

**User Manual**



# **CRV-430WP Series**

**43" Curved Touch Monitor**

**ADVANTECH**

*Enabling an Intelligent Planet*

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## Product Warranty (2 years)

Advantech warrants the original purchaser that all of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products that have been repaired or altered by persons other than repair personnel authorized by Advantech, or products that have been subject to misuse, abuse, accident, or improper installation. Under the terms of this warranty, Advantech assumes no liability for the consequence of such events.

Because of Advantech's high quality-control standards and rigorous testing, most customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced free of charge during the warranty period. For out-of-warranty repairs, customers will be billed according to the cost of the replacement materials, service time, and freight. Please consult your dealer for more details.

If you suspect that your product is defective, follow the steps outlined below.

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages displayed when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and all relevant information readily available.
3. If your product is diagnosed as defective, obtain a return merchandise authorization (RMA) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a completed Repair and Replacement Order Card, and a proof of purchase date (such as a photocopy of your sales receipt) in a shippable container. Products returned without a proof of purchase date are not eligible for warranty service.
5. Write the RMA number clearly on the outside of the package and ship it prepaid to your dealer.

# Declaration of Conformity

## CE

This product has passed the CE test for environmental specifications. Test conditions for passing included the equipment being operated within an industrial enclosure. In order to protect the product from damage due to electrostatic discharge (ESD) or electromagnetic interference (EMI) leakage, we strongly recommend the use of CE-compliant industrial enclosure products.

## FCC Class A

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 such cases, users are required to correct the interference at their own expense.

# Technical Support and Assistance

1. Visit the Advantech website at <http://support.advantech.com> to obtain the latest product information.
2. Contact your distributor, sales representative, or an Advantech customer service center for technical support or additional assistance. Please have the following information ready before calling:
  - Product name and serial number
  - Description of your peripheral attachments
  - Description of your software (operating system, version, application software, etc.)
  - Comprehensive description of the problem
  - The exact wording of any error messages

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## Warnings, Cautions, and Notes

**Warning!** Warnings indicate conditions that if not observed can result in personal injury!



**Caution!** Cautions are included to prevent hardware damage or data losses.



New batteries are at risk of exploding if incorrectly installed. Do not attempt to recharge, force open, or heat the battery. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

**Note!** Notes provide additional optional information.



## Document Feedback

To assist us in improving this manual, we welcome all comments and constructive criticism. Please send all feedback in writing to [support@advantech.com](mailto:support@advantech.com)

# Safety Instructions

1. Read these safety instructions carefully.
2. Retain this user manual for future reference.
3. Disconnect this equipment from all AC outlets before cleaning. Use a damp cloth to clean the equipment. Do not use liquid or spray detergents.
4. For plugable equipment, the power outlet socket should be located near the equipment and easily accessible.
5. Protect the equipment from humidity.
6. Place this equipment on a reliable surface during installation. Dropping or letting the equipment fall may cause damage.
7. The openings of the enclosure are for air convection. Prevent the equipment from overheating. Do not cover the openings.
8. Ensure that the voltage is correct before connecting the equipment to a power outlet.
9. Position the power cord away from high-traffic areas. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If idle for a long duration, disconnect the equipment from the power source to avoid damage from transient overvoltage.
12. Never pour liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should only be opened by qualified service personnel.
14. If one of the following occurs, have the equipment checked by service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment is malfunctioning or does not function according to the user manual.
  - The equipment has been dropped or damaged.
  - The equipment shows obvious signs of breakage.
15. Do not store this equipment in an environment where the temperature fluctuates below  $-20\text{ }^{\circ}\text{C}$  ( $-4\text{ }^{\circ}\text{F}$ ) or above  $60\text{ }^{\circ}\text{C}$  ( $140\text{ }^{\circ}\text{F}$ ) because this could damage the equipment. The equipment should be stored in a controlled environment.
16. The sound pressure level at the operator's position does not exceed 70 dB (A) in accordance with IEC 704-1:1982.

DISCLAIMER: These instructions are provided according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

**Caution!** *Information regarding the adapter output rating (24 V<sub>DC</sub>, 5 A/100 W min) is provided in the user manual to assist with adaptor selection if a power adapter is not shipped with the unit.*





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# Chapter 1

## Overview

- Introduction

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## 1.1 Introduction

### 1.1.1 Scope

This document defines and describes the outline specification of a 43" curved (1500R) projected capacitive touch monitor with 4mm cover glass.

### 1.1.2 Overview

The curved projected capacitive touch monitor is constructed with tempered touch glass, UHD (3840 \* 2160) TFT panel, and solid metal chassis with 400 x 400 VESA mount for easy installation.

