

# **USER MANUAL**

Models : CTOUCH 46", 55", 55"LED, 65", 70", 82"

ver. 2.0

CTOUCH consists of a complete range of interactive FullHD LCD touch displays. Through the innovative technology Optical Sensing, CTOUCH displays are fast and very accurate to use.

The complete range extends from 32 inch to 82 inch.

The 55 inch model is alsy available in a LED version. This environmentally friendly variant consumes 50% less energy!

At least 50.000 burning hours Full HD 1920 x 1080 Dual or Multi Touch A clear and sharp view at all times 1 USB cable to the computer Innovative Optical Sensing technology Optional soft touch pen 3 years warranty



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#### **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. 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.
- 15. Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
- 16. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.
- 17. The mains plug of the power supply cord shall remain readily operable.
- 18. An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing connection.



### NOTE: PROLONGED USE OF HEADPHONES AT A HIGH VOLUME MAY CAUSE HEALTH DAMAGE ON YOUR EARS.

The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. (Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household waste at the end of its working life. To prevent possible harm to the environment or damage to health from uncontrolled waste disposal, please separate this from other types of waste and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal

#### SAFETY PRECAUTIONS

The up contents not to notify can be changed.

#### NOTE

The color and appearance of the product may vary depending on the model, and the product specifications are subject to change without prior notice for reasons of performance enhancement.



### PLEASE READ THE FOLLOWING SAFETY INSTRUCTIONS AS THEY ARE DESIGNED TO PREVENT DAMAGE TO PROPERTY AND HARM TO THE USER.



Warning / Caution



Failure to follow directions noted by this symbol could result in bodily harm or damage to the equipment.



Notational Conventions



Prohibited

Do not disassemble

Do not touch



Important to read and understand at all times





Ground to prevent an electric shock

#### POWER



When not used for an extended period of time, set your computer to DPM. If using a screen saver, set it to active screen mode. The images here are for reference only, and are not applicable in all cases (or countries).

Do not use a damaged or loose plug. • This may cause electric shock or fire.



Do not pull the plug out by the wire or touch the plug with wet hands. • This may cause electric shock or fire.



Use only a properly grounded plug and receptacle.An improper ground may cause electric shock or equipment damage.



Insert the power plug firmly so that it does not come loose.A bad connection may cause fire.



Do not excessively bend the plug and wire, or place heavy objects upon them, as this could cause damage.

• This may cause electric shock or fire.



Do not connect too many extension cords or plugs into one outlet. • This may cause fire.



Do not disconnect the power cord while using the LCD Display.

• A surge may be caused by the separation and may damage the LCD Display.



Do not use the power cord when the connector or plug is dusty.

- If the connector or plug of the power cord is dusty, clean it with a dry cloth.
- Using the power cord with a dusty plug or connector may cause electric shock or fire.



To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable. • This may cause electric shock or fire.

#### INSTALLATION





Put down the LCD Display carefully. • Failing to do so may damage the LCD Display.



Do not place the LCD Display face down. • This may damage the TFT-LCD surface.

The installation of the bracket must be done by a gualified professional.

• Installing the bracket by unqualified personnel may result in injury.

• Always use the mounting device specified in the owner's manual.



When installing the product, make sure to keep it away from the wall (more than 10 cm / 4 inches) for ventilation purposes.

• Poor ventilation may cause an increase in the internal temperature of the product, resulting in a shortened component life and degraded performance.



Do not spray water or detergent directly onto the LCD Display. • This may cause damage, electric shock or fire.



#### LCD INTERACTIVE SHALL BE FIXED TO THE GROUND BY SCREWS.



### WHEN CLEANING THE LCD DISPLAY CASE OR THE SURFACE OF THE TFT-LCD SCREEN, WIPE WITH A SLIGHTLY MOISTENED, SOFT FABRIC.



Keep the product away from places exposed to oil, smoke or moisture; do not install inside a vehicle.

- This may cause a malfunction, electric shock or fire.
- In particular, avoid operating the LCD Display near water or outdoors. Where the LCD Display could be exposed to snow or rain.

#### **OTHERS**

When removing batteries from the remote control, be careful that.
They are not swallowed by children. keep the batteries out of children's reach.
If the batteries are swallowed, see a doctor immediately.

(damage).



When replacing batteries, place the batteries in the correct +/- polarity position as indicated on the battery holder.

