# 23-inch Interactive Smart Shelf Screen (ISS)



Model: LD230EKS-FPN4 CMMI ID :

# Product User Manual (V1.0)

Before using the product, please read the instruction manual in detail. (Hereinafter, this product will be referred to as ISS.)

# **Change history**

Version	Date	Page	Description
Ver.1.0	January 23, 2024	1	First issued

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## 1. Key Safety Information

- •Before using this product, please read the instructions ca refully and keep the manual well.
- •Before using the product, please read the instructions th oroughly and familiarize yourself with the operating procedures. Failure to follow the operating procedures may result in injury to the user or others and property damage.
- •Do not use the product in places close to water or install it in high-temperature environments.
- •Do not place the product in environments exposed to dir ect sunlight or install it near heating devices or open flam es. (For example: radiators, electric heaters, gas ranges, etc.)
- •Ensure that there is sufficient ventilating space of about 10cm around the product to allow normal operation and h eat dissipation, and to prevent overheating.
- •Please do not place the product on vibrating or shaky sh elves or on unstable places such as tables, moving carts, etc. People may get injured or even die. And the product may fall and be severely damaged.
- •When installing the product, ensure there is enough spa ce to connect the power cable to the outlet so that it will n ot be stepped on or pressed.
- •Do not connect multiple products or other electronic devices to a single outlet at the same time.
- •Do not use unapproved power cables or other devices b y connecting them to the product.
- •Use products from designated parts suppliers only.
- •Clean with a dry cloth, and turn off the power of the prod uct before cleaning.
- •Store this product and packaging materials such as EPE air caps and protective panels out of the reach of children.
- •Do not attempt to repair or disassemble the product your self. If you disassemble the product, there is a risk of elec tric shock or other hazards. Ignoring this warning could re sult in death or serious injury. Seek assistance from the s eller or service center.
- ▲Warning: When using a Class 1 adapter, connect it to a grounded power outlet.

If it does not operate normally even after following the inst ructions in this manual, please contact the service center.

## 2. Components

Check the product packaging box and if there are any mis sing items, please inquire the store where you purchased it. The actual product may differ from the images.



ISS x 6 units

## 3. Pre-installation Instructions

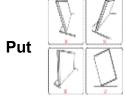
#### **Opening the packaging box**

Before opening the product packaging, inspect the packaging box and install it on a flat surface near a wall with an outlet. Place the product packaging box with the side that has the arrow mark facing upwards.

Order	Open the box according to the direction of the arrow.	2. The top surface of the opened box is as follows.	3. Remove the cushioning material from the top surface.	4. Take the products out one by one from the second layer.	5. Remove the c from the product.
Picture					

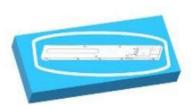


When transporting the product, be sure to secure it with both hands. When holding the product, do not apply pressure to the screen. Avoid applying force or using sharp and pointed objects on the screen.



When placing the product, make sure the front of the screen faces downwards as shown in the picture below.

Do not stand the product upright.



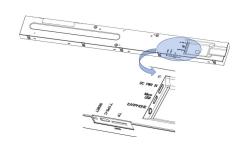
When placing the product, lay it on a flat surface with a protective film or table mat, with the front of the screen facing downwards. Refer to the illustration.

Do not place objects on or apply pressure to the back cover of the product. The internal mechanism of the product may be damaged.

## 4. Installation Precautions

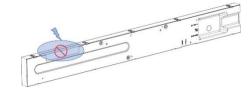
Install the product on the wall according to the instructions to avoid damage. We recommend having the installation done through a certified installation company.

Do not support the product by its edges.



When using the product vertically or horizontally, ensure that obstacles do not obstruct the product's input terminal. Otherwise, the product may not operate normally. Ensure sufficient space is secured before installation to place the product. Please refer to the last page of this manual for detailed product dimensions.

