

# HDi *Mobi OS™* Multi-touch Screen

# **Operation Manual (Android 5.0)**



Remarks:

- Technical parameters and pictures in this manual are for reference only and subject to change without notice. The actual product may differ.
- Before using our product please read this manual carefully and keep for future reference if required.
- This manual should not be copied fully or partially in any kind or manner without written approval of HDi.

# Introduction

Thank you for buying our new generation interactive multi-touch MTS product. This manual provides you with the necessary information to assist in the operations of this device. If you have further queries please do not hesitate to contact our support team.

HDi is dedicated to developing and improving the performance and reliability of our products. We have designed and manufactured this device with one objective in mind and that is to ensure that our customers' needs and user experience are fulfilled.

Thank you for your purchasing this product.

# Safety considerations

# WARNING

- 1. Do not place containers with liquid on or near this product.
- 2. Use only dry cloth to clean.
- 3. Do not block any ventilation holes.
- 4. Install this product according to manufacturer's specifications
- 5. A distance of at least 160mm must be kept from this product and other objects and/or walls.
- 6. Do not install this product near heat sources.
- 7. This product must be connected to a power point which is appropriately earthed.
- 8. Use the earthed power plug supplied by with this product.
- 9. Keep the power cord tangle free.
- 10. Use a properly functioning power point at all times.
- 11. Disconnect the power plug during storm or if you intend not to use for a long period of time.
- 12. The device is a heavy product and when moving use appropriate equipment to avoid injury.
- 13. Use qualified technicians to mount the device on the wall and/or mobile trolley. Abide by manufacturers' mounting instructions.
- 14. Use only qualified technicians for all repairs.
- 15. Antenna must be kept away from power cord.
- 16. The external antenna must be connected to earth to prevent potential damage caused by voltage surge or ESD (Electro Static Discharge).
- 17. Follow instructions when inserting batteries into the remote control unit. Discard all batteries appropriately.
- 18. Do not use mixed batteries (old and new, carbon-zinc and alkaline).

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The HDi multi-touch display is a combination of two advance technologies. The IR (Infrared) touch technology and high definition (HD) digital display technology (MTS) creating the HD Interactive Android Version Multi Touch Screen (MTS). This combination provides the user the ability to interact with an MTS screen using a finger or any solid object.

# **Main functions**

#### Acute touch

The MTS is a high resolution touch displaying screen. Users interact with the MTS using finger, pen or other non-transparent object.

## HD display

The MTS is a high resolution display terminal, as a HD monitor.

# **Technical specification**

size		55"			65"			
OSD language	English	1			I			
Panel	Resolution	Upt	o 1920X1080	)	Up to 1920X1080(standard Up to 3840 X 2160 (4K/2K)			
	Color System	PAL	PAL / NTSC / SECAM					
AV	Composite (in)	1.0 \	/p-p±5%@75	johm				
	Audio (in)	500r	500mV rms					
Analog RGB (PC)	Mode	Upt	o 1920X1080	)@60Hz				
	Component	Y: 1.	0Vp-p@75 Ω	, PbPr: 0.7V	p-p@75 Ω			
YPbPr/HDMI	Support format	Upt	o 1080P					
	HDMI Format	HDN	11 1.4 /HDCP	1.2				
USB file system	FAT32, FAT16, NT	FS (NT	FS compress	ed file is not	t supported)			
	CVBS/Audio Input	1 X 3RCA (yellow, white, red)						
	YPbPr	1 X MINI3.5MM (three-in-one terminal)						
Input	nput USB input 2X USB 3.0-A (horizontal)							
terminals	PC-RGB Input	1 X D-SUB 15Pin (blue)						
	PC Audio Input	1X 3.5mm Stereo audio-in jack						
	HDMI input	3 X HDMI-A (one in front)						
	RS232	1XRS232						
Output terminals	AV OUT	1 X 3	3.5mm Stere	o audio-in ja	ck			
	Processor	Mob	oi OS™ (Built	on Android !	5.0.1)			
	CPU	ARM A53×4 1.4GHz						
	GPU	ARM Mali450 MP4(4+2) 450MHz						
Mobi OS™	RAM	2GB(4Gbit×4); DDR3; 1866MHz						
specification	ROM	16G	B Build in EN	IMC				
	wifi	IEEE	802.11 a/b/g	/n Dual Ban	d 5 GHz			
	SD CARD	Supp	oort MAX 320	GB SD Card				
	RJ 45 port	1						
Voltage range	AC(90~240)V-50	/60HZ						
Power consumption	Standby: <1W							
Power consumption	Rated Consumption	on:	<150W	<220W		<250W		

