

DK651DR5

USER MANUAL

65" 4000 nits Dual-Sided Ultra-High Brightness Outdoor Kiosk

Please read this manual carefully before operating the product and keep it for future reference. The use of diagrams and illustrations in the manual are for reference only, the actual product may be different.



FOR MORE INFORMATION

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DynaScan

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Material Contents Declaration

Part Name	Hazardous Substances					
	Lead	Mercury	Cadmium	Hexavalent Chromium	Polybrominated Biphenyls	Polybromodiphenyl Ethers
	Pb	Hg	Cd	Cr ⁶⁺	PBB	PBDE
PCBA	○	○	○	○	○	○
CHASSIS	○	○	○	○	○	○
ACCESSORY	○	○	○	○	○	○
PACKAGE	○	○	○	○	○	○

“○” indicates that the level of the specified chemical substance is less than the threshold level specified in the standards of SJ/T-11363-2006 and EU 2011/65/EC.
 “×” indicates that the level of the specified chemical substance exceeds the threshold level specified in the standards of SJ/T-11363-2006 and EU 2011/65/EC.

Recycling and Energy Information

DynaScan is firmly committed to its environmental protection efforts and we believe that reducing our products' impact on the environment is of the utmost importance. We are dedicated to meet the latest environmental protection regulations.

Energy usage

Mode	Energy Consumption
Power On Mode	Typ. 1000W / Max. 1600W
Standby	< 50W

Disposal

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. When replacing old appliances with new one, the retailer is legally obligated to take back your old appliances for disposal at least for free of charge.

LICENSES



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



Declaration of Conformity

FCC

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.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

Manufacturer Name DynaScan Technology Corp.


Manufacturer Address 6F, No. 88 Wenmao Rd., Guishan Dist, Taoyuan City 333001, Taiwan




This device complies with **Directive 2014/53/EU** issued by the Commission of the European Community.

Article (a)	Article (b)
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Safety Precautions

CAUTION	
	Do not install the display in a wet environment or place anything filled with liquid such as a vase or beverage on top of it.
	Do not install the display near flammable objects such as gasoline or other volatile liquids.
	Do not install the display near any heat sources such as radiators or other heating devices.
	Do not install the display in the dusty environment.
	Do not damage the power cord or plug.
	Do not disassemble the screen to avoid electric shock.
	The product can normally be operated at an altitude under 2000m. Abnormalities may occur when installing the device at an altitude above 2000m.
	Please affix the stand to the ground steadily before mounting the display onto the stand.

WARNING	
	Please power off the LCD and the video source before plugging in the DVI, DP or HDMI cable.
	Please installed the display in well-ventilated place, do not install in a confined space.
	Suitable for mounting on concrete or other non-combustible surface only.
	If it gives off smoke, strange smell, or unusual noise, or when it gets too hot to touch, immediately unplug the display and contact the dealer.
	Clean only with soft, dry cloth but not use chemical liquids, and unplug while cleaning.
	Do not use extreme force or any sharp or pointed objects to touch the display.
	Do not drop or allow any object to fall to the display.
	Do not operate the display with wet hands to avoid electric shock.
	Do not discard this product with general household waste. Please be sure to comply with the local waste regulations.
	This device uses, generates and radiated radio frequency energy. The radio frequency energy produced by this device is well below the maximum exposure allows by Federal Communications Commission (FCC).
	When a stationary or fixed image is displayed on the screen for a long time, the image may be permanently imprinted on the screen. This phenomenon is known as image burn-in and is not covered by the manufacturer's warranty.
	In order to avoid burn-in, avoid prolonged display of static or fixed images on the screen.
	Power supply cord must not be attached to the building surface, nor run through walls, ceilings, floors and similar openings in the building structure.
	Power cord shall be connected to a socket-outlet with earthing connection.

Important Safety Information

- Disassembling the LCD is strictly prohibited. Opening the cover may expose the user to electric shock or other hazards. Please contact DynaScan certified service professionals for all maintenance requirements.
- Do not allow any liquid to enter the LCD. Also avoid placing the LCD close to water sources.
- Do not place heavy objects on the power cord. A damaged power cord might cause electric shock or fire.
- Do not bend, twist, or damage the power cord.
- The power cord must comply with the local safety regulations.
- Do not damage or modify the prongs/pins and the ground contact on the power cord plug.
- Do not place the LCD on an unlevelled surface or an unstable vehicle. The LCD could fall over and cause substantial damage.
- Do not cover the vents and/or the heat sink.
- Do not install the LCD beside radiators or other heat sources. The installation site should have sufficient ventilation so the heat generated by the LCD can be dissipated.
- Do not use the Signage in a hot, humid, dusty, or fummy environment.
- Handle the LCD with care. Save the packaging materials for transport later.
- Clean the LCD backside at least once a month for dust and other particles.

Unplug the LCD immediately and contact a DynaScan certified service professional as soon as possible when any of the following situations occurs:

- Damaged power cord or power plug.
- If liquid or foreign object has entered the LCD.
- If the LCD has been exposed to rain or water.
- If the LCD has been dropped or the casing has become damaged.
- If any structural damage such as cracks or unnatural vibration is found.
- If the LCD cannot be operated following the steps outlined in this manual.
- If the LCD emits smoke or other odors, or generates strange noises.

Operating Suggestions

- Avoid displaying a stationary image for a long period of time in order to prevent image sticking.

Cleaning the Panel

- Use a soft, lint-free cloth to gently wipe the dust off from the screen panel.
- Do not use any hard material to wipe the panel.
- Do not poke the panel with your hand or any sharp object (such as a pen or a nail) or exert excessive pressure on the panel to prevent any damage.
- Do not use any cleaning solutions on the panel as it might cause discoloration.

Cleaning the Casing

- Unplug the power cord.
- Gently wipe the casing with a soft cloth.

Attention

- Do not use any of the following solutions to clean the casing as they may damage the paint and cause it to crack or peel: benzene solution, alkaline solution, alcohol-based cleaning solution, glass cleaner, wax, polisher, or detergent.

Getting Started

Contents

Confirm that the accessories below are shipped along with the display. If any item is missing, please contact your dealer. The color and shape of the accessories may vary with the products.

- DK651DR5 Professional LCD.
- Remote Control x 1 pc.
- Batteries (1.5V / AAA) x2 pcs.