#### **WLan Antenna**



The product has a WLan connection antenna on the top. When installing the product, ensure that there are no objects on top of the wireless antenna, and that there are no metal objects or devices around the product. Otherwise, the wireless signal may be weak or may not be received at all.

#### Rear screw hole



There are three screw holes on the back of the product, which can be used for installation. Use three M3x6mm screws (maximum torque 4kgf-cm) to securely fix the mounting base to the product.

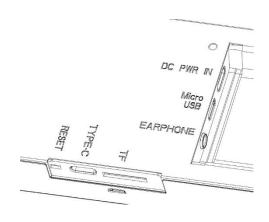
▲ Caution: The product may fall and cause injury to others.

Note: A wall mount bracket is available for separate purchase and can be easily installed.

## 5. Product Description

#### **External terminal description**

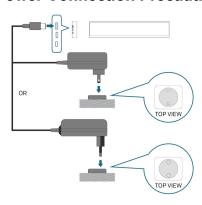
The table and figure below describe the location and function of the product's external terminals.



Terminal	Function	
DC PWR IN	Connect the adapter to supply power to the product.	
Micro USB*1 (OTG)	Connect the product to a computer via the USB cable to debug it.	
Type-C USB *1 (HOST)	Connect external storage devices or peripherals such as a mouse and keyboard via the US B Type-C.	
EARPHONE	Connect a 3-pole earphone compatible with CTIA standards for audio output.	
TF	Insert a Micro SD card through the TF (Micro SD card slot) to expand the device's storage c apacity. (Max. 256G)	
RESET	Press briefly for 1 second to turn off the screen.     Press and hold for 3 seconds to turn the product off and enter standby mode.     Press and hold for 7 seconds to force a reboot.	

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#### **Power Connection Precautions**



- 1. Connect the Type-C connector of the adapter to the "DC PWR IN" port of the product.
- 2. Plug the power cable into the outlet.

Once the power is connected, the product will turn on automatically.

If the adapter plug is loose, current noise may occur.

Do not repeatedly plug in and unplug the adapter.

#### **▲** Caution:

- The adapter may vary depending on the country of purchase.
- In any situation, use a power cable that is suitable for the alternating current voltage of the power outlet and conforms to the safety standards of the country/region of the material, which is approved by the safety standards.
- Use a certified AC/DC adapter.

Warning: If the AC power cable is disconnected, first remove the adapter from the outlet.

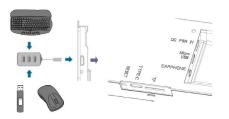
When using this product, please use the following adapter.

Use a UL-certified product marked with "Class 2" or "LPS" or "PS2" which is rated DC 12V, 3A or higher.

### 6. External Device Connection

▲ Caution: Before connecting, turn off the power to all devices, and after connecting, turn on the power to all devices.

#### **Description of external terminals**



- 1. Connect a Micro USB / Type-C USB or USB HUB to the product.
- \* When connecting a flash memory drive, keyboard, or mouse, the product's flash memory and the video/image files on the drive will be displayed automatically.

▲ Caution: The product supports the video/image file formats below only through the Micro-USB / Type-C USB terminal.

( JPEG,BMP,GIF,PNG,MPEG-2, GOOGLE VP8, H.263, MOTION JPEG, MPEG4(H.264, H.265), MPEG4-Visual, VP9, MPEG Audio, WAV Audio, OGG Audio, FLAC Audio, MIDI Audio, AAC )

## 7. System Description

#### Setting

You can adjust many settings of the product using the Settings menu.

- 1. Select the "All Applications" button on the right side of the main screen to go to the "All Applications" menu. Enter. Or slide up from the bottom of the screen. (Figure 1)
- 2. Select "Settings" from the "All Applications" list. (Figure 2)

#### **Network Connection**

After connecting the power to the product, please follow the steps below to connect to the wireless router.

