It is normal that the temperature change picture will have color differences in a short time, and will not have adverse effects on the functional operation of the whole machine.
- It is recommended to refresh the screen to a white screen when not in use or stored for a long time to avoid burn-in.

Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Battery abuse or mishandling can cause overheating, liquid leakage, or an explosion.

To avoid possible injury, follow these instructions:

DO NOT open, disassemble, or service any battery.

DO NOT crush or puncture the battery.

DO NOT short-circuit the battery, or expose it to water or other liquids.

DO NOT dispose of in fire.

Do NOT use another type of battery to replace the batteries.

Do NOT attempt to charge the battery with the device.

Do NOT mix to use the old and new batteries.

Keep away from children.

Batteries are to be inserted with the correct polarity.

Exhausted batteries or not using equipment for a long time, must be removed the batteries from the product.

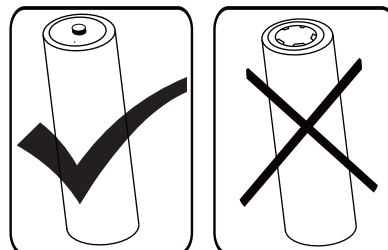
After replacing the batteries, ensure that the battery compartment cover is locked.

Stop using the battery if it is damaged, or if you notice any discharge or the buildup of foreign materials on the battery leads.

Do not put the battery in trash that is disposed of in landfills. When disposing of the battery, comply with local ordinances or regulations.



Please use 18650 batteries with a maximum length of 67mm.



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

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

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC / ISED's licence-exempt RSSs 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.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée 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.

FCC/ISED/CE-RED 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.

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.

EU Declaration of Conformity/UK 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), ErP directive (2009/125/EC).The Radio Equipment Directive(2014/53/EU) or Radio Equipment

Regulations 2017(for UK). The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the Radio Equipment Directive.

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 are listed below:

2400-2483.5MHz: < 20 dBm (EIRP) (for 2.4G product only)

5150-5250MHz: < 23 dBm (EIRP)

5250-5350MHz: < 23 dBm (EIRP)

5470-5725MHz: < 30 dBm (EIRP)

5725-5825MHz: < 13.98 dBm (EIRP)

The device is restricted to indoor use only when operating in the 5150 to 5350MHz frequency range. (for 5G product only)

	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(NI)
	UK						

中国 RoHS

根据中国大陆《电器电子产品有害物质限制使用管理办法》，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	○	○	○	○	○	○
电子墨水屏	X	○	○	○	○	○
电路板组件 *	X	○	○	○	○	○
电源适配器	X	○	○	○	○	○
电源线 / 连接线	X	○	○	○	○	○

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。

O: 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。

X: 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）。



环保使用期限

在产品本体上标示的该标志表示环境保护使用期限为 10 年。

电子信息产品的环境保护使用期限是指电子信息产品中所含的有害物质不会向外部泄漏或出现突然变异，并且电子信息产品的用户在使用该电子信息产品时也不会对环境造成严重污染或对人体、财产带来严重损害的期限。

在环境保护期限内，请按照使用说明书使用本产品。

本环境保护使用不覆盖易损件：电池。

《废弃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，不当利用或者处置可能会对环境和人类健康造成影响。

中国 RoHS 合格评定制度标识

为从源头上限制电器电子产品有害物质使用，减少产品废弃后对环境造成的污染，增加绿色产品供给，促进绿色消费，本产品满足《电器电子产品有害物质限制使用管理办法》引用的相关标准要求；根据《电器电子产品有害物质限制使用合格评定制度实施方案》之规定，采用符合性申明之合格评定方式，按规定要求使用如下合格评定标识：



仅适用于非热带气候条件下安全使用：

仅适用于非热带气候条件下安全使用。

“注意
如果电池更换不当会有爆炸危险
只能用同样类型或等效类型的电池来更换”

“接入本设备的有线网络天线必须与保护接地隔离，不然可能会引起着火等危险！”

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。

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.