Installing and Replacing Remote Control Batteries

1. Open the battery compartment cover.
2. Insert 2 new AAA batteries.
3. Close the battery compartment cover.

Warning:

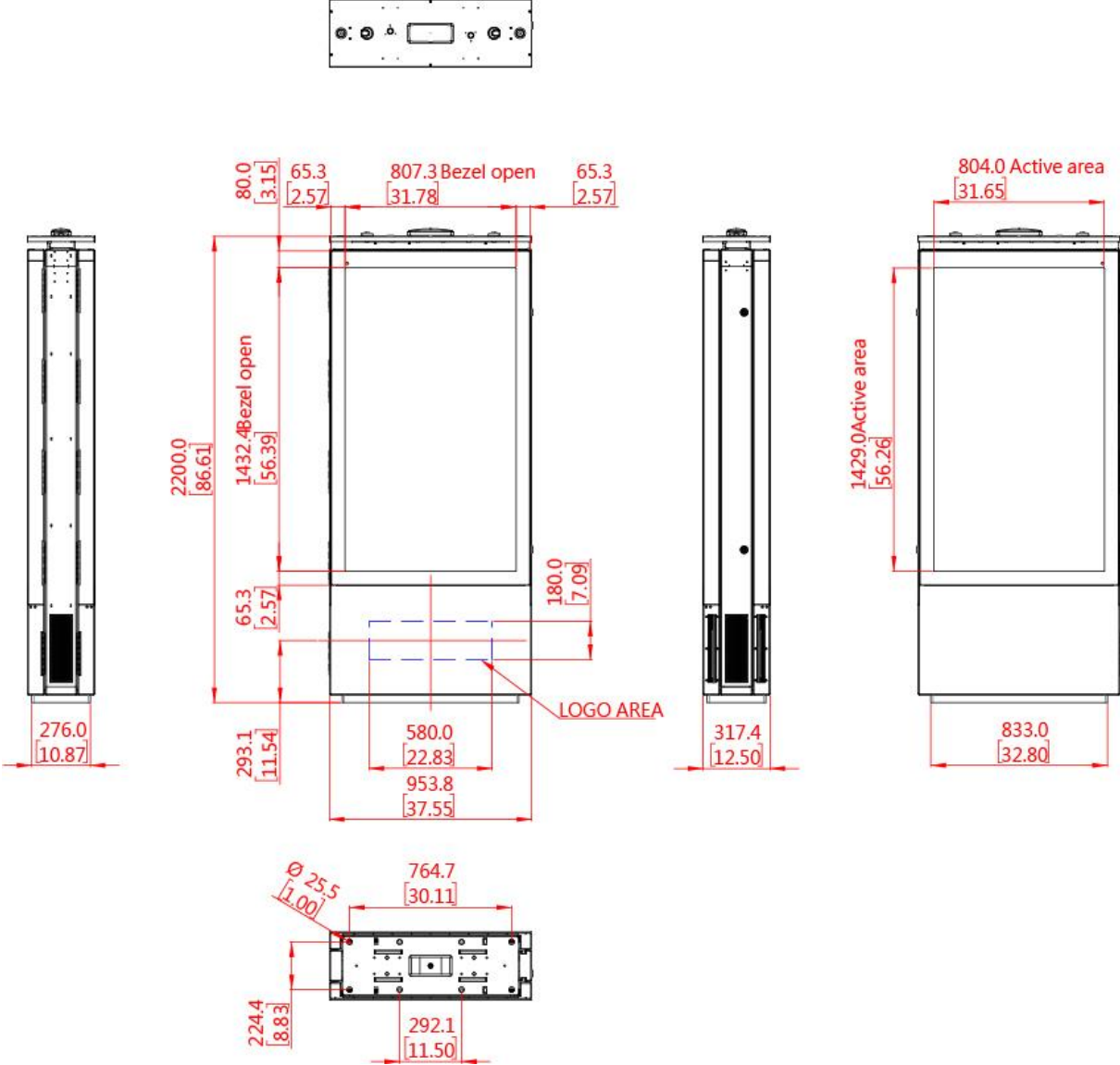
- Incorrect usage of batteries may cause leakage or explosion.
- Pay attention to the polarity when installing the batteries.
- Do not mix different types of batteries or new and used batteries. Doing so may shorten the battery life or cause leakage.
- Remove or replace the batteries when they are empty in order to prevent acid leaking in the battery compartment.
- Do not touch the leaked substance from the batteries in case of a battery leakage. Doing so may hurt human skin.

Note: If the remote control is not going to be used for a long time, we recommend removing the batteries from the remote control.

