ZKTEK

COT215E-APK02

21.5" Open-Frame Monitor with 4mm

SAW Touchscreens

Safety Instructions

1. Read these safety instructions carefully.
2. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
3. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
4. Keep this equipment away from humidity.
5. Put this equipment on a reliable surface during installation. Dropping it or letting if fall may cause damage.
6. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
8. Position the power cord so that people cannot step on it . Do not place anything over the power cord.
9. All cautions and warnings on the equipment should be noted.
10. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over voltage.
11. Never pour any liquid into an opening. This may cause fire or electrical shock.
12. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
13. If one of the following situations arises, get the equipment checked by service personnel:
    A) The power cord or plug is damaged.
    B) Liquid has penetrated into the equipment.
    C) The equipment has been exposed to moisture.
    D) The equipment does not work well, or you cannot get it to work according to the user's manula.
    E) The equipment has been dropped and damaged.
    F) The equipment has obvious signs of breakage.

14. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20℃ OR ABOVE 60℃. THIS MAY DAMAGE THE EQUIPMENT.

1.1 Introduction

- Long lasting product cycle-enclosure controlled by touch specifications
- Future generation panels phased-in without external changes
- High quality panel with high brightness,high contrast ratio and broad viewing angle
- Multiple mounting options including VESA mount, horizontal or vertical bracket-mount
- Compact and slim profile for easy integration from side,top and bottom
- SAW technology on pure glass for the ultimate in image quality
- Finger or gloved hand operation
- Dual USB/Serial touch interface port
- Worldwide agency approvals

1.2 Product Features

1.2.1 General

Model	COT215E-APK02
Series	Dust-proof and Compact
Monitor Dimensions	**Width**: 512mm **Height**: 298mm **Depth**:54.3mm
Weight（N.W/G.W）	8Kg / 9.5Kg (Approx.)
LCD Type	21.5"WSXGA Color TFT-LCD
Video Input	VGA and DVI
Recommend	1920*1080@60Hz
OSD controls	Allow on-screen adjustments of Brightness, Contrast Ratio, Auto-adjust, Phase, Clock, H/V Location, Languages, Function,
Power Supply	Type: External brick Input (line) voltage: 100-240 VAC, 50-60 Hz Output voltage/current: 12 volts at 4 amps max
Mount Interface	1)VESA 75mm and 100mm 2)Mount bracket, horizontal or vertical
Regular Warranty	3 years for SAW Sensor; 3 years for controller; 1 year for LCD
Agency Approval	FCC,CE

1.2.2 LCD Specification

Active Area(mm)	476.64(H)×268.11(V)
Resolution	1920x1080@60Hz
Dot Pitch(mm)	0.24825×0.24825
Nominal Input Voltage VDD	+5.0V(Typ)
Viewing angle (v/h)	89°/89°
Contrast	3000:1
Luminance(cd/m2)	250
Response Time	5s/20s
Support Color	16.7M colors
Backlight MTBF(hr)	50000

1.2.3 Touchscreen Specification

Type	SAW touch Surface Acoustic Wave(SAW)
Resolution	4096x4096
Light Transmission	92%
Touch Life Cycle	50 millions
Touch Response time	16ms
Touch System Interface	RS-232 and USB interface
Power consumption	+5V@80mA