Taiwan:

低功率電波輻射性電機管理辦法

取得審驗證明之低功率射頻器材，非經核准，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。低功率射頻器材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。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材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。

在 5.25-5.35 赫赫頻帶內操作之無線資訊傳輸設備，限於室內使用。應避免影響附近雷達系統之操作。

高增益指向性天線只得應用於固定式點對點系統。

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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:

- ePaper Display
- Quick start guide
- Power cord
- Adapter
- Philips logo plate



ePaper Display



Quick start guide



Power Cord



Adapter



Philips logo plate

* Items may differ in different locations

* Display design and accessories may differ from the images shown.

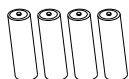
NOTES:

- The RTC battery (coin/button CR2032) are intended to be installed (and replaced) by the user, please ensure use the correct battery:

Type / model	Technical data
CR2032	Rated 3 V, Max Abnormal Charging Current 10 mA.
NCR18650GA	Capacity: 3200mAh
NCR18650BD	Nominal voltage: 3.6V Charging: Std. 1625mA, 4.20V Temperature: Charging: 0-45°C, Discharging: 0-60°C.



CR2032 Lithium Battery
(Not provided)



18650 Lithium Battery
(Not provided)

- The adapter is only used for this display, and cannot be used for other purposes.
Your device uses one of the following power supplies:

Type / model	Technical data
ADPC2045	INPUT: 100-240V~ 1.5A 50-60Hz OUTPUT:45.0W 20.0V == 2.25A

- 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.
- Keep the packaging materials appropriately after unpacking the product.

WARNING

- **WARNING:** The device contains a coin/button/small-sized cell battery. Do not ingest the battery, as it may result in chemical burns.
- If the coin/button/small-sized cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
- **CAUTION:** Risk of fire or explosion if the battery is replaced with an incorrect type of battery.
- Do not expose batteries to high temperatures or around sources of heat, such as sunlight, heaters, microwave ovens, ovens, or water heaters. Overheating of the battery may cause an explosion.
- Do not throw the battery into a fire. Otherwise, the battery may catch fire or explode.
- Do not drop, squeeze, or puncture the battery. Avoid external pressure, which may cause internal short circuits and overheating.

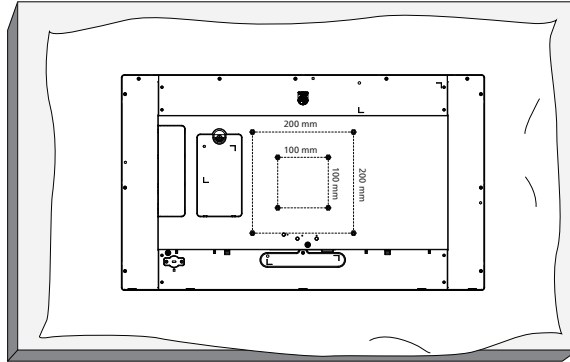
- Do not disassemble or modify the battery, insert foreign objects, or immerse the battery in water or other liquids to avoid battery leakage, overheating, fire, or explosion.
- Dispose of batteries in accordance with local regulations. Do not dispose of batteries as domestic waste. Improper handling of the battery may cause the battery to explode.

1.3. Installation Notes

- Only use the power cable and adapter provided with this product. If an extension cord is required, please consult your service agent.
- The product should be installed on a flat surface, or the product may tip over. Leave a space between the rear of the product and the wall for proper ventilation. Do not install the product in a kitchen, bathroom or a place exposed to moisture, failure to do so may shorten the life of the internal parts.
- Do not install the product where it is 3,000m and higher in altitude. Failure to do so may result in malfunctions.

1.4. Mounting on a Wall (Optional)

To mount this display on a wall, a standard wall-mounting kit (commercially available) is required. It is recommended that you use a mounting interface that complied with TUV-GS and /or UL1678 standard in North America.