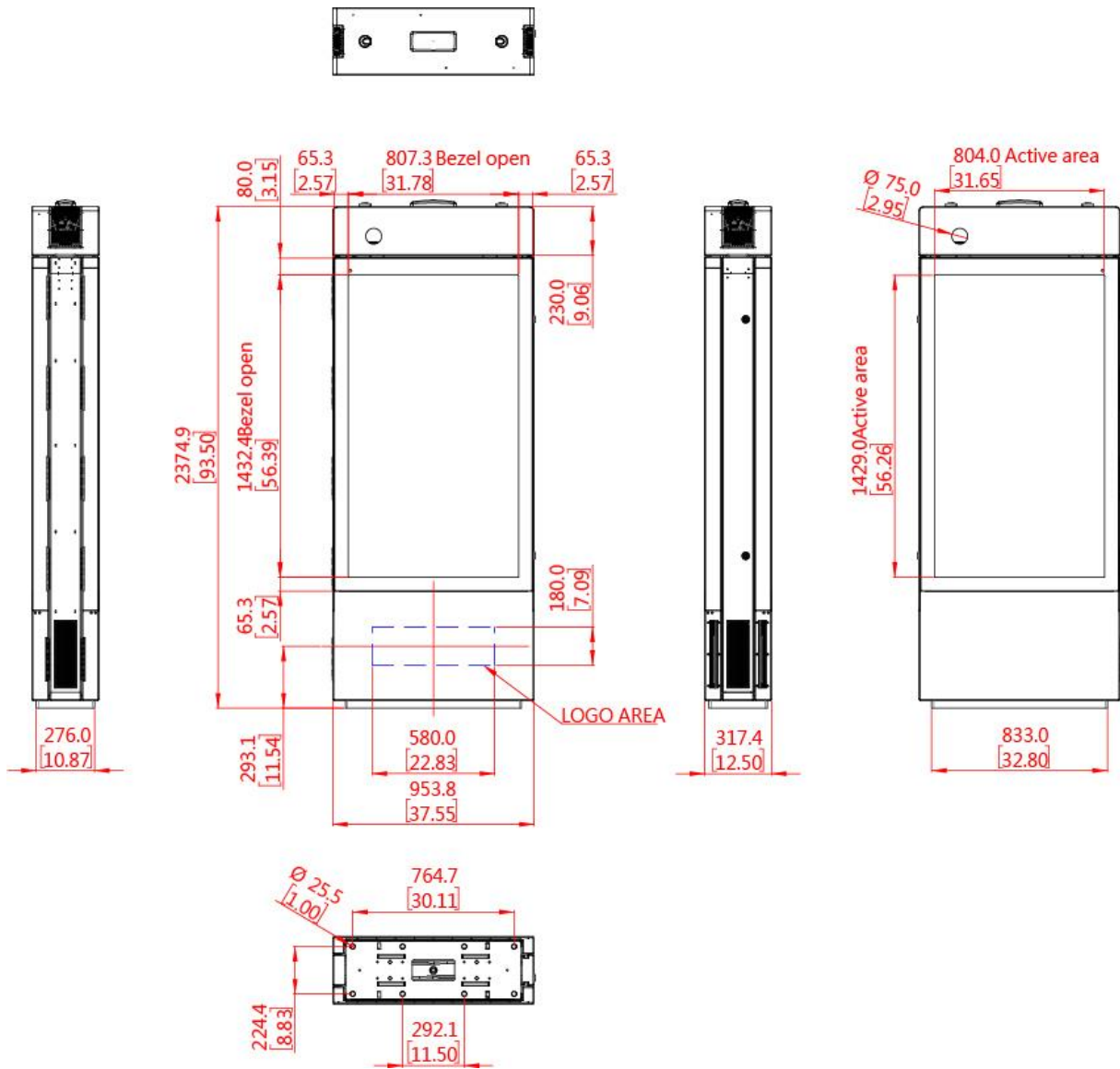
Installation

Incorrect installation may cause injury or damage the equipment. Product warranty does not cover the damage caused by improper installation and DynaScan shall not be held responsible in such incident.