- 1. Select the "All Applications" button on the right side of the main screen to go to the "All Applications" menu. Enter. Or slide up from the bottom of the screen. (Figure 1)
- 2. Select "Settings" from the "All Applications" list. (Figure 2)
- 3. Select "Network & Internet" from the "Settings" menu. (Figure 3)
- 4. Select "Wi-Fi". (Figure 4)
- 5. Make sure the switch is enabled. (Figure 5)
- 6. Select the SSID of the router you want to connect to. To connect to an encrypted wireless hotspot, you must enter the hotspot password.
- 7. Return to the "All Applications" list. Please select the "Lightning" application from the "All Applications" menu.

Please select the "Lightning" application from the "All Applications" menu. Open the web page and check if you are properly connected to the wireless internet.

(Figure 6)

#### **Bluetooth Connection Setup**

- 1. Select "Connected device" from the "Settings" menu. (Figure 7)
- 2. Select "Connection Preferences" in the "Connected devices" item on the "Settings" menu.

Select "Connection Preferences" in the "Connected devices" item on the Settings menu. (Figure 8)

- 3. Select "Bluetooth" and activate the switch. (Figure 9)
- 4. Check if the switch is activated, then select "Pair new device". (Figure 10)
- 5. Select the device to pair. (Figure 11)