The curved LCD offers the best Viewing Angles of 178°/178°, without any color shift, and offers the best vibrant colors. High brightness of 450cd/m2 can meet most customer applications.

The curved projected capacitive touch offers 10 point multi-touch with non-visible wire, clear touch sensor, and tempered glass, to provide all necessary protection from impact and high performance. Manufactured from high-grade components, laminated in top class clean room to eliminate particles, hair, and fingerprints, the curved projected capacitive touch glass provides accurate touch with quick response.

**Note!** *Whilst every effort has been made to provide an accurate description of the system design and specification, changes may be required as the design process proceeds to ensure the product meets the best design and operational performance possible.*



# Chapter 2

## System Setup

- Specifications
- Packing List
- Dimensions

## 2.1 Specifications

	Part number	CRV-430WP
<b>Display</b>	Display Type	43" TFT LCD with long life LED backlight
	Max. Resolution	3840 x 2160
	Luminance (cd/m <sup>2</sup> )	450 (Typ.)
	Viewing Angle	89/89/89/89 (left/right/up/down)
	Pixel Pitch	0.2451 mm x 0.2451 mm
	Colors	10-bit(D), 1.07 Billion Colors
<b>Touch</b>	Touch Type	Projected capacitive, 4mm toughened glass
	Light Transmission	≥85%
	Driver Support	Windows, Linux, Mac
	Touch Points	10
	Touch Interface	USB
<b>Environment</b>	Hardness	≥6H
	Operating Temperature	0 ~ 50 °C
	Storage Temperature	-20 ~ 60 °C
	Vibration	Random Vibration 5-500 Hz, 2.16G, 1H per axis (with package)
	Weight	33kg (Net weight ) / 38kg (Gross weight)
<b>System</b>	I/O	VGA x 1, DP (V1.2) x 1, HDMI 1.4 x 2, HDMI 2.0 x 2, Audio input x 1, Audio output x 1, USB x 1 (AD board maintenance), USB x 1 (Reserved for touch function)
	OSD	Keys: Power, Menu, Up, Down, Left, Right, Select
	Power	120W power adaptor with AC 100~240V input and DC +24/5A output
	EMC Compliance	CE/FCC/CCC, RoHS