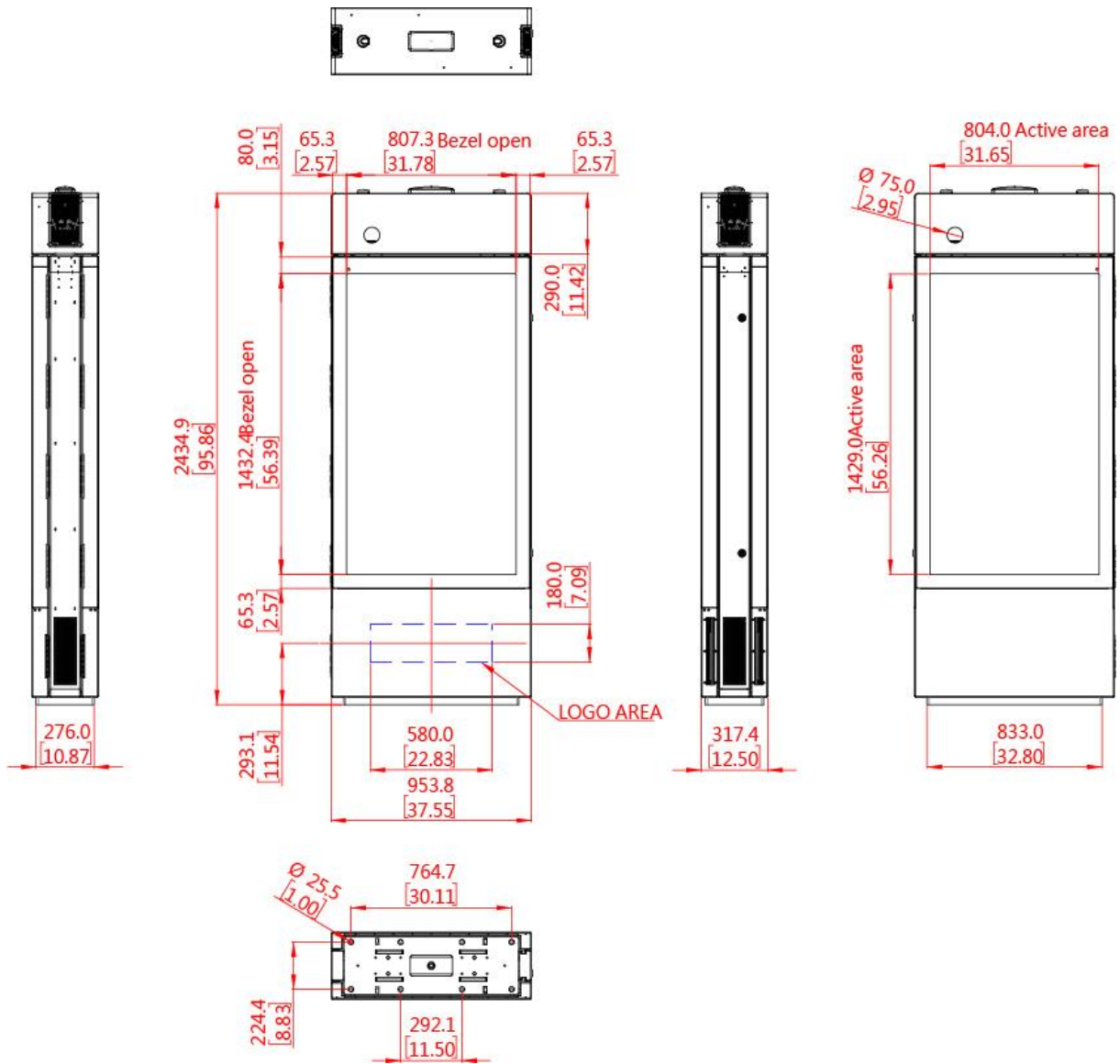
A



B




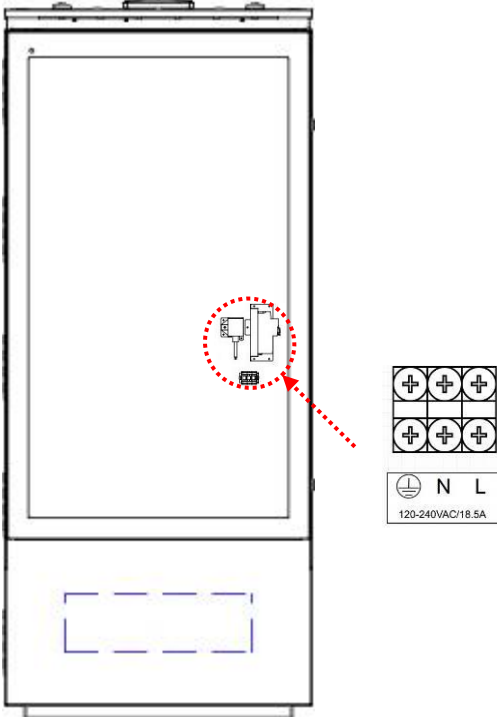
C



Connecting to a Power Source

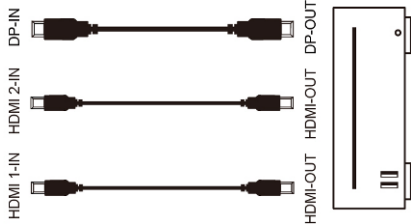
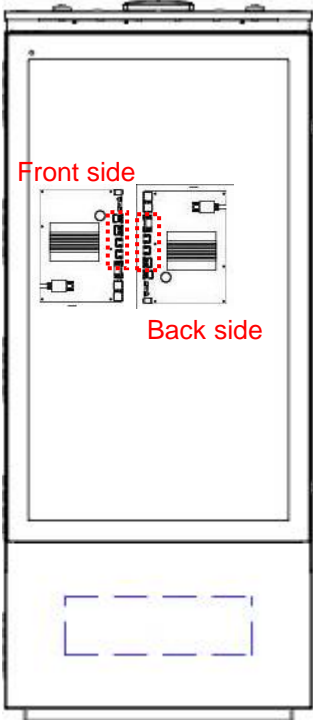
Using the power cable, connect it in the power terminal inside the front door of the display shown in the diagram below. Connect the power cable to a 200-240 volt, 50 / 60Hz 15A AC power outlet.

 Insert the plug completely into the socket. A loose power connection may cause damage to the display and/or lead to a fire hazard.



Connecting an External Video Source

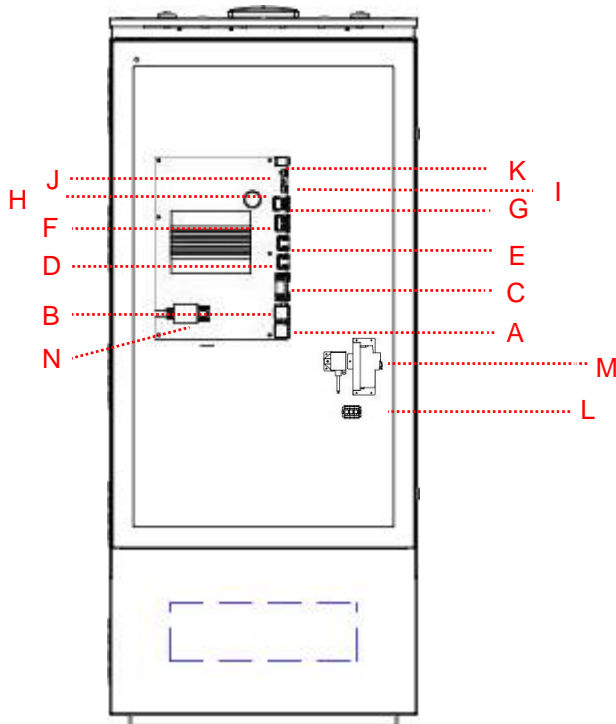
Turn OFF the power of both LCD , external video device and open the front side door. Using the DP cable (or HDMI cable), insert one end into the DP-IN (or HDMI 1-IN, HDMI 2-IN) which is shown in the diagram below. Connect the other end of the DP cable (HDMI cable) to the DP output (or HDMI output) of the video source. Refer to your video device's manual for additional information.



Input / Output Terminals

- A. **RJ-45 1 (IN):** RJ45 network input connection.
- B. **RJ-45 2 (IN):** RJ45 network input connection.
- C. **RS-232 (IN):** RS232C network input connection for remote control from PC.
- D. **HDMI 1 (IN):** Connect the HDMI output of a PC or an AV device via a HDMI cable.
- E. **HDMI 2 (IN):** Connect the HDMI output of a PC or an AV device via a HDMI cable.
- F. **DP (IN):** Connect the DP output of a PC or an AV device via a DP cable.
- G. **USB 3.0 port1:** Support for USB flash drive storage, mouse and keyboard.
- H. **Extension Connector:** Extension Connector for optional IR Extension sensor kit (ESK302).
- I. **Micro SD card:** Support for up to 128GB, FAT32 format is supported.
- J. **Thermal:** Extension Connector for optional Extension thermal kit (ETK302).
- K. **Audio (OUT):** Connect the audio signal output from Audio IN jack to an external AV device.
- L. **AC (IN):** Connect the supplied power cord to the wall outlet.
- M. **Power Switch:** Press to switch the main power on/off.
- N. **HDMI 3 (IN):** Connect the HDMI output of a PC or an AV device via a HDMI cable.

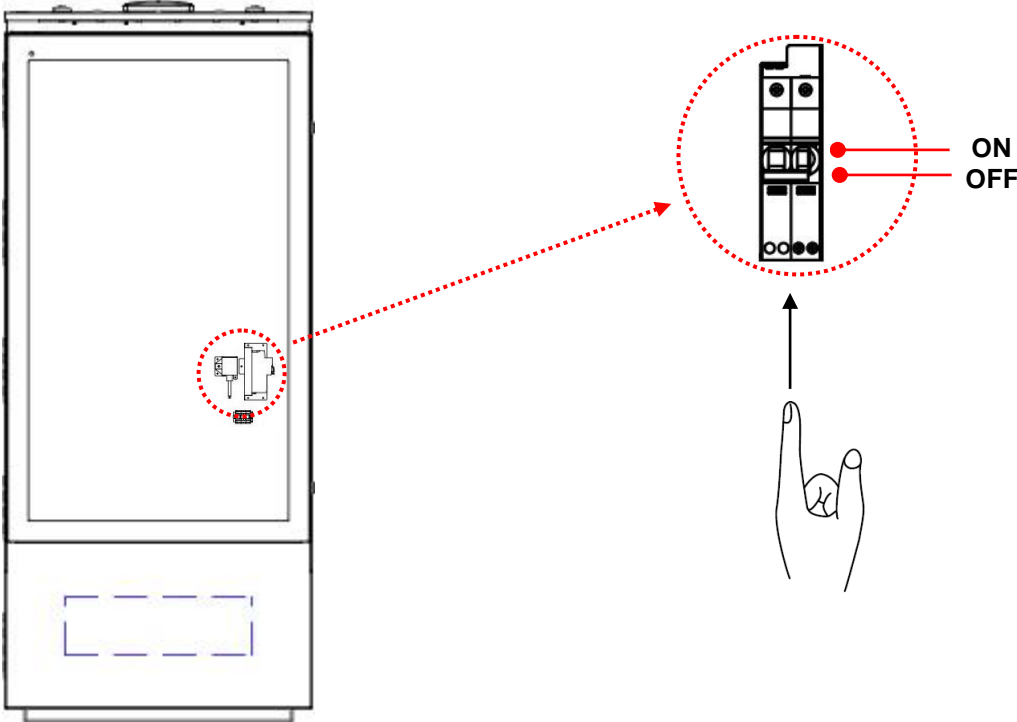
**USB 3.0 port: A standardized port to connect a variety of devices like mouse, keyboard, and flash drive. Support USB storage devices formatted with NTFS, FAT32 (32G) file system.*



Operating Instructions

Powering On/Off the Display

To turn on/off the display, press the power switch on the side of the display as shown in the diagram below.