1. Prepare a flat and horizontal surface that is larger than the display and spread a thick protective sheet on it to facilitate your operation without scratching the screen.
2. Ensure you have all accessories for all types of mounting (wall mount, ceiling mount, table stand, etc).
3. Follow the instructions that came with the base mounting kit. Failure to follow the correct mounting procedures could result in damage to the equipment, or injury to the user or installer. The product warranty does not cover the damage caused by improper installation.
4. For the wall-mounting kit, use the M4 mounting screws (with a length 10 mm longer than the thickness of the mounting bracket) and tighten them securely.

1.4.1. VESA Grid

100(H) x 100(V) mm (M4 mounting screws with a length 10 mm longer than the thickness of the mounting bracket) 200(H) x 200(V) mm (M4 mounting screws with a length 10 mm longer than the thickness of the mounting bracket)
--

Caution:

To prevent the display from falling:

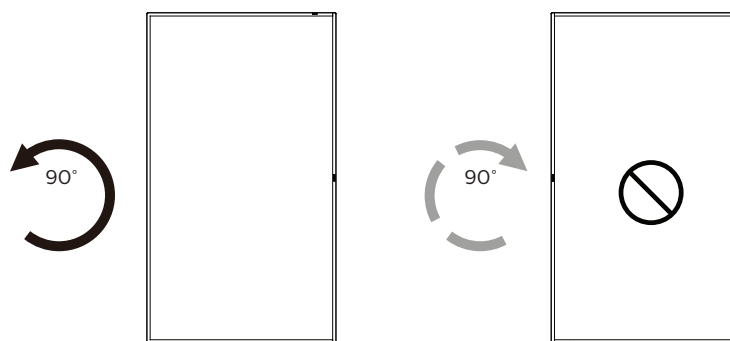
- For wall or ceiling mounting, we recommend that you install the display with metal brackets which are commercially available. For detailed instructions about the installation, refer to the guide provided with the bracket.
- To prevent the display from falling in case of earthquake or other natural disaster, please consult the manufacturer of the bracket for the mounting location.

1.5. Mounting in Portrait Orientation

This display can be installed in portrait orientation.

Rotate the display 90 degrees counterclockwise. The "PHILIPS" logo should be on the right side when facing the display.

NOTE: The working hour in portrait mode is 24 hours per day.

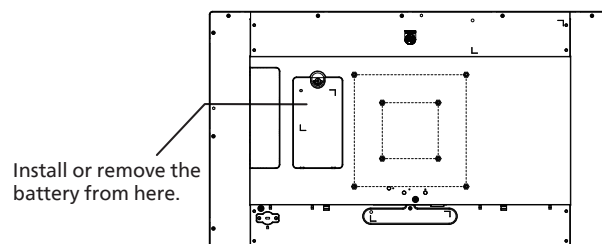


1.6. Battery installation and removal method (optional)- For service personnel only

- 1) Remove the battery cover.
- 2) Pay attention to the direction of the battery panel, and install or remove the battery.

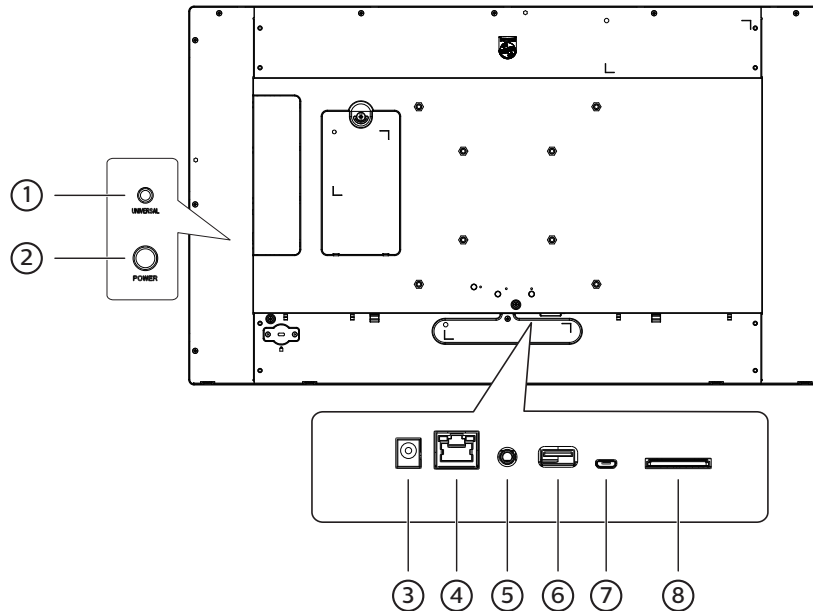
Warning:

- 1) The batteries are intended to be replaced or charged only by authorized service personnel (for example, the manufacturer or personnel authorized by the manufacturer).
- 2) Please use 18650 batteries with a maximum length of 67mm. Using longer batteries may damage the battery holder.
- 3) The battery compartment is not intended to be user accessible. Battery compartment is only accessible with a tool.
- 4) Users cannot replace the battery.
- 5) Disposing of a battery by placing it in fire or a hot oven, or mechanically crushing or cutting it, can result in an explosion. Leaving a battery in an environment with extremely high temperatures can also lead to an explosion or the leakage of flammable liquid or gas. Subjecting a battery to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.



2. Parts and Functions

Introduction to the terminals



① Universal key

Press the UNIVERSAL key to pause the picture (that is, stay at the current picture and not show the next one). Press it again to continue displaying the next pictures.

② Power key

Turn the main power on or off. Long press the power key for 2 seconds to start the device; long press the power key for about 4 seconds to shut down the device, and the LED light will be off.

Note: When using the power adapter, power on directly, when using 18650 battery (optional) for power supply, press the power key to start the machine.

③ DC input

DC power input from the power adapter.

④ LAN

LAN W/POE: Internet and PoE function.

*The protocol version number for POE power supply is IEEE 802.3bt.

⑤ AUDIO OUT

Audio output for external AV device.

⑥ USB 2.0 port

Connect to usb storage device and service port

⑦ MICRO USB port

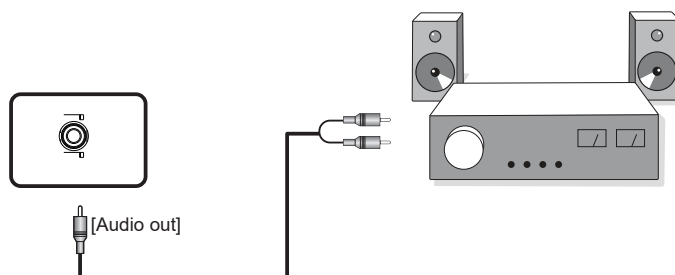
Insert a Micro USB.

⑧ SD card

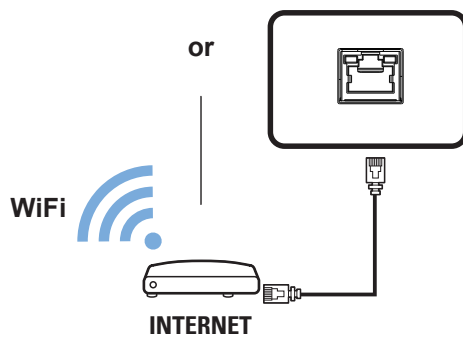
Insert a SD card.

3. Connecting External Equipment

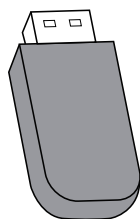
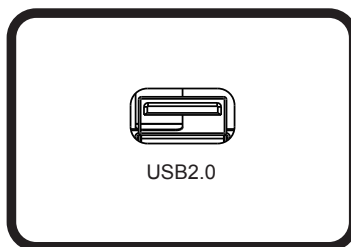
3.1. Connecting audio devices



3.1.1. Using network interface



3.2. Connect USB



4. Operation Guide for Local Carousel Application

4.1. Picture requirements

1. bmp, png, jpg, jpeg and webp formats are supported.
2. Resolution: in Landscape the supported picture resolution is 2560 x 1440 pixels, and in Portrait the supported picture resolution is 1440 x 2560 pixels.
3. If the resolution of the uploaded picture is different from the screen resolution, it can still be displayed. When the image resolution is larger than the screen resolution, it will automatically be downscaled to fit the screen resolution. When the image resolution is smaller than the screen resolution, it will NOT be upscaled to the screen resolution but will keep its original size.
Not automatically upscaling smaller (than screen resolution) images is intended behavior in order to be able to only change a specific part of the screen and avoid a complete new screen refresh. See also under 4.4 (Customize the carousel profile: config.xml content).