• The incorrect polarity may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



Use only specified standard batteries. Do not use new and used batteries together. • This may cause a battery to break or leak and may cause fire, injury, or contamination



The batteries (and rechargeable batteries) is not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning. The used or rechargeable batteries for recycling purposes as the consumer.

• The customer can return used or rechargeable batteries to a nearby public recycling center or to a store selling the same type of the battery or rechargeable battery.

### **PACKAGE CONTENTS**

#### NOTE

Please make sure the following items are included with your LCD Display. If any items are missing, contact your dealer. Contact a local dealer to buy optional items.



#### FRONT



#### 1) POWER

Turns the LCD Display On/Off.

#### 2) MENU

Opens the on-screen menu and exits from the menu or closes the adjustment menu.

#### 3) SOURCE (INPUT)

Switches from PC mode to Video mode. Changing the source is only allowed for external devices that are connected to the LCD Display at the time.

#### 4+5) Vol-/Vol+( LEFT/ RIGHT)

Moves from one menu item to another horizontally or adjusts selected menu values. adjusts the audio volume.

#### 6+7) ▲ /▼(UP/DOWN)

Moves from one menu item to another vertically or adjusts selected menu values.

#### 8) LED

Shows Power Saver mode by blinking RED.

#### 9) IR Sensor

Aim the remote control towards this spot on the LCD Display.





- 1. AC Power In.(100V ~ 240V)
- 2. USB(for Touch)
- 3. RS-232 Input.
- 4. HDMI 1, 2, 3 Input.
- 5. PC(RGB) Input.
- 6. PC(Audio) Input.
- 7. SPIDF (Optical) Audio Output.
- 8. S-Video Input.
- 9. AV Input.
- 10. Component.(Input)
- 11. Sound Output.
- 12. SCART Input.
- 13. Sound Out.(2ch 8W, 8 Ohm)

#### **REMOTE CONTROL**



Insert the battery into proper polarities.



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### CONNECTION

### **CONNECTING A COMPUTER**



- 1. Connect the power cord for your LCD Display to the power port on the back of the LCD Display. Turn on the power switch.
- Using the D-sub (Analog) connector on the video card. Connect the D-sub to the 15-pin, RGB port on the back of your LCD Display and the 15 pin D-subPort on the computer.
- 3. Using the HDMI(DVI) connector on the video card. Connect the HDMI(DVI) Cable to the HDMI (HDCP) port on the back of your LCD Display and the HDMI(DVI) port on the computer.
- 4. Using the USB (TOUCH) connector on the PC USB terminal. Connect the USB(A-B) Cable to the USB port on the back of your LCD Display and the USB port on the computer.

### ADJUSTING THE LCD DISPLAY

### **PICTURE MENU**

Press [MENU] Button. OSD Main MENU will be shown.



#### ENTER THE PICTURE MENU

Press ▲/▼ Button to move the PICTURE Menu. Press ENTER Button.



#### ADJUSTMENT CSM (COLOR STATUS MODE)

Press  $\blacktriangle/ \blacksquare$  Button to move the CSM. Press ENTER Button.

Press ▲/▼Button to move the Cool, Normal, Warm, User. Press ENTER Button.



#### **CUSTOM ADJUSTMENT CSM**

Press  $\blacktriangle/ \blacksquare$  Button to move the R/G/B. Press ENTER Button.

Press  $\triangleleft \triangleright$  Button to adjust R/G/B rate.



#### **PICTURE MENU**





Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press ▲/▼Button to move the PSM (Picture Status Mode). Press ENTER Button.

Press ▲/▼Button to select Dynamic/Standard/Mild/ Game/User. Press ENTER Button.

User is already setting value of Contrast & Brightness.

#### **ADJUST BACKLIGHT**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press ▲/▼Button to move to the Backlight. Press ENTER Button. Back light is related to power consumption.

Press  $\lhd \triangleright$  Button to adjust the Contrast rate. After finish, Press [Exit] Button to exit the OSD MENU.



#### **SOUND MENU**

Press [MENU] Button. OSD Main MENU will be shown.



#### ENTER THE SOUND MENU

Press  $\blacktriangle$  /  $\blacktriangledown$  Button to move the SOUND Menu. Press the ENTER Button.