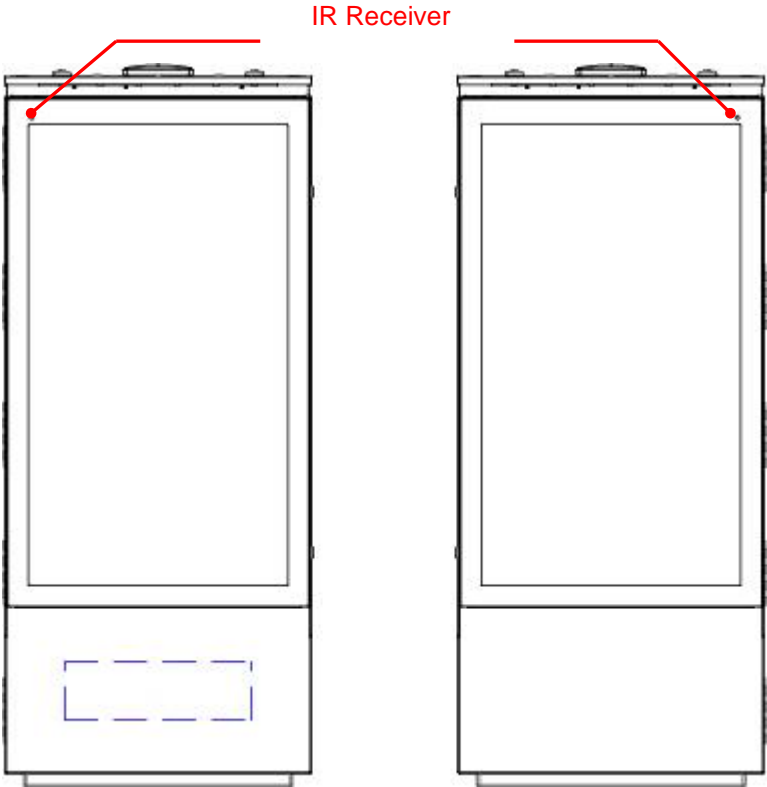
NOTE: The remote control only works when the power switch is ON.

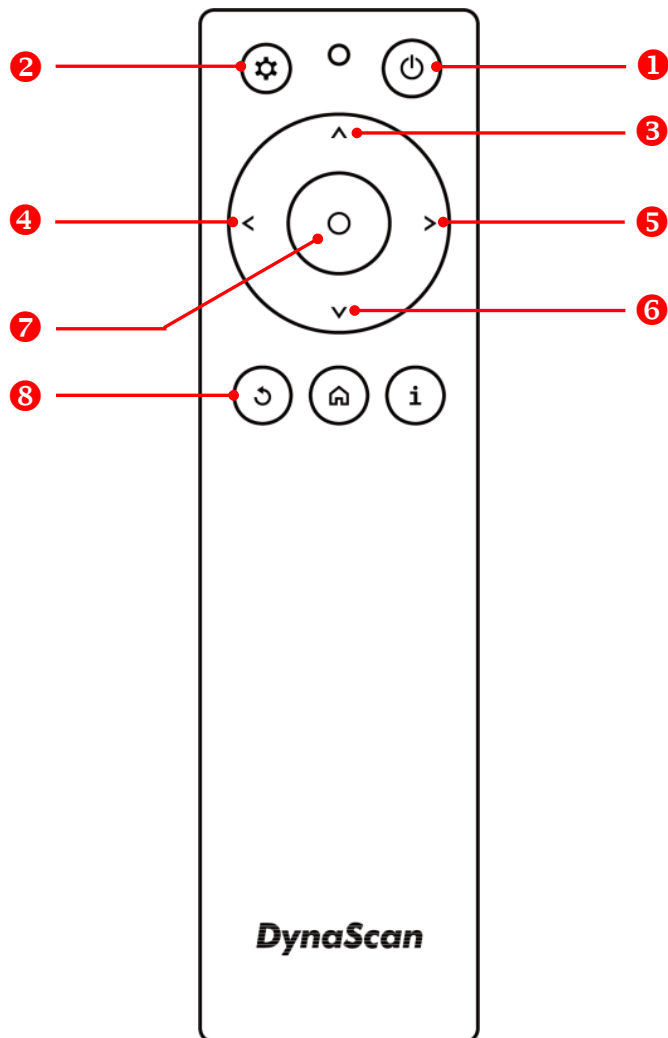
Using the Remote Control

When using the remote control, aim the remote at the IR receiver on the display. The IR receiver on the DK651DR5 model is at the front of the display with a receiving angle of 100 degrees. The IR receiver configurations of the model are shown in the figure below.

The operating range of the remote control is 2.5 meters (8 feet).

Ambient light may affect the performance of the remote control. Avoid fluorescent or neon lights in the vicinity.





*Color and shape may vary by model.

ITEM		DESCRIPTION
①	POWER	Power On / Off
②	MENU	OSD On / Off
③	UP	Move the cursor up or change the setting of selected item.
④	LEFT	Exit the current selection.
⑤	RIGHT	Select the highlighted item.
⑥	DOWN	Move the cursor down or change the setting of selected item.
⑦	OK	Enter (for DSM365 only)
⑧	BACK	Return to the last page. (for DSM365 only)

Navigating the On Screen Display (OSD) Menu

Press the MENU button on the built-in keypad or remote control to show the OSD. Use the navigation arrows to select and adjust the menu items.