1.2.4 External AC Power Adapter

Output	DC 12V /4A
Input	100-240 VAC, 50-60 Hz
MTBF	50000 hr at 25℃

1.2.5 Environment

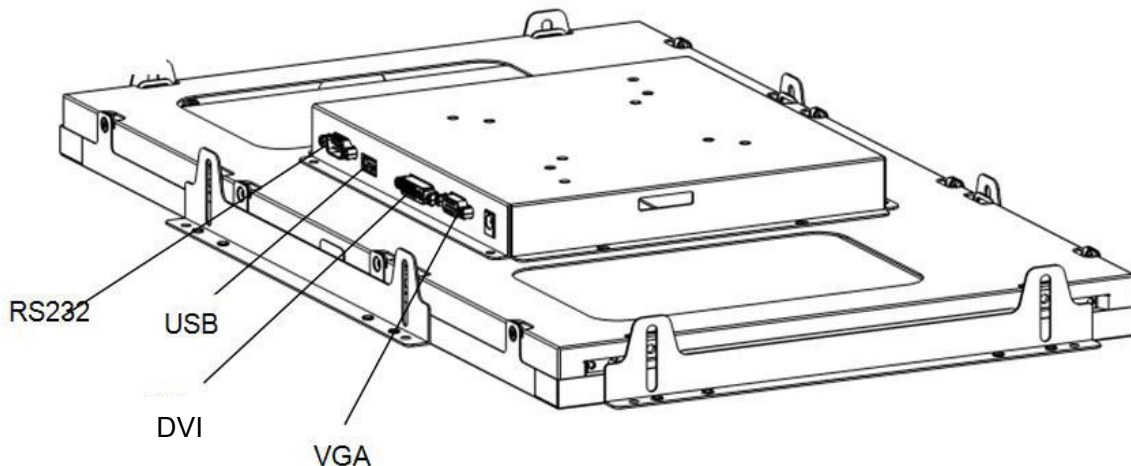| Operating Temp.	0～50℃
Storage Temp.	-20～60℃
Operating RH:	20%～80%
Storage RH:	10%～90%

1.3 System setup

1.3.1 Preparing for First-time Use

Before you start to set up the LCD Monitor, You should have at least the following items ready in your accessory box:

A) 12V DC Power adapter;
B) Power cord for adapter;
C) VGA cable;
D) RS-232 cable or USB cable
E) L-brackets：Two standard L-brackets are included
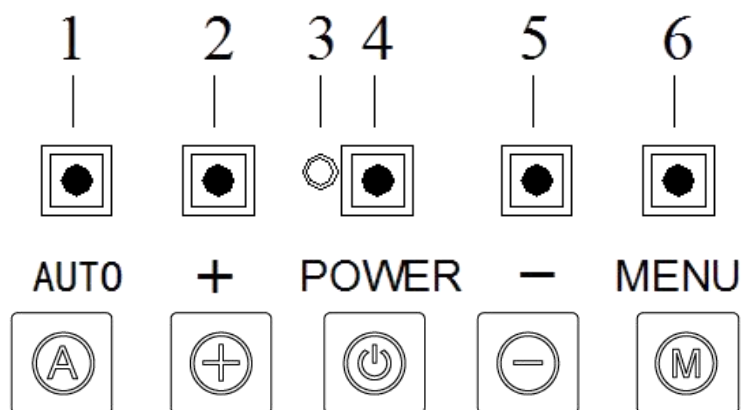F) CD driver for LCD Monitor

1.3.2 I/O arrangement

The diagram shows the VGA port, RS-232 port, USB port and DC Power inlet

RS232　USB　DVI　VGA

1.3.3 OSD Control
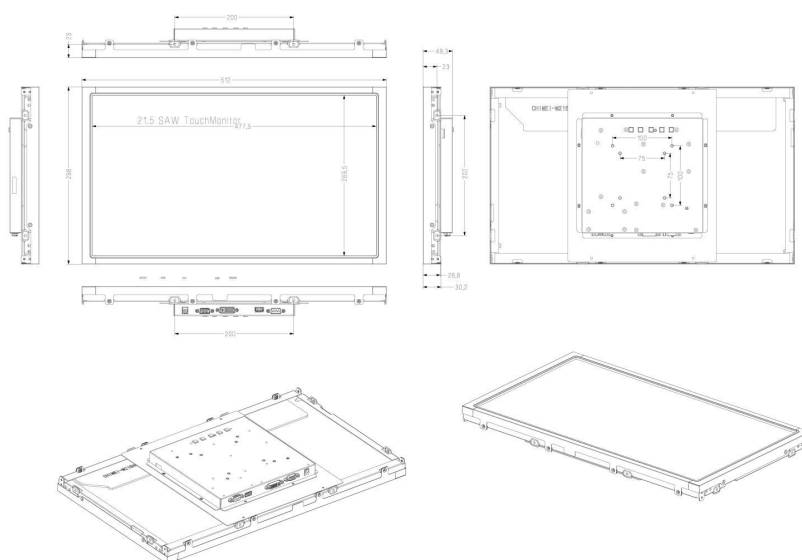
OSD buttons

Adjusting with OSD control

Five different keys are well-defined for operation . They are labeled on the keypad.