#### **SELECT SOUND EFFECT**

Press ▲/▼Button to select Flat/Music/Movie/ Speech/User. Press ENTER Button. User is already setting value of Equalizer.



#### SOUND BALANCE

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press  $\blacktriangle/\blacksquare$  Button to select the Balance Menu. Press ENTER Button.

Press  $\lhd \triangleright$  Button to adjust the Left/Right Balance rate.

#### **SOUND MENU**



### **ADJUST EQUALIZER**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press ▲/▼ Button to select the Equalizer Menu. Press ENTER Button.

Press  $\blacktriangle/ \blacksquare$  Button to select the 0.1/0.5/1.0/5.0/10kHz. Press ENTER Button.

Press  $\lhd \triangleright$  Button to adjust the Equalizer frequence

AVL mode is not supported.

After finish the adjustment, press [Exit] Button to exit of the OSD MENU.

Setup System and time On/OFF.

Press [MENU] Button. OSD Main MENU will be shown.



#### **ENTER THE TIME MENU**

Press ▲/▼ Button to move up to the TIME Menu. Press ENTER Button.



#### **SETUP SYSTEM TIME**

Press  $\blacktriangle/ \blacksquare$  Button move up to the Clock Menu. Press ENTER Button.

Auto mode is not supported.

Press  $\blacktriangle/ \blacksquare$  Button to select Manual. Press ENTER Button.

Press  $\blacktriangle/ \blacksquare$  Button to adjust the time. Press ENTER Button.



**CTOUCH** 

#### **SETUP SYSTEM OFF TIME**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press  $\blacktriangle / \triangledown$  Button to select Off Time. Press ENTER Button.

Press  $\blacktriangle / \checkmark$  Button to select Off. Press ENTER Button.

Press  $\blacktriangle/ \blacksquare$  Button to adjust the OFF time. Press ENTER Button.

#### **TIME MENU**



#### **SETUP SYSTEM ON TIME**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press  $\blacktriangle/ \blacksquare$  Button select On Time. Press ENTER Button.

Press  $\blacktriangle/ \blacksquare$  Button to move up to the PR. Press ENTER button.

Press ▲/▼Button to adjust On Time. Press ENTER button.

#### **ADJUST BACKLIGHT**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press ▲/▼Button to move to the Backlight. Press ENTER Button. Back light is related to power consumption.

Press  $\lhd \triangleright$  Button to adjust the Contrast rate. After finish, Press [Exit] Button to exit the OSD MENU.



#### **INPUT MENU**

Press [MENU] Button. OSD Main MENU will be shown.



#### **ENTER THE INPUT MENU**

Press ▲/▼ Button to move up to INPUT Menu. Press ENTER Button.



#### **INPUT SOURCE SELECT**

Press ▲/▼ Button to select SCART/AV/ S-VIEDO/COMPONENT/PC/HDMI1/HDMI2/HDMI3. Press ENTER Button.



#### **SELECT SCREEN RATIO**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press  $\blacktriangle/ \blacksquare$  Button to select ARC(Auto Ratio Control). Press ENTER Button.

Press ▲/▼Button to select AUTO/16:9/14:9/4:3/ Zoom1/Zoom2/Spectacle. Press ENTER Button.

After finish the adjustment, Press [Exit] Button to exit of the OSD MENU.

#### **SET UP MENUS**

Press [MENU] Button. OSD Main MENU will be shown.



#### **ENTER SETUP MENU**

Press ▲ / ▼ Button to move up to SETUP Menu. Press ENTER Button.



#### **CHANGE OSD LANGUAGE**

Press ▲/▼ Button to select Language. Press ENTER Button.



#### **SETUP RESET**

Press  $\triangleleft$  or Menu Button to move up to upper MENU.

Press  $\blacktriangle/\blacksquare$  Button to select Reset Press ENTER Button.

Press  $\blacktriangle/ \blacksquare$  Button to select ON, OFF. Press ENTER Button.





#### **SETUP PC CONTROL**

 $\mbox{Press} \triangleleft \mbox{or}$  Menu Button move up to the PC Control Menu.

Press  $\blacktriangle/ \blacksquare$  Button to change each item. Press ENTER Button.

Press ▲/▼Button to adjust values. Press ENTER Button.

If you want to auto adjust, just select Auto Adjust and press enter.



#### **SETUP WXGA**

Press  $\triangleleft$  or Menu Button move up to upper MENU.