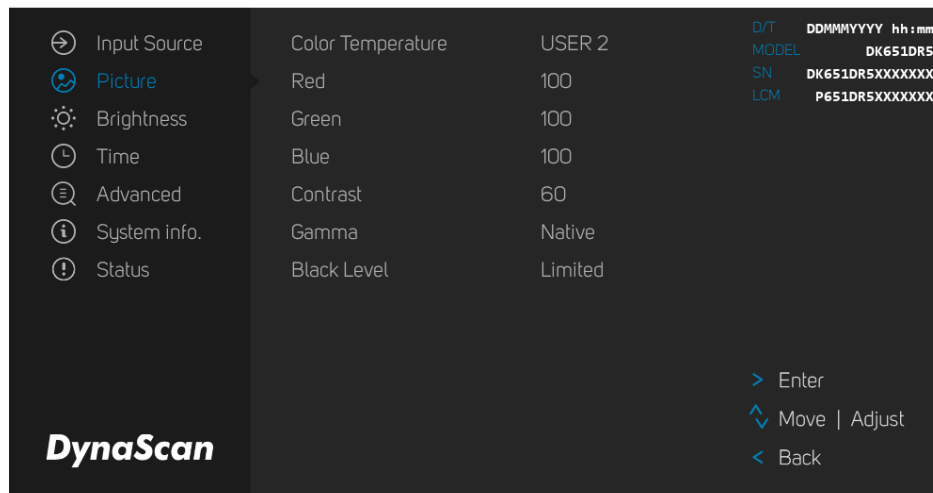
*The change of each setting can only enable when you press “LEFT” (refer to p.12) to back to the last menu layer.

1. Input Source



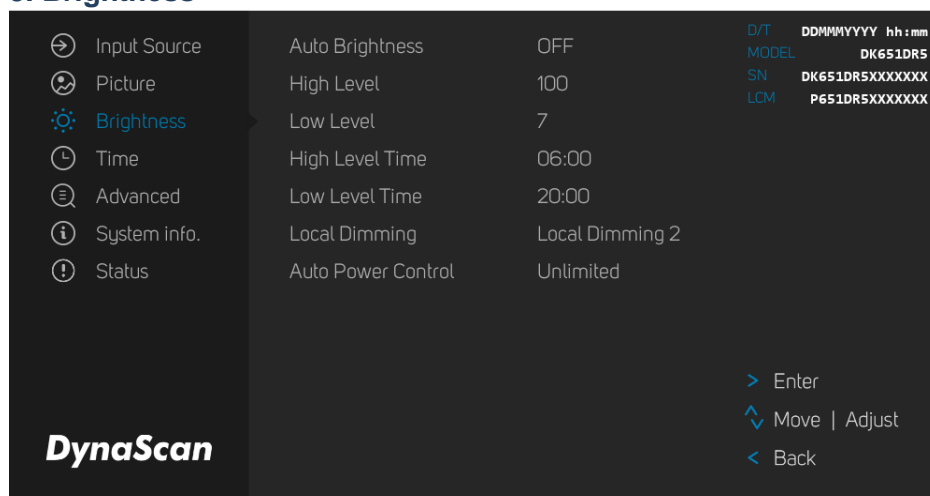
ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
Input Source	Main	HDMI 1	Set the Main input to display.
	Failover 1	HDMI 2	Set the Failover 1 input to display.
	Failover 2	DP	Set the Failover 2 input to display.
	Failover 3	HDMI 3	Set the Failover 3 input to display.
	Failover 4	DSM365	Set the Failover 4 input to display.
	Failback	OFF	Set the time (hour),when the Input Source is failover , it will redetection the Main Source per few hour.
	Command Detection	OFF	Only effective in Main input source. If the display didn't get both commend and the input signal, it will trigger the Failover1 function.

2. Picture



ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
Picture	Color Temperature	USER 2	Select the color temperature. (User2, User1, D93, D65 and D55).
	Red	100	Adjust the red light level. Range 0 – 100. Note: The feature is only supported on User2 mode.
	Green	100	Adjust the green light level. Range 0 – 100. Note: The feature is only supported on User2 mode.
	Blue	100	Adjust the blue light level. Range 0 – 100. Note: The feature is only supported on User2 mode.
	Contrast	60	Adjust the contrast level. Range 0 – 100.
	Gamma	Native	Adjusts the Gamma value. (Native, 2.2, 2.4 and sGamma)
	Black Level	Limited	Selects the black level to adjust the screen gray scale. "Limited" for video source uses 16 to 235 levels for R/G/B, such as HDMI. "RGB Full" for video source uses all levels from 0 to 255 levels. "Auto" is for detecting the video source to determine its value is applicable for "Limited" or "RGB Full".

3. Brightness



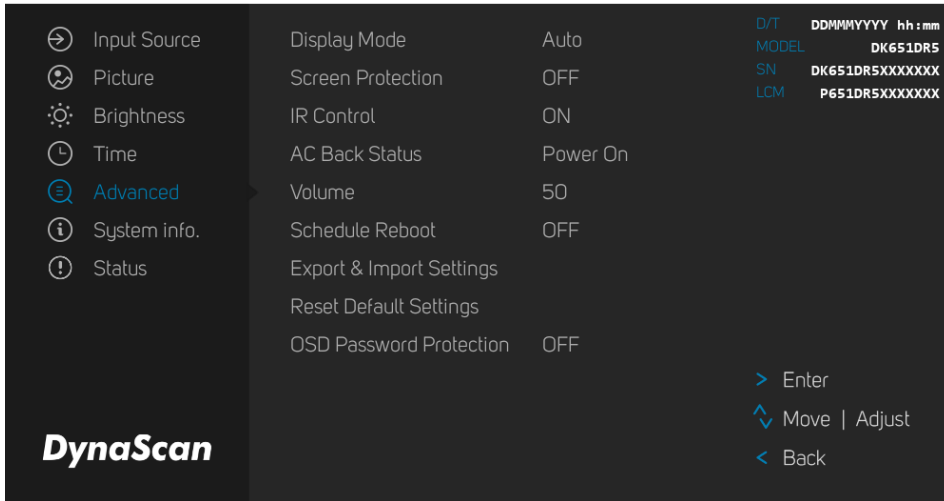
ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
Brightness	Auto Brightness	Off	<p>A. If the AUTO BRIGHTNESS is “Off”, the screen brightness will remain at HIGH LEVEL brightness value.</p> <p>B. If the AUTO BRIGHTNESS is “Auto”, the brightness of display will be adjusted according to the ambient light. When ambient light is bright, the screen will adjust to the High Level brightness value set; when ambient light is dark, the screen will adjust to the Low Level brightness value set.</p> <p>C. When the Timer (“High Level Time” & “Low Level Time”) mode is set, the</p>

			display will automatically switch the brightness according to the time set. D. When setting "Mix" mode, Timer and Light sensor will work at this mode. For example, setting "High Level Time = 8:00am" and "Low Level Time = 6:00pm", the light sensor will detect environment brightness and then display will adjust the value of High Level during 8:00am and 6:00pm.
	High Level	100	Adjusts the highest brightness level. Range 0 – 100.
	Low Level	7	Adjusts the lowest brightness level. Range 0 – 100.
	High Level Time	06:00	Set high level time.
	Low Level Time	20:00	Set low level time.
	Local Dimming	Local Dimmng2	Adjusts the contrast. UDR is the highest contrast. Local Dimming 1 is the lowest contrast. (Local Dimming 1/2, UDR)
	Auto Power Control	Unlimited	Adjusts the Power Control(W). Range 600~2700(300+) or Unlimited