4.2. Copy pictures

Note: USB flash disk and SD card only support FAT32 format.

Copy pictures from a USB flash disk or SD card:

1. Copy the pictures into the Pictures file directory under the USB disk or SD card root directory. For example {root dir of storage}/Pictures/.
2. Insert the USB disk or SD card with the pictures ready into the EPD platform and power cycle the display .
3. After restarting, the application will delete the original pictures directory first, and then copy all the files in the pictures directory of the USB disk or SD card to the EPD.
4. Prompt after copying is completed: Remove USB and restart it.
5. Reboot the device. The local carousel application is started by default after the device is booted. The carousel will start if there are pictures in the picture directory.

Copy pictures from a PC:

1. Turn on the EPD and connect it to the computer.
2. Operate on the computer; enter the directory: ePaper Signage -> Internal shared storage -> Pictures.
3. Copy the pictures to be carouselled to the picture directory above.
4. Disconnect the cable between the EPD and the computer.
5. Reboot the device. The local carousel application is started by default after the device is booted. The carousel will start if there are pictures in the picture directory.

4.3. Start picture carousel

1. If a power adapter is used, insert the EPD power cord, and the device will boot automatically. If the battery is used, press and hold the power key for 2 seconds to start the device after the battery is put in.
2. After starting, the carousel of the pictures in the picture directory will automatically start playing.

4.4. Carousel function setting

To change the carousel settings, add the config.xml file (together with pictures) when copying the pictures.

If the config.xml file is not added, the default settings will be used for the carousel.




Default carousel settings:

- The device will enter sleep mode after displaying the pictures.
- The picture is displayed from the bottom left corner of the screen.
- The picture display interval is 150 seconds.

Customize the carousel profile:

- Follow this format for the config.xml content:

```
<?xml version="1.0"?>
<epd_config>
  <sleep on="1"></sleep>
  <interval second="150"></interval>
  <remember on="1"></remember>
  <rotate degree="0"></rotate>
  <image path="img1.bmp" x="0" y="0"></image>
  <image path="img2.bmp" x="0" y="0"></image>
  <image path="img3.bmp" x="0" y="0"></image>
</epd_config>
```

Tag	Properties	Value	Description
sleep	on	"0":	The EPD device does not enter sleep mode (higher power consumption)
		"1" (Default)	The EPD device will enter sleep mode after displaying the pictures (lower power consumption)
interval	second	(user input) Default: 150	<ul style="list-style-type: none"> The interval between the completion of a picture display and the start of the next picture display. This value must be at least 150. It is recommended that the interval should not exceed 24 hours.
remember	on	"0"	Turn off the memory function and reboot the EPD device to display the first picture.
		"1" (Default)	Turn on the memory function, and the EPD device will continue to display the next picture after reboot.
rotate	degree	"0" (Default)	Display picture rotated by 0 degrees. 
		"180"	Display picture rotated by 180 degrees. 
		"auto"	Display picture automatically rotated by 0 or 180 degrees.
image	path	(user input)	Picture name (with extension)
	x	(user input) Default: 0	Abscissa of starting position for picture display.
	y	(user input) Default: 0	Ordinate of starting position for picture display. 

4.5. Indicator

- Booting: Flashing green
- Booting completed: Solid blue
- After the screen is ready to be refreshed until the refresh is completed: Flashing blue
- Sleep/Shut down: Off
- The battery is less than 15%: The red light flashing means the battery needs to be replaced.
- The red light will flash three times and then turn off after the device is booted: The battery is low and needs to be replaced.

5. Cleaning and Troubleshooting

5.1. 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 insert sprays, solvents and thinners.