# **Technical Specification (continued)**

size			75″		84''		
OSD language	English			I			
Panel	Resolution	Upt	o 3840 X 2160 (4K/2K)	Up to 3840 X 2160 (4)	2К)</td		
	Color System	PAL / NTSC / SECAM					
AV	Composite (in)	1.0 \	/p-p±5%@75ohm				
	Audio (in)	500r	nV rms				
Analog RGB (PC)	Mode	Upt	Up to 1920X1080@60Hz				
	Component	Y: 1.	0Vp-p@75 Ω, PbPr: 0.7Vp-p@75 Ω				
YPbPr/HDMI	Support format	Upt	о 4К				
	HDMI Format	HDN	11 1.4 /HDCP 1.2				
USB file System	FAT32, FAT16, NT	FS (NT	FS compressed file is not supporte	d)			
	CVBS/Audio Input	1 X 3RCA (yellow, white, red)					
	YPbPr	1 X MINI3.5MM (three-in-one terminal)					
Input	USB input	2X USB 3.0-A (horizontal)					
terminals	PC-RGB Input	1 X D-SUB 15Pin (blue)					
	PC Audio Input	1X 3.5mm Stereo audio-in jack					
	HDMI input	3 X HDMI-A (one in front)					
	RS232	1XRS	5232				
Output terminals	AV OUT	1 X 3	1 X 3.5mm Stereo audio-in jack				
	Processor	Mob	i OS™ (Built on Android 5.0.1)				
	CPU	ARM A53×4 1.4GHz					
	GPU	ARM Mali450 MP4(4+2) 450MHz					
Mobi OS™	RAM	2GB(4Gbit×4); DDR3; 1866MHz					
specification	ROM	16GB Build in EMMC					
	wifi	IEEE802.11 a/b/g/n Dual Band 5 GHz					
	SD CARD	Supp	port MAX 32GB SD Card				
	RJ 45 port	1					
Voltage range	AC(90~240)V-50	/60HZ					
Power	Standby: <1W						
consumption	Rated Consumpti		<250W	<415W	<510W		

## **Technical Specification (touch parameters)**

Working temperature	0°C~40°C
Set up	As per this Operations Manual
Touch points	Single/Two/Four/Six points available
Writing mode	Finger, writing pen or any non-transparent object
Positioning technology	IR technology
Positioning accuracy	<2mm
Positioning resolution	4096*4096/16384*16384/32768*32768
Writing response time	<8ms
Cursor speed	>120 dot/sec
Communication port	USB
Operating system	WINDOWS/LINUX/MAC /Android
PC response	System auto response

## Remark:

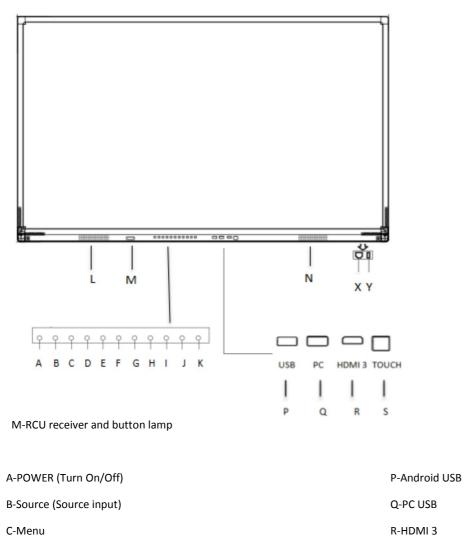
Above mentioned parameters are for standard models and are subject to change without notice.

size	N.W. (KGS)	G.W(KGS)	Display size	Dimension(outline)	Dimension(package)
55"	40±2KGS	53±2KGS	1209.6*680.4 mm	1283.5*781*81mm	1430*910*190mm(carton)
65"	68±2KGS	84±2KGS	1428.5*803.5 mm	1547*936*93mm	1680*1050*220mm(carton)
75"	82±2KGS	104±2KGS	1650*928mm	1714*1012*90mm	1845*1145*220mm(carton)
84"	107±2KGS	125±2KGS	1860.48*1046.52mm	1942*1154*84mm	2084*1325*225mm(carton)

Dimensions and weights

Note: Reference only

# Front panel of interactive display



C-Menu

D-Volume+

E-Volume-

F-Channel+

G-Channel-(Menu item+/-)

H-PC (Built-in OPS power On/Off key (If no OPS, no functions)

I-ES Turn (On/Off Energy-saving)

J-Enter (enter above choice)

K-Home (back to Android home screen)