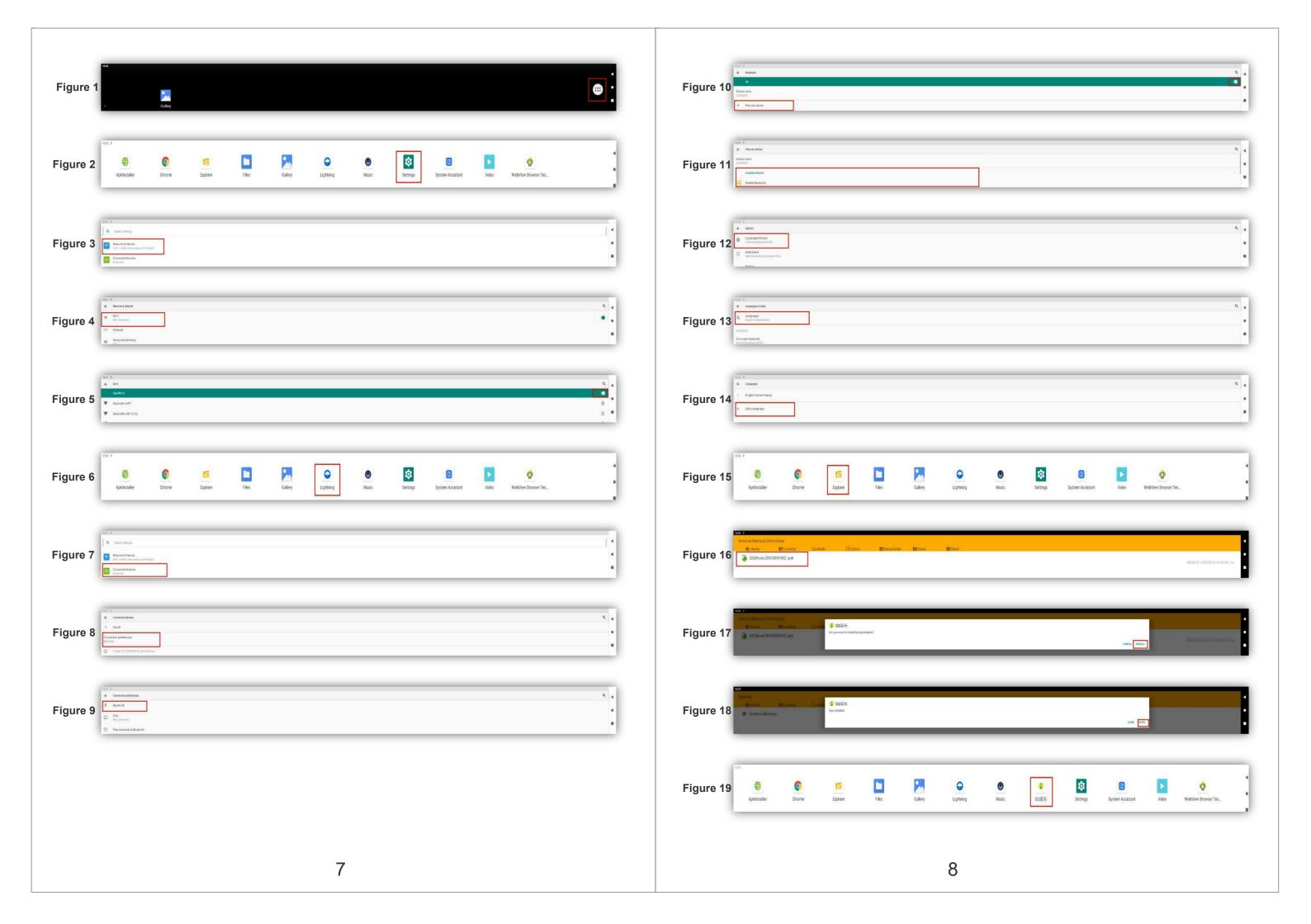
#### **System Language Settings**

Change display language in the "Settings" menu:

- 1. Select "Languages & Input" in "System" from the "Settings" menu. (Figure 12)
- 2. Select "Languages" from the "Languages & Input" menu. (Figure 13)
- 3. To add a desired language, select "Add a language". (Figure 14)
- 4. Use the "Bar" icon on the right side of the menu to drag the desired language to the top from the list of default languages.

#### Installed applications

- 1. Select the "All Applications" button on the right side of the main screen to go to the "All Applications" menu. Enter. or slide up from the bottom. (Figure 1)
- 2. Select "Explorer" from the "All Applications" menu. (Figure 15)
- 3. Locate the location of the program installation file in the "Explorer" menu. After finding it, select the corresponding file. (Example, QQ) (Figure 16)
- 4. Select the "Install" button in the confirmation message that appears on the screen. Start the installation of the program. (Figure 17)
- 5. After the installation is complete, select the "Open" button to run the program. (Figure 18)
- 6. After installing the application, you can run the program from the "All Applications" screen. (Figure 19)



## 8. FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions.

- (1) This device does not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation. Unauthorized changes or modifications not expressly approved by the party responsible for compliance could invalidate the user's authority to operate the equipment.

Note: 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.

- Change the direction or position of the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to 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.

To comply with FCC RF exposure guidelines, this equipment must be installed and operated with a minimum distance of 20cm between the radiator and your body. Use the supplied antenna only.

# 9. Hazardous Substances in Electrical and Electronic Equipment (RoHS)

	Hazardous substances					
components	lead (Pb)	mercury (Hg)	cadmium (Cd)	hexavalent chromium (Cr6+)	polybrominated biphenyls (PBB)	polybrominated diphenyl ethers (PBDE)
PCB	X	0	0	0	0	0
Cable	0	0	0	0	0	0
Plastic	0	0	0	0	0	0
Metal parts	X	0	0	0	0	0
Display Panel	0	0	0	0	0	0

This part indicates that the content of hazardous substances contained in all homogeneous materials of the part is below the restriction requirements specified in the standard GB/T 26572 [Requirements for Concentration Limits for Certain Restricted Substances in Electrical and Electronic Products].

X: Indicates that the content of hazardous substances contained in one or more of the homogeneous materials of the part exceeds the restriction requirements specified in GB/T 26572-2011.

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The data in this table has been provided by a professional certification agency.



: This product has passed the Japanese TELEC certification and meets all the requirements of the certification.



: To better care for and protect the Earth, when the user no longer needs the product or when the product's life has ended, please comply with relevant laws and regulations on recycling of waste electronics and deliver it to a local manufacturer that is qualified for recycling, which is recognized by the state.





# Appendix 1.

Caution: The following are the specifications for the product. For reference only, if you have any questions, please contact the supplier.