Press  $\blacktriangle$ / $\bigtriangledown$ Button to select the WXGA Menu. Press ENTER Button.

Press  $\blacktriangle / \triangledown$  Button to select resolution. Press ENTER Button.

After finish the adjustment, Press [Exit] Button to exit of the OSD MENU.

#### **TOUCH CALIBRATION**

#### 1. How to initiate Calibration (2 ways)

- Press Calibration button from the given application
- Press the Scroll Lock key 10 times.



- 2. Mouse Cursor pointer tip needs to be touched for each calibration point
- 3. For each calibration point, touch above the mouse cursor tip vertically and hold until mouse cursor moves to the next position.
- 4. Mouse cursor will move to the center of the screen when 4 point calibration is finished.



- Draw rectangle or circle with a 30 millimeter or bigger diameter circle-shaped puck.
   Draw every edges and comers with that puck
- Draw strait vertical and horizontal lines more than 5 times. Check whether drawn lines are strait enough

### **INTERFACE BOX & HIDDEN KEY**

- 1. Press Scroll Lock button 10 times to initiate calibration
- 2. Num Lock button 10 times to change 2-Touch Mode
- Touch mode sequence: None Wheel Mode Right Click None
- 3. Press Caps Lock button 10 times to toggle beep on/off



#### **SPECIFICATIONS**

#### SYSTEM SPECIFICATIONS

ITEMS	65 INCH	70 INCH	82 INCH
Detection method	Optical image sensor system		
Touch tool / Reaction	Hand or other solid object, 50m/s(min)		
Supported OS	Windows XP / Vista / 7		
Effective screensize(mm)	1428.48(W) x 803.52(H)	1549.44(W) x 871.56(H)	1805.76(W) x 1015.74(H)
Overall dimensions (with stand) mm	1555(W)x1045(H)x280(D)	1667(W)x1108(H)x280(D)	1924(W)x1242(H)x280(D)
Overall dimensions (without stand) mm	1555(W)x980(H)x135(D)	1667(W)x1028(H)x131(D)	1924(W)x1175(H)x132(D)
Weight	Approx. 94.7Kg	Approx. 100Kg	Approx. 134Kg

### LCD PANEL SPECIFICATIONS

ITEMS	65 INCH	70 INCH	82 INCH
Display Size (Diagonal)	65Inch (16:9)	70Inch (16:9)	82Inch (16:9)
Response Time	5.5ms(Typ G to G)	8 ms(Typ, G to G)	8 ms(Typ, G to G)
Pixel Pitch (mm)	0.744(H) x 0.744(V)	0.807(H) x 0.807(V)	0.9405(H) x 0.9405(V)
Resolution	1920 x 1080 (WXGA)	1920 x1080 (WXGA)	1920 x1080 (WXGA)
Colors	8 bit+FRC, 1073.7M	8 bit, 16.7M	8 bit, 16.7M
Brightness	500cd/m² (Typ)	450cd/m² (Typ)	450cd/m² (Typ)
Contrast Ratio	5000:1	2000:1	2000:1
View Angle(Typ)	Hor. 178, Ver. 178	Hor. 178, Ver. 178	Hor. 178, Ver. 178
Surface Treatment	Hard coating(3H)	Hard coating(3H), Haze 44%	Hard coating(3H), Haze 44%
Panel Size(Typ)mm	1508.0W x 878.0H	1630.0W x 952.0H	1878.6W x 1083.6H

### **RATINGS OF ENVIRONMENT**

ITEM / MODEL	65 INCH	70 INCH	82 INCH
Storage Temperature	-20 °C ~+60°C		
Operating Temperature	0°C ~+35°C		
Power Supply Voltage	AC100 -240V, 50/60Hz		
Power Consumption	550W	630W	675W

#### **SPECIFICATIONS**

#### SYSTEM SPECIFICATIONS

ITEMS	55″ LED	55″ LCD	46″ LCD
Detection method	Optical image sensor system		
Touch tool / Reaction	Hand or other solid object, 50m/s(min)		
Supported OS	Windows XP / Vista / 7		
Effective screen size(mm)	1209.6(W) x 680.4(H)	1209.6(W) x 680.4(H)	1018.08(W) x572.67(H)
Overall dimensions (with stand) mm(WxHxD)	1335.5 x 915 x 250	1335.5 x 915 x 250	1141 x 794 x 250
Overall dimensions (without stand) mm	1335.5 x 850 x 100	1335.5 x 850 x 123	1141 x 729 x 124.7
Weight	Approx. 56Kg	Approx. 63Kg	Approx. 48Kg