4. Time

ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
Time	Current Date		Set the date.
	Current Time		Set the clock. Note: The internal clock will continue to function when the power is turned off.
	Day of Week		Set the day of week. (Monday to Sunday)
	Time Zone		Set the Time Zone.
	Power Control Timer	Off	Automatic power on / off schedule function.
	On Time	06:00	Set turn-on time.
	Off Time	00:00	Set turn-off time.

5. Advanced



ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
Advanced	Display Mode	Auto	Change the Menu orientation. The Menu can be displayed in either LANDSCAPE or PORTRAIT mode.
	Screen Protection	Off	Turn on / off image burn-in protection. Set image burn-in protection interval. Range 0 – 100 minutes.
	IR Control	On	Enable/disable the remote control for Menu. Note: When disabled, the remote control function can be enabled again from the control panel on the display or through the DynaScan “Display Manager” application.
	AC Back Status	Power On	Choose to use the AC back status function. <u>Power On:</u> Display booting up when the power back after an outage. <u>Standby:</u> Display keeps soft-off status when the power back after an outage. <u>Memory:</u> Display will back to the last state when the power back after an outage.
	Volume	50	Set volume. Range 100 – 0.
	Schedule Reboot	Off	Enable/disable the Schedule Reboot, And set the Time.
	Export & Import Settings		Export or Import OSD Setting by USB.
	Reset Default Setting		Restore all settings to default. Note: It does not modify CURRENT DATE, CURRENT TIME, DATE OF WEEK, TIME ZONE, POWER ON TIME and POWER OFF TIME.
	OSD Password Protection	Off	Turn On: Create Password > Confirm Password > Password Protection On Turn Off: Enter Password > Password Protection Off

6. System Info

Input Source	Resolution	DSM365 1920 x 1080	D/T	DDMMYYYY hh:mm
Picture	LCM Serial Number	P651DR5XXXXXXX	MODEL	DK651DR5
Brightness	MCB Version	XXXXX	SN	DK651DR5XXXXXXX
Time	FW Version	XXXXX	LCM	P651DR5XXXXXXX
Advanced	OS Version	XX.XXXX		
System Info.	Input Power	XXXX W		
Status	Input Voltage	XXX V		
	Input Current	XX.X A		
	Ambient Temp.	XX °C		

> Enter
 ^ Move | Adjust
 < Back

DynaScan

ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
System Info.	Resolution		Input resolution.
	LCM Serial Number		The LCM serial number.
	MCB Version		The MCB version.
	FW Version		The Firmware version.
	OS Version		The OS version.
	Input Power		Input Power (W avg.)
	Input Voltage		Input Voltage
	Input Current		Input Current
	Ambient Temp.		Ambient Temp.

7. Status

Input Source	Protection Mode	None	D/T	DDMMYYYY hh:mm
Picture	Door Status	Close	MODEL	DK651DR5
Brightness	Fan Status Main/Door	OK/OK	SN	DK651DR5XXXXXXX
Time	LCM Status	OK	LCM	P651DR5XXXXXXX
Advanced	ECB Status	OK		
System Info.	PSU Status 1/2/3/4	OK/OK/OK/OK		
Status	PSU Status 5/6/7/8	OK/OK/OK/OK		
	PSU Status 9	OK		

> Enter
 ^ Move | Adjust
 < Back

DynaScan

ITEM 1	ITEM 2	DEFAULT	DESCRIPTION
Status	Protection Mode		None: The display under normal working conditions. <u>Active</u> : When one of Fan, LCM and ECB is abnormal, the brightness will decrease as the protection mode.
	Door Status		
	Fan Status Main/Door		Detect the fan is spinning or not. When it is NG, the fan is abnormal.
	LCM Status		If the LCD's temperature is too high to work well, LCM will be NG. LCD will decrease its brightness.
	ECB Status		If the ECB's temperature is too high, it will show NG. And the brightness will decrease.
	PSU Status 1/2/3/4		If the voltage of PSU is abnormal, it will show NG.
	PSU Status 5/6/7		If the voltage of PSU is abnormal, it will show NG.
	PSU Status 9		If the voltage of PSU is abnormal, it will show NG.

Some functions may not be available for all models.

Specifications

MODEL		DK651DR5
PANEL	LCD Panel Size	64.53 inches
	Native Resolution	1920 x 1080
	Brightness	4000 cd/m ² (Typ.)
	Contrast Ratio	4,000:1 (Static)
	Response Time	8 ms (Typ.)
	Viewing Angle	178°/ 178°
	Life Time	100,000 hrs (Typ.)
	Panel Surface	2H, Low Reflection, Circular PF.
POWER	Power Supply	Internal
	Rated Voltage	(1) Rating 100 – 120 V, 50 / 60Hz (2) Rating 200 – 240 V, 50 / 60Hz
	Power On Mode	Typ. 1000W / Max. 1600W
MECHANICAL SPECS	Bezel Width (T/B/L/R)	65.3/65.3/65.3/65.3 mm
	Cabinet Color	Black
	Monitor Dimension (LxHxD)	2200/2374.9/2434.9 x 953.8 x 317.4 mm
	Monitor Weight (set / package)	373 kg (Basic)
	Orientation	Portrait
USER INTERFACE	OSD Language	English
ENVIRONMENT	Operation Temperature	-30°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	Humidity	10%~100% RH Non-Condensing
I/O Ports	HDMI	IN *6 (HDCP)
	DP	IN *2
	Audio	OUT *2
	USB port	IN *2
	RJ-45	IN *4
	Micro SD card	IN *2



Design and specifications are subject to change without notice.