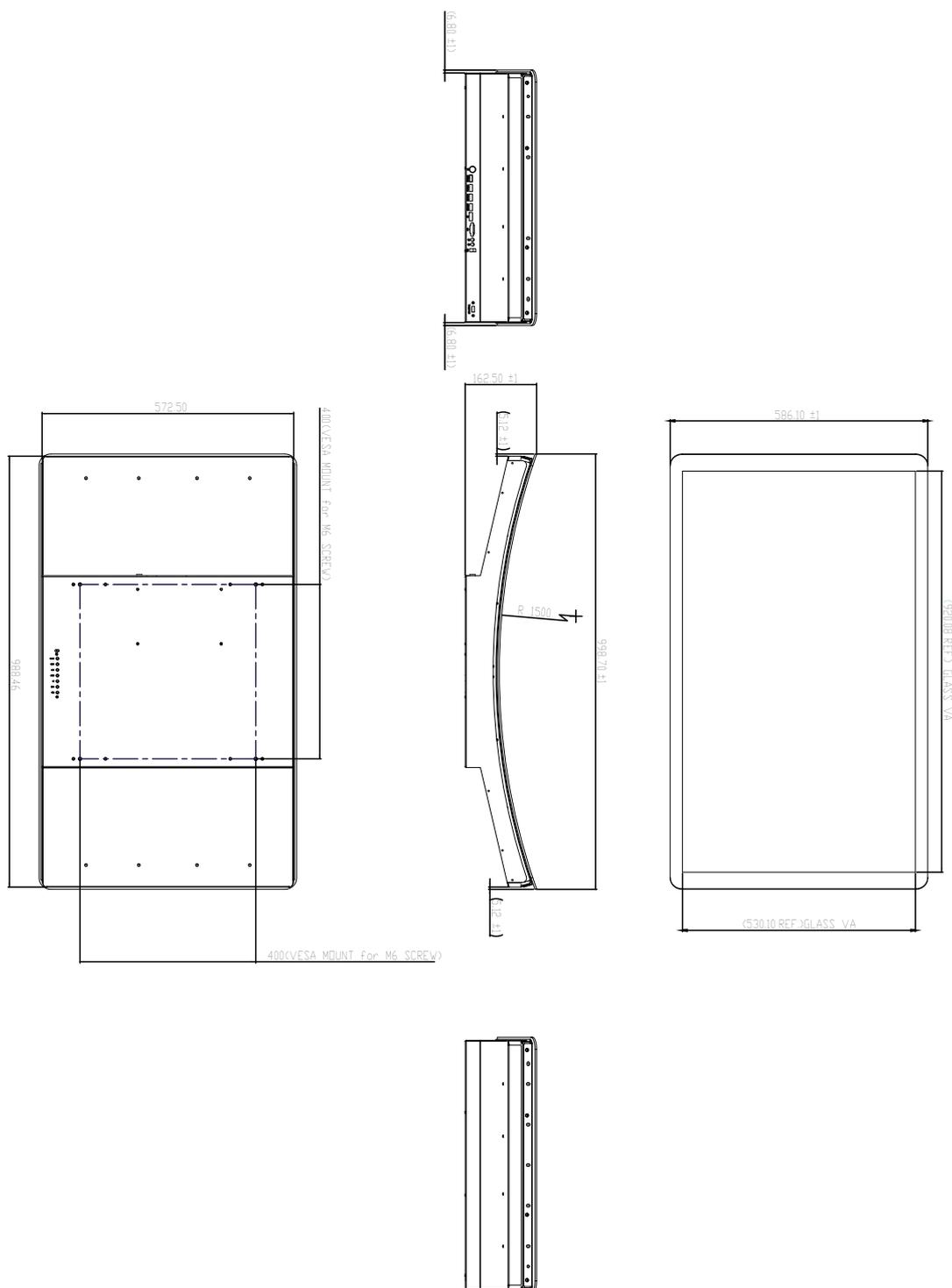
## 2.2 Packing List

- 1 x CRV-430WP touch monitor
- 1 x USB Type A cable (reserved for Touch)
- 1 x Display Port cable

**Note!** *The accessory cables listed above are subject to change for different SKUs.*



## 2.3 Dimensions



**Note!**  Select the correct VESA mounting kit with an appropriate weight loading capability. Use M6 screws to affix the digital signage display to the mounting unit.



# Chapter 3

## Functions

- LED Indicator
- OSD Menu
- Touch Drivers

## 3.1 LED Indicator

- None: power off
- Flashing Red: Standby
- Solid Blue: Active

### 3.1.1 Keypad (7 Keys)



Power, Menu, UP, Down, Left, Right, Select

Key Name	Function	Remarks
Power Key	Power On / Off	
Menu Key	OSD Menu On / Off	
Up Key	OSD Menu Up Select / Image reverse scan	
Down Key	OSD Menu Down Select	
Left Key	Volume Down	
Right Key	Volume Up	
Select Key	Input Source Select	

## 3.2 OSD Menu

OSD Menu	Description	Remarks
Picture	Color Mode	Control the Picture mode setting
	Brightness	Adjust the Brightness of the Screen
	Contrast	Adjust the Contrast of the Screen
	Saturation	Adjust the Saturation of the Screen
	Hue	Adjust the Hue of the Screen
	Gamma	Adjust the Gamma of the Screen
	Aspect Ratio	Adjust the Aspect Ratio Screen
	DCR	Set the DCR on/off of the Screen
Advance	Color Bypass	Set the Color Bypass On/Off of the Screen
	Picture Bypass	Set the Picture Bypass On/Off of the Screen
	Noise Reduction	Noise Reduction setting
	Super Resolution	Super Resolution setting
	Black Level	Gray level adjust
Color	Sharpness	Adjust sharpness
	Color Temperature	Control the temperature of the color
	Red	Control the intensity of the color of the screen's image(Usable when Color temperature is USER mode.)
	Green	
Blue		

OSD	OSD Horizontal Position	Adjust the H-Position of the OSD Menu	
	OSD Vertical Position	Adjust the V-Position of the OSD Menu	
	OSD Transparency	Adjust the Transparency of the OSD Menu	
	OSD Rotation	Adjust OSD Menu	
	OSD Timeout	Adjust the Off Timer of the OSD Menu	
MISC	Language	Adjust the Language of the OSD Menu	
	Volume	Adjust the Volume of audio	
	Mute	Audio ON/OFF select	
	PC setting	Adjust the Analog RGB of the Screen	PC Mode only
	Factory Reset	Adjust the Initialize of the Set	
	Response time	Adjust LCD Response time, faster or normal	
	FreeSync	Reserved for AMD Graphic solution	
	PIP	PIP Mode	Select the picture in picture of the screen
PIP Size		Select the size of the PIP screen	
PIP Position		Select the Position of the PIP screen	
Input	Main Input	Main Screen Input Select	
	Sub Input1	PIP & Triple / Quad Input Select1	
	Sub Input2	Triple / Quad Input Select 2	
	Sub Input3	