X-Power in, AC110-220V

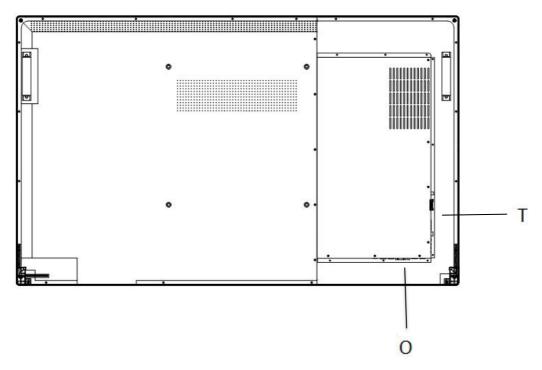
Y-Switch

Note: Front panel picture for reference only may differ from actual product

S-TOUCH USB

L&N - Speaker

# Rear view of interactive display

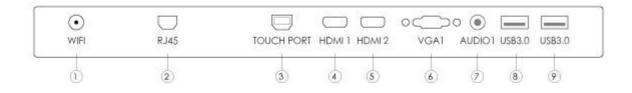


Note: Reference only may differ from actual product

# Back I/O Ports T

	Number	NAME	FUNCTION
	1	PC USB	For external PC USB port transfer to front PC USB port
	2	SPDIF	Coaxial output
	3	RS232	serial communication transmission of data control
	4	SD CARD	SD card slot, support max 32GB SD CARD
RS 232 3	5	0	Headphone output
SD CARD (4)	6	AV OUT	AV OUT
• • • • •	7	YPbPR	Coaxial output
AV OUT6 YRBPR7	8	AV IN	AV IN

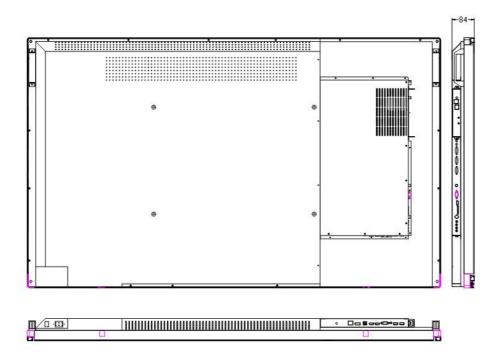
# Back I/O Ports O



Number	NAME	FUNCTION
1	WIFI	WIFI antenna
2	RJ45	Wired network port
3	TOUCH USB	Touch port
4	HDMI 1	HD multimedia signal input 1
5	HDMI 2	HD multimedia signal input 2
6	VGA1	External computer video input
7	AUDIO1	External computer audio input 1
8	USB3.0	Supports playing documents, pictures, audios, and videos
9		directly under android

# Side/rear port description

# Side View



Remark: For reference only.

Video Input: Connect VGA cable with interactive touch MTS and source.

Audio Input: When using VGA input, an audio cable is needed to connect PC and MTS.

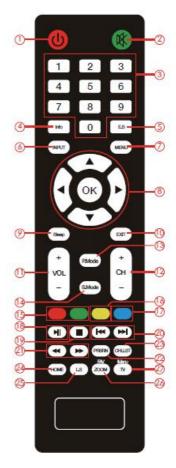
Touch Input: Using a USB cable to connect PC and interactive touch MTS

# **Packing List**

No.	Part name	Quantity
1	RCU (Remote Control Unit)	1
2	Warranty Card	1
3	USB cable (1.5 metre, B-type)	1
4	USB cable (1.5 metre, A-type)	1
5	Stylus (3 pieces with different color)	1
6	Telescopic	1
7	Accessory Box	1
8	User Manual	1
9	Wall Mount Screws	4
10	Power cable (1.8 metre, Australia specification)	1
11	VGA cable (1.8 metre, black)	1
12	HDMI cable (2 metre, black)	1
13	Audio cable (1.5 metre, black)	1
14	AAA Batteries	2