### LCD PANEL SPECIFICATIONS

ITEMS	55″ LED	55″ LCD	46″ LCD
Display Size (Diagonal)	55Inch (16:9)	55Inch (16:9)	46Inch (16:9)
Response Time	6ms(Typ G to G)	6ms(Typ G to G)	8ms(Typ G to G)
Pixel Pitch (mm)	0.63(H) x 0.63(V) mm	0.63(H) x 0.63(V) mm	0.53(H) x 0.53(V) mm
Resolution	1920 x 1080 (WUXGA)	1920 x 1080 (WUXGA)	1920 x 1080 (WUXGA)
Colors	1.07Billion Colors	1.07Billion Colors	16.7M Colors
Brightness(Typ)	450cd/m², LED BACKLIGHT	450cd/m², CCFT BACKLIGHT	450cd/m <sup>2</sup> , CCFT BACKLIGHT
Contrast Ratio	5000:1	5000:1	4000:1
View Angle(Typ)	Hor. 178, Ver. 178	Hor. 178, Ver. 178	Hor. 178, Ver. 178
Surface Treatment	Hard coating, Haze 0%	Hard coating, Anti-glare	Hard coating, Haze44%
Panel Size(Typ)mm	1267.6Wx744.4Hx30.9D	1286.0Wx745.0Hx62.5D	1083Wx627Hx57.5D

ITEM / MODEL	55″ LED	55″ LCD	46″ LCD
Storage Temperature	-20°C ~+60°C		
Operating Temperature	0°C ~+35°C		
Power Supply Voltage	AC100 -240V, 50/60Hz		
Power Consumption	40W ~ 150W	60W ~ 210W	60W~200W

### **INPUT/OUTPUT DESCRIPTION**

I	TEMS	SPECIFICATIONS	
	Display Format	Auto/16:9/14:9/4:3/ZOOM1/ZOOM2/Spectacle	
Video	Picture Status Memory	5 Modes	
	Color Status Memory	4 Modes	
	Output(RMS)	EQ Max. 8W X 2 Channels	
	Sound System	Stereo	
Sound	Equalizer	5 Bands	
	Sound Status Memory	5 Modes	
	Balance	Yes	
	PC-RGB	1 ( D-SUB 15P)	
	PC-Audio	1 ( Ø3.5 JACK )	
	Full-Scart or RCA-AV	1 ( SCART 21P )	
	CVBS Input/Audio L/R	1 ( RCA JACK )	
Torminals	SPDIF	1 ( Optical )	
Terminats	Component Video/Audio	1 ( Y-Pb-Pr RCA JACK )	
	HDMI	3 (HDMI 1.3/HDCP1.1/DVI1.0 Compatible )	
	EXT, Audio Output	1 ( Ø3.5 JACK )	
	RS232C	1 ( D-SUB 9P )	
	Software Update	Yes(Through D-SUB With Jig-Board)	
	Component	480i/480P/576I/576P/720P/1080I/1080P	
		1080P(50HZ/60HZ)	
	HDMI	1080i(50HZ/60HZ)	
		720P(50HZ/60HZ)	
Resolution		576P(50HZ)	
		480P(60HZ)	
	PC	DOS 720*400(70HZ)	
		VGA 640*480(60HZ/72HZ/75HZ)	
		SVGA 800*600(56HZ/60HZ/72HZ/75HZ)	
		XGA 1024*768(60HZ/70HZ/75HZ)	
		SXGA 1280*1024(60HZ)	
		WXGA 1280*768(60HZ/75HZ), 1360*768(60HZ/75HZ)	
		WSXGA 1600*1200(60HZ), 1920*1080(60HZ)	

#### **MECHANICAL LAYOUT**

#### 82" LCD INTERACTIVE



31





70" LCD INTERACTIVE



0

**65" LCD INTERACTIVE** 

•

LINNA HANNA NYA MAMPINA MAN



224

100

915

73.5

61

L٠

55" LED INTERACTIVE

71

.

55"LED

1,213





**55" LCD INTERACTIVE** 



**46" LCD INTERACTIVE** 

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