A) **[Power]** Key is designated for Power On/Off

B) **[Menu]** Key is designated for Menu/Enter function depending on the selected item. Pressing [Menu] can invoke OSD menu. After that, [Menu] is also an entry key.

C) **[+]** key is designated for selection function in up direction in OSD menu and also to increase the value on selected function.

D) **[-]** key is designated for selection function in down direction in OSD menu and also to decrease the value on selected function.

E) **[AUTO]** key is designated for invoking AUTO ADJUST function at any time once is pressed for H-position, V-position, Pixel Clock and Phase for an optimal image.
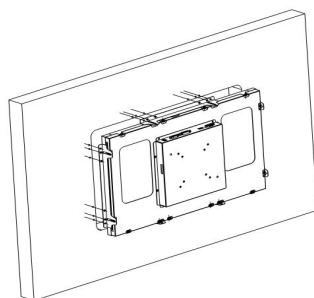
1.3.4 Setup the driver

1. Make sure the Touchscreen Cable is properly connected. The Setup program cannot configure the touchscreen without it.

2. Insert the CD Kit into your PC system's CD drive.

3. Click the SETUP.EXE installation program. The Setup program begins to execute and load the TOUCH driver.

4. Follow the instructions displayed on the screen. Make your selections carefully when ansereing questions to complete the installation.
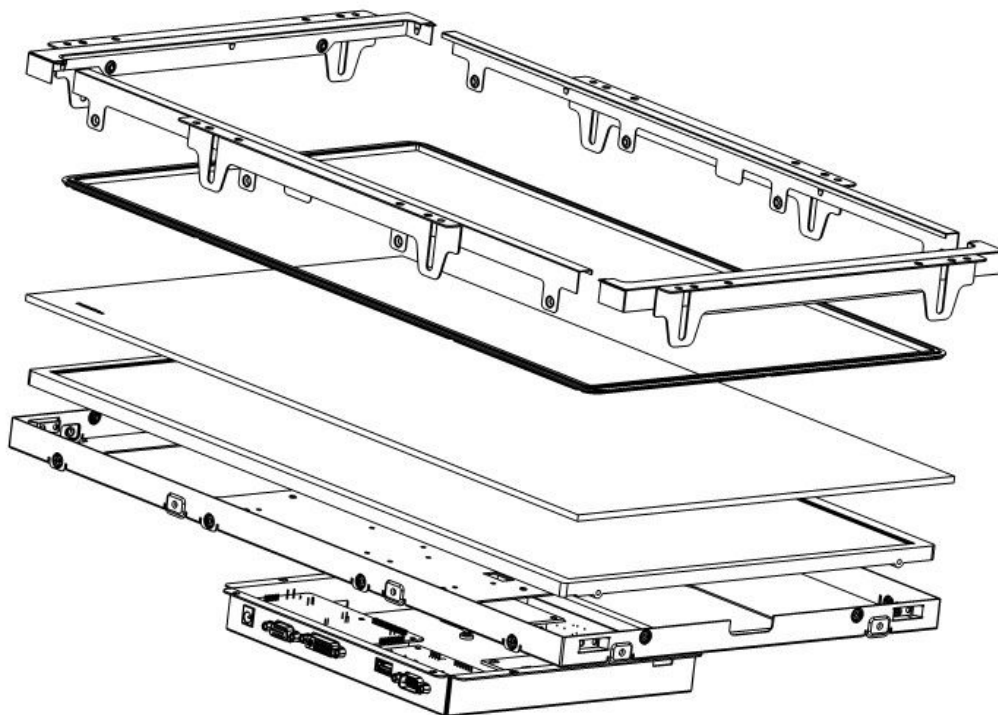
1.4 Mechanical Dimension

