

# COT185E-APK02

18.5" Open-Frame Monitor with 4mm

SAW Touchscreens



Shenzhen Zhongkong Computers Co Ltd. PUBLISHED DATE:2013-03-28



# **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°C OR ABOVE 60°C. THIS MAY DAMAGE THE EQUIPMENT.

# **1.1 Introduction**

<u>ZKT</u>EK<sup>®</sup>

- Long lasting product cycle-enclosure controlled by ZKTEK 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
- ZKTEK touch's 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	COT185E-APK02	
Series	Compact	
Monitor Dimensions	Width: 446.7mm Height: 268.8mm Depth: 38.5mm	
Weight (N.W/G.W)	6Kg / 8Kg (Approx.)	
LCD Type	18.5"SXGA Color TFT-LCD	
Video Input	VGA and DVI	
Recommend	1366*768 @75Hz	
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	5 years for SAW Sensor; 3 years for controller; 1 year for LCD	
Agency Approval	FCC, CE, RoHS	

#### 1.2.2 LCD Specification

Active Area(mm)	409.8(H)×230.4(V)
Resolution	1366*768 @75Hz
Dot Pitch(mm)	0.3×0.3
Nominal Input Voltage VDD	+5.0V(Typ)
Viewing angle (v/h)	80785°
Contrast	1000:1
Luminance(cd/m2)	250

#### COT185E-APK02 Spec1.0

# ZKTEK®

Response Time(Rising/Falling)	3.6s/1.4s
Support Color	16.7M colors
Backlight MTBF(hr)	30000

### **1.2.3 Touchscreen Specification**

Туре	ZKTEK 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 <b>?</b> C
Storage Temp.	-20~60 <b>?</b> C
Operating RH:	20%~80%
Storage RH:	10%~90%

## 1.3 System setup

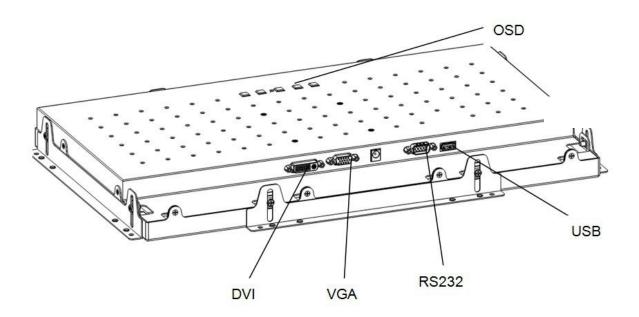
## 1.3.1 Preparing for First-time Use

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

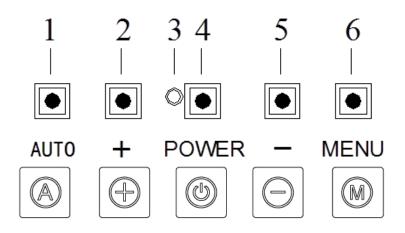
## 1.3.2 I/O arrangement

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



## 1.3.3 OSD Control

<u>ZKT</u>EK<sup>®</sup>



## 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

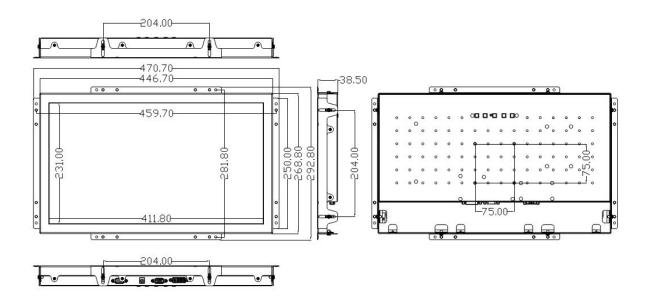
1. Make sure the Touchscreen Cable is properly connected. The Setup program cannot configure the touchscreen without it.

2. If you are install the touchscreen monitor in WINDOWS 7 system, try to install the touchscreen monitor automatically.

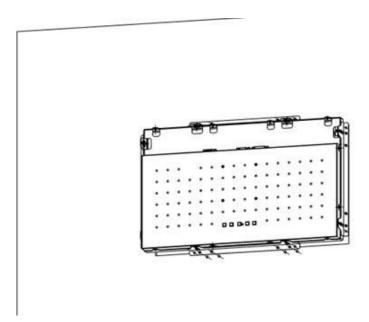
3. The system should try to locate the touchscreen monitor and install the drivers automatically.

4. Follow the instructions displayed on the screen. If there is any prompt, make your selections carefully to complete the installation

# 1.4 Mechanical Dimension



# 1.4.1 Touch Monitor Mounting guide

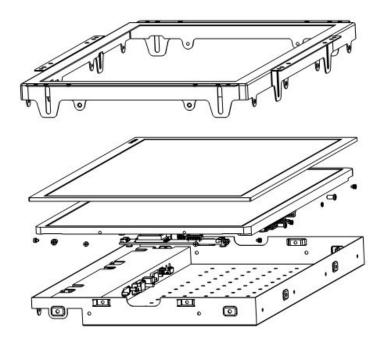




1. Build 8 screw studs along the four sides of the cut out opening based on the dimension given on the drawing above.

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

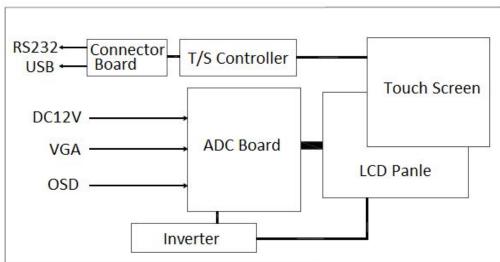
# 1.4.3 Exploded Diagram



# **1.5 Electrical Block Diagram**

The LCD touch monitor is constructed based on steel open frame architecture. It consists of a19" 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	1)Check that the monitor's Power Switch is on.
respond after you turn on	2)Turn off the power and check the monitor's power
the system	cord
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
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

## 4.0 How to contact us

## Shenzhen ZHONGKONG Computers Co. Ltd

- Add: 3/F, Blg. A, Pin'Ao Industrial Park,BaiGong'Ao Industrial Zone, Fumin Community, Guanlan, Shenzhen 518110, Guangdong, China
- Tel: +86-755-26983900
- Fax: +86-755-26983901