Cabinet Cleaning Instructions

- If the cabinet becomes dirty, wipe the cabinet with a soft, dry cloth.
- If the cabinet is extremely dirty, soak a lint-free cloth in a mild detergent solution. Wring the cloth to remove as much moisture as possible. Wipe the cabinet. Use another dry cloth to wipe over until the surface is dry.
- Do not use solution that contains oil to clean the plastic parts. Such product damage the plastic parts and void the warranty.
- Do not allow any water or detergent to come into contact with the surface of the display. If water or moisture gets inside the unit, operating problems, electrical and shock hazards may result.
- Do not scratch or hit the cabinet with fingers or hard objects of any kind.
- Do not use volatile substances such as insert sprays, solvents and thinners on the cabinet.
- Do not place anything made from rubber or PVC near the cabinet for any extended periods of time.

5.2. Troubleshooting

Problem	Possible reason	Solution
No screen update.	<ol style="list-style-type: none"> 1. The power cord is disconnected or the battery may be dead. 2. The main power switch is not turned on. 	<ol style="list-style-type: none"> 1. Replace four fully charged batteries or plug in the power cord. 2. Please press the power key.
Unable to boot.	<ol style="list-style-type: none"> 1. The battery may be dead. 2. The power cord may be abnormal. 3. The incorrect booting may be due to the micro USB being plugged in first. 	<ol style="list-style-type: none"> 1. Replace four fully charged batteries or plug in the power cord. 2. Confirm the connection between the power adapter and the wire socket. 3. Please unplug the wire and power supply (battery and power cord) connected to the PC first, wait 40 seconds, and then connect the power cord (if the battery is inserted, press the power key again).
Abnormal picture.  0% Battery drain out Shutdown	The battery may be dead.	Replace four fully charged batteries or plug in the power cord.
A prompt will display after booting: Please plug-in flash drive and reboot Flash drive file path: /Pictures/	There is no picture in the device or the picture format is not supported.	Recopy pictures.
When copying pictures from a USB flash disk or SD card, the screen will display the prompt: Please fix the following errors, reinsert flash drive and reboot: - "0. jpg" : Image does not exist.	The picture in config.xml does not exist or the picture format is not supported.	Confirm that the picture name in config.xml is correct (including the file extension), and copy the picture again.
During the carousel, the screen displays the prompt: Pictures/2.jpg Image file does not exist.	The picture does not exist or the picture format is not supported.	Confirm that the picture format is correct, and copy the picture again.
During the carousel, the screen displays the prompt: Pictures/2.jpg Display area is outside of the EPD panel.	The starting x and y positions of the picture in config.xml are greater than or equal to the screen pixel size.	Adjust the x and y positions of the picture in config.xml to be smaller than the screen pixel size.
During the carousel, the screen displays the prompt: There are some problems with the images. Please make sure the images are all correct and copy again.	All pictures in the device are damaged or the format is not supported.	Recopy pictures.
The displayed picture does not fill the entire screen.	The picture resolution is different from the screen pixel size.	Adjust the picture resolution to be the same as the screen pixel size, and copy the picture again.

<p>The corner of the screen displays 'Battery Low'. (The horizontal screen of the machine is displayed in the bottom left corner, and the vertical screen is displayed in the top left corner.)</p> 	<p>Battery level below 15%.</p>	<p>Replace four fully charged batteries or plug in the power cord.</p>
<p>The corner of the screen displays 'Overheating'. (The horizontal screen of the machine is displayed in the bottom left corner, and the vertical screen is displayed in the top left corner.)</p> 	<p>The ambient temperature is above 50°C.</p>	<p>Place the machine in an environment that meets the operating temperature range.</p>
<p>The corner of the screen displays 'Temp Low'. (The horizontal screen of the machine is displayed in the bottom left corner, and the vertical screen is displayed in the top left corner.)</p> 	<p>The ambient temperature is below 0°C.</p>	<p>Place the machine in an environment that meets the operating temperature range.</p>