1.4.1　Touch Monitor Mounting guide

1. Build 8 screw studs along the four sides of the cut out opening based on the dimension given on the drawing above.

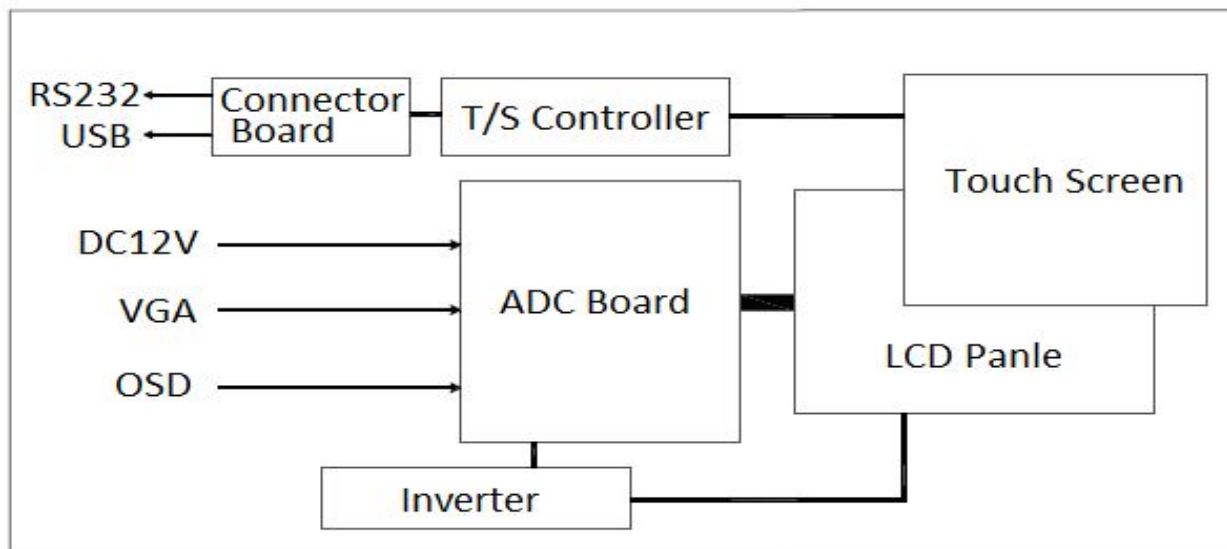2.Tighten the screw stud with hex nut and make sure it is stable.

1.4.3 Exploded Diagram

1.5 Electrical Block Diagram

The LCD touch monitor is constructed based on steel open frame architecture. It consists of a 22" LCD panel, an DC to AC inverter board to support a set of cold cathode fluorescent light, an analog to digital converter board (AD Board) to convert analog RGB signals to digital ones, and a touchscreen used as a pointing device. A metal chassis supports the whole module.

Block Diagram

2.0 Solutions to Common Problems

Problem	Suggestion(s)
The monitor does not respond after you turn on the system	1)Check that the monitor's Power Switch is on. 2)Turn off the power and check the monitor's power cord and signal cable for proper connection.
Characters on the screen are dim	Refer to the About Touchmonitor Adjustments section to adjust the brightness.
The screen is blank	1)During operation, the monitor screen may automatically turn off as a result of the Power Saving feature. Press any key to see if the screen reappears. 2) Refer to the About Touchmonitor Adjustments section to
Screen flashes when initialized	Turn the monitor off then turn it on again.
"Out of Range" display	Check to see if the resolution of your computer is higher than that of the LCD display.
Touch doesn't work	Make sure the touch cable is securely attached at both ends.

3.0 Typical Application

Gaming/Casino Systems
Outdoor and indoor Kiosks
Entertainment
Transport and Ticketing
Hospitality
Banking
Customizsed Solutions