# **RCU (Remote Control Unit)**

- 1) Standby: turn on or turn off the machine
- 2) Mute: mute or restore the sound
- 3) 0-9 numeric key: selection or input number
- 4) Info: display the screen information
- 5) E.S: energy-saving. On E.S mode, display will be turned off, audio keep working.
- 6) INPUT: enter or select source channel
- 7) MENU: enter or exit from the menu
- 8) Up/Down/Left/Right and OK: select Up/Down/Left/Right and the selection
- 9) Sleep: Sets a timer to turn off the interactive flat panel
- 10) Exit: Returns to previous menu
- 11) VOL+/-: VOL+/ VOL- to adjust volume level
- 12) CH+/-: menu up and down select
- 13) P.Mode: adjust picture mode
- 14 ) S.Mode: adjust sound mode
- 15) N/A
- 16) Display: Turns on/off the screen display
- 17) Touch button: Turn on/off touch
- 18) Play/.Pause : play audio/video or pause audio/video
- 19) Freeze: Freeze/unfreeze the display and sound
- 20) Previous/Next: select previous or next file
- 21) Forward/Rewind: Forward or Rewind the audio/video
- 22) PRSRN: screen shot button, save the picture in SCREENSHOOT file.
- 23) CHLIST: N/A
- 24 ) Home: back to Android Home page
- 25) L.S: N/A
- 26 ) Zoom: display ratio selection, support 16:9, 4:3, Auto, full screen, just scan, 14:9, dot to dot, default.
- 27) TV: N/A



# **Introduction of OSD**



# **Operation of OSD** — How to choose source channel

Three ways as follows to choose the source channel:

1.1: Touch the source you want and already connect on the screen

Step 1: Touch the source you want, such as HDMI1

HDMI1	HDMI2	НДМІЗ
HDMI-OPS	UGA VGA	
Calculator	Clock	

Step 2: Touch the source screen



#### 1.2 Press slip menu to select

Step 1: Touch screen bottom and slip up some distance, there will be menu show as below



1.3 Use remote controller or press front source button and press"  $\clubsuit$ " and "OK" for confirmation



# Introduction of "Menu"

Under the Non Android system, press "MENU" key on the remote controller or the touch screen to show the menu, then press  $\checkmark$  / $\blacktriangleright$  to choose sub menu, press  $\bigstar$ / $\blacktriangledown$  to enter the sub menu (picture menu $\rightarrow$ voice menu $\rightarrow$ channel menu $\rightarrow$ setting menu $\rightarrow$ time menu)

### Source Menu

For signal input, including VGA, HDMI1, HDMI2, HDMI3, HDMI-OPS (for built-in PC), AV, YPBPR, Media browser.

- 1. Entering submenu by pressing  $\blacktriangle/\nabla$ .
- 2. Entering into option by pressing "OK".
- 3. Adjusting by pressing  $\triangleleft/\triangleright$ .
- 4. After finishing adjust and setting, save by pressing "OK"
  - or "EXIT" and return the previous menu.



## **Picture menu**

Includes Picture mode, Contrast, Brightness, Hue, Sharpness, Saturation, Back Light, PC image Mode, Color temperature, Color Temperature, Zoom mode.

- 1. Press  $\blacktriangle/ \nabla$  to choose sub-menu.
- 2. Press "OK" to enter the channel.
- 3. Press **◄**/**▶** to adjust.
- 4. Press "OK" or "EXIT" to save or back to the previous menu.
- Picture Mode includes standard, soft, user, game, auto, PC, vivid, nature, sport, bright. When in the PC channel, please choose PC Mode.

ک] Source	Picture Mode	্ব্যঞ্জ Sound sta	Channel	) Setting

- > PC image Mode includes Clock, phase position, horizontal position, vertical position, auto adjustment.
- Color Temperature includes Standard, Warm, User, Cold.
- > Zoom mode includes 16:9, 4:3, auto, full screen, JUST SCAN, 14:9, DOT TO DOT, DEFAULT.

#### Sound Menu

Including options of sound mode, low pitch, high pitch, equalizer, balanced sound, AVC, AD, AUTO HOH, surround sound, SRS, SPDIF output and single sound;

- 1. Choosing submenu by pressing  $\blacktriangle/\nabla$ .
- 2. Entering into option by pressing "OK".
- 3. Adjusting by pressing  $\triangleleft/\triangleright$ .
- 4. After finishing adjust and setting, save by pressing "OK" or "EXIT" and return previous menu.
- Sound mode includes Standard, Music, Cinema, Sports, User.
- SPDIF includes PCM, turn off and RAW.

Ricture	⊄ø Sound	് Channel	ලා Setting
Sound Mode	Stand	lard	
Balance	50		
SPDIF Output	PCI	м	
	Alone		
	Picture Sound Mode Low Pitch High Pitch Balance	Picture Sound   Sound Mode Stand   Low Pitch 50   High Pitch 50   Balance 50   SPDIF Output PC	Picture Sound Channel   Sound Mode Standard   Low Pitch 50   High Pitch 50   Balance 50   SPDIF Output PCM

## **Channel Menu**

Not available, when chose this Menu, will show previous menu content.