6. Technical Specifications

Display

Item	Specifications
Screen Size (Active Area)	696.32 (H) x 391.68 (V)mm
Aspect Ratio	16:9
Number of pixels	2560 (H) x 1440 (V)
Pixel pitch	0.272 (H) x 0.272 (V) [mm]

In/Out Terminals:

Item	Specifications
Audio Output (3.5mm phone jack x 1)	0.5V [rms] (Normal) / 2 Channel (L+R)
USB	USB Type-A 2.0X1, Micro USB 2.0 (non- support OTG)X1

General:

Item	Specifications
Power Input	20.0V \pm 2.25A
Power Consumption (Typ.)	8.3 W (Average during picture update only)
Power Consumption (Standby & Off)	<0.5 W
AC Switch Off Mode (W)	0
Dimensions (Without Stand) [W x H x D]	718.7 x 426.9 x 37.5
Weight	3.2kg (Without battery)
Display Resolution (Pixels)	2560 (H) x 1440 (V)

Environmental Condition:

Item		Specifications
Temperature	Operational	0~ 50°C (POE power supply) 0~ 40°C (Battery power supply & Adapter power supply)
	Storage	-25 ~ 60°C
Humidity	Operational	20 ~ 80% RH (No condensation)
	Storage	5 ~ 95% RH (No condensation)
Altitude	Operational	0 ~ 3,000 m
	Storage / Shipment	0 ~ 9,000 m

Warranty policy for Philips Professional Display Solutions

Thank you for purchasing this Philips product. Philips products are designed and manufactured with high standards and deliver high quality performance, ease of use and ease of installation. If you encounter any difficulties while using your product, we recommend that you first consult the user manual or the information in the support section of the website, where (depending on the product type) you may find a downloadable user manual, frequently asked questions, instruction videos or a support forum.

LIMITED WARRANTY

In the unlikely event the product requires service, we will arrange for your Philips product to be serviced free-of-charge within the warranty period, provided that the product was used in accordance with the user manual (e.g. in the intended environment).

For these product categories, a partner company of Philips is the warrantor of the product. Please check the documentation supplied with your product.

WHO IS COVERED?

Your Warranty coverage begins from the first date of purchase of the product. You need to provide proof of purchase to receive warranty service. A valid sales receipt or other valid document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?

If any defect due to faulty materials and/or workmanship occurs within the warranty period, we will make arrangements for a free of charge service. Where a repair is not possible or not commercially viable, we may replace the product with a new or equivalent refurbished product with similar functionality. Replacement will be offered at our discretion and the warranty will continue from the date of original purchase of the first date of purchase of the product. Please note that all parts, including repaired and replaced parts, are covered only for the duration of the original warranty period.

WHAT IS EXCLUDED? Your warranty does not cover:

- Consequential damages (including but not limited to loss of data or loss of income), nor compensation for activities done by yourself, such as regular maintenance, installing firmware updates or saving or restoring data (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- Labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of various types of external devices (e.g., WiFi, antenna, USB dongles, OPS type devices) and other systems outside of the product.
- Reception problems caused by signal conditions or cable or antenna systems outside the unit.
- A product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- If the model or production number on the product has been altered, deleted, removed or made illegible.

The warranty applies on condition that the product has been handled properly for its intended use and in accordance with the operating instructions

To Obtain Warranty Service And Information

For detailed warranty coverage information and additional support requirement and help line, please contact the seller and/or system integrator you purchased the product from. Please note in the USA, this limited warranty is only valid for Products purchased in the Continental United States, Alaska, and Hawaii.

Before Requesting Service

Please check your user's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

WARRANTY PERIOD

Warranty period for PHILIPS signage display is listed as below, for areas not covered in this table, please follow their warranty statement.

Standard warranty period for PHILIPS signage display is listed as below, for areas not covered in this table, please follow the local warranty statement.

Region	Standard Warranty Period
USA, Canada	3 years
China	1 year
Japan	3 years
Rest of world	3 years
Mexico	3 years
Brazil	3 years
Chile	3 years
Peru	3 years

Note that for professional products, the specific warranty terms of the sale- or purchase agreement may apply.



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Specifications are subject to change without notice.

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