#### 1. Display

	size	23 inch
	backlight	LED
	display area	585.562(H) * 48.187(V) [mm]
liquid cryst	Resolution	1920 *158
al	Brightness	700cd/m <sup>2</sup>
	viewing angle	89° (Contrast Ratio ≥10) (typi cal) )
	Injection rate	60Hz

#### 2. Touch

touch pane I	touch techno logy	LG Incell
	driving meth od	USB Free drive
	touch metho d	fingers or a capacitive pen
	support syst em	Android

#### 3. System Configuration

	Android version	Android 11
Android	Central Processing U nit	RK3566W
	ROM	32G ROM
	RAM	2G RAM

#### 4. Rated conditions

	Input voltage	110V~220V 50/60Hz
rated	consumption	<36W
conditi	standby power consum ption	≤0.5W
	power supply interface	Type-C

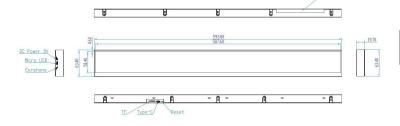
#### 5. Usage environment

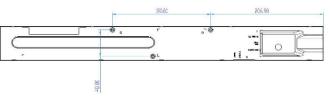
operating temperatur e	0°C ~ 45°C
operating humidity	10% RH ~ 80% RH
storage temperature	-20°C ~ 60°C
storage humidity	10% RH ~80% RH
service life	50000 hour
	operating humidity storage temperature storage humidity

#### 6. Bluetooth

	operating freq uency	Bluetooth: 2402-2480MHz WiFi: IEEE 802.11a/b/g/n/ac/ax 2.4GHz/5GHz
ВТ	modulation sc heme	GFSK, Pi/4 DQPSK, 8DPSK, D SSS, OFDM
	Antenna desi gnation	Internal Ant.
	Antenna Gain	3dBi

#### 7. Product size



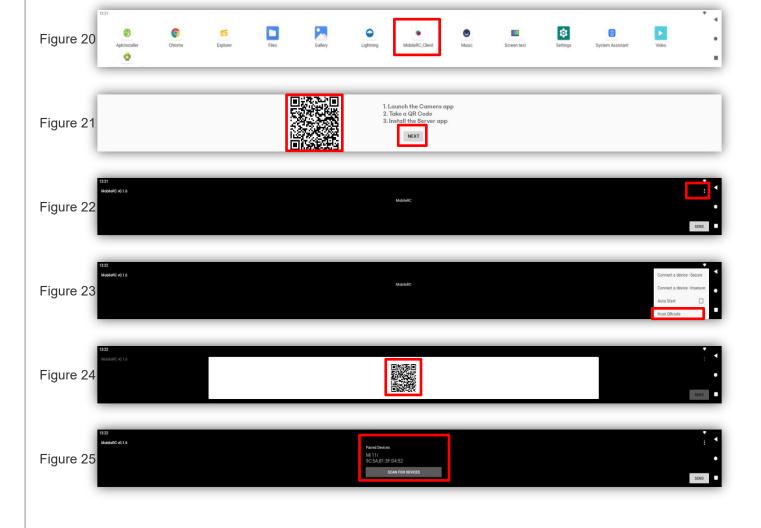


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# Appendix 2.

## How to Use the MobileRC\_Client App

- 1. Select "MobileRC\_Client" from the "All Applications" menu. (Figure 20)
- 2. Activate the camera on your mobile phone and scan the QR code to proceed app authentication. (Figure 21)
- 3. After verifying with your mobile phone, press the "Next" button. (Figure 21)
- 4. Click the options button at the top right. (Figure 22)
- 5. If not authenticated, click "Host QRCode" and proceed to step 2 after downloading the mobile app. (Figure 23, 24)
- 6. If the product and mobile phone are already paired via Bluetooth, select the paired device; if not, press "Scan for devices" to create a new connection. (Figure 25)



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