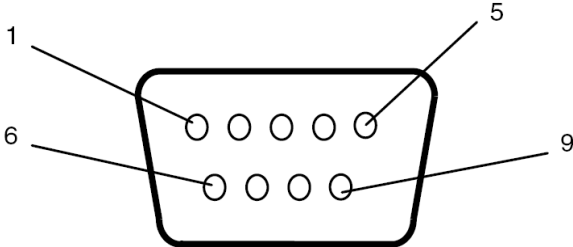
Input Mode

Active Resolution		Refresh Rate
H Pixels	V Lines	
640	480	60 Hz
720	480	60 Hz
800	600	60 Hz
960	600	60 Hz
1024	768	60 Hz
1280	720	60 Hz
1280	768	60 Hz
1280	960	60 Hz
1280	1024	60 Hz
1366	768	60 Hz
1400	1050	60 Hz
1440	900	60 Hz
1600	1200	60 Hz
1680	1050	60 Hz
1920	720	60 Hz
1920	1080	60 Hz

Pin Assignments

RS-232 Input

PIN No.	NAME
01	Connected to 7&8
02	TXD
03	RXD
04	Connected to 6
05	GND
06	Connected to 4
07	Connected to 1&8
08	Connected to 1&7
09	NC



Troubleshooting

ISSUE	RECOMMENDED SOLUTION
No image is displayed.	<ul style="list-style-type: none"> ● Check whether the cable is completely plugged in. ● Check whether the main switch is in the ON position, and the power cord is completely plugged in. ● Check whether the image source's resolution is set as the supported format (refer to section "Input Mode", p.23). ● Check whether the cable is damaged or bent excessively.
Nothing happens when switching the main switch on.	<ul style="list-style-type: none"> ● Unplug the power cord from the socket and plug it in again after a few seconds to reset the Signage. <p>Note: Unplugging the power cord will not change the settings.</p>
Image is unstable.	<ul style="list-style-type: none"> ● Check whether the cable is completely plugged in.
The remote control does not work.	<ul style="list-style-type: none"> ● Check whether there are batteries in the remote control. ● Check the batteries for freshness, polarity, etc. ● Check whether the remote is in the operation range. ● Bright light may interfere with the remote control. Please avoid using the remote control near special fluorescent lights or neon lights.
Auto on/off does not work or does not function properly.	<ul style="list-style-type: none"> ● Check whether the TIMER setting in the menu is set to "OFF". ● Check whether the "Power On Time" and "Power Off Time" settings are set correctly.
Cannot control the display remotely via RS-232.	<ul style="list-style-type: none"> ● Check whether the RS-232 cable is connected properly.

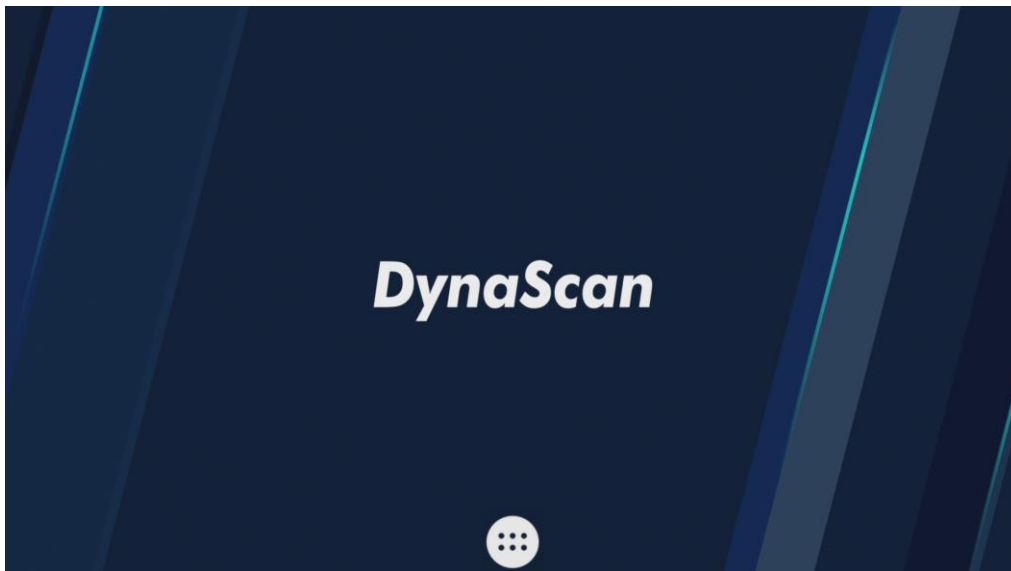
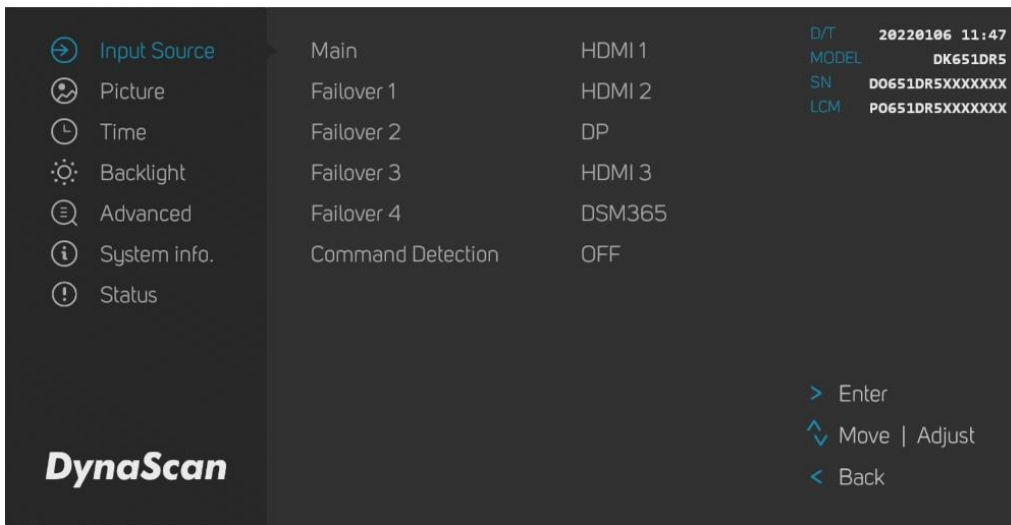
If you are still having trouble with your DynaScan DS² Professional LCD, contact your dealer or DynaScan directly for more assistance.

About DSM365

DSM365 is an internal operating system as Android, which can install the applications via USB flash drive storage, SD card or Internet.

How to Switch to DSM365

- Press the MENU button on either the rear panel control or remote control to show the OSD.
- Use the navigation arrows to select and adjust the Input Source.
[Input Source → Main → DSM365]



1

ITEM		DESCRIPTION
1	APPS	Show the Installed APPS.

www.dynascandisplay.com

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