汩 Source	[æ] Picture	्य Sound	С Channel	@ Setting

#### Set Menu

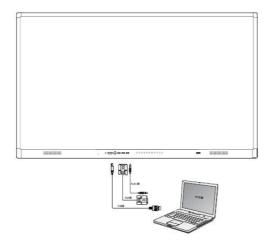
Including Menu Time, No signal shutdown time, Boot setting, Restore To Default.

- 1. Entering sub menu by pressing  $\blacktriangle/\nabla$ .
- 2. Entering into option by pressing "OK".
- 3. Adjusting by pressing  $\triangleleft/\triangleright$ .
- 4. After finishing adjust and setting, save by pressing "OK" or "EXIT" and return the previous menu.
- Menu time include 5S, 10S, 15S, 20S, 30S and ALWAYS.
- Boot setting includes boot music, boot logo, boot volume.

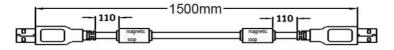


# **Connecting PC**

- Leave the MTS unit powered off
- Using the VGA or HDMI cable connect the MTS unit VGA or HDMI port with that of the PC



- Connect USB cable to the PC and to the touch port of the MTS unit.
- Power up the MTS unit and use the remote control unit (RCU) to select input source (HDMI Source)
- Use cables supplied together with this MTS unit.



The MTS unit has a driver-less touch frame.

Connect the USB cable.

Once the USB cable is connected, allow a few seconds for the MTS to register the connected PC.

## Maintenance of touch frame

- The IR technology is sensitive to excessive dust
- Keep the screen surface free from dust
- Clean with a soft dry cloth

# Troubleshooting

#### No Signal

Possible Causes: Connecting ports damage, VGA or HDMI line failure, Source input selection error, VGA or HDMI line not fixed connected

Corrective actions: Re-connect VGA or HDMI line and check if it is fixed firmly

Select the right input source

#### No Audio

Possible causes: audio line not connected, check audio output from PC (e.g. volume, mute, etc.)

Corrective actions: Ensure audio cable is connected if using VGA, check volume and mute output in PC

#### Touch frame issues

Off calibration

Corrective action: Re-do the calibration, using Windows or IR frame calibration software included with the MTS unit, Check display resolution of your PC

Touch point drift.

When the cursor drifts away from the touch point.

Corrective action: Ensure there are no 'other' accidental touches from sleeves, elbows, etc.

Only single touch

Check if your PC has installed WIN7 or higher version OS

Check that the software you are using is multi touch capable

Corrective action: Install and use multi touch capable OS and application software.

## **Trouble shooting for MTS problems**

No audio and picture

- Check if the power is on and power cord connected firmly with power supply
- Check if you have turned the power button on rendering the unit on standby
- Check brightness and contrast setting
- Check volume
- Check the Source selection is appropriate

### Picture but no audio

- Check volume
- Check if the mute button is activated in the RCU

## No picture or only black and white picture

- Adjust color setting
- Check if the color format is right

### Disturbance in audio and picture

- Relocated MTS unit
- Plug the power line to another power socket
- Re adjust antenna

## Picture is not clear or distorted

• Check antenna orientation, position and connection.

### Not full screen display

- Go to picture menu set the zoom mode to 16:9 or full screen or dot to dot
- Change the PC resolution to 1920\*1080p or default
- Set the PC project to "second screen only"

#### Non responsive RCU

- Change batteries
- Clean RCU emitting window
- Unblock the receiving window at the MTS unit
- Check batteries' contact points.

## **RoHS Standards**

Part name	Toxic and Hazardous Substances or Elements					
	Lead	Mercury	Cadmium	Hexavalent Chromium	Polybrominated Biphenyl	Polybrominated Diphenyl Ether
	(Pb)	(Hg)	(Cd)	Cr(VI))	(PBB)	(PBDE)
Housing	0	0	0	0	0	0
LED screen	x	0	0	0	0	0
PCB parts	x	0	0	0	0	0
Power line/Connection line	x	0	0	0	0	0
RCU	0	0	0	0	0	0
Accessories	x	0	0	0	0	0

#### Marking for toxic and hazardous substances and elements

\* : PCB parts includes PCB board and its components, such as resistor, capacitor, IC, connector etc.

o: Represents toxic and hazardous substance content contained in all homogeneous materials of designated part below National Standards of SJ/T 1364-2006.

X: Represents toxic and hazardous substance content contained in one of homogeneous materials of designated part all meet EU ROHS standard and PCB parts related Lead is exempted from Eu RoHS, and the maximum content is **946166.7 ppm**.

Remark: Environmental protection life time 10 years. Use under temperature of  $5^{\circ}C \sim 35^{\circ}C$ , all toxic and hazardous substances will not leak.

Environmental protection life time of this product does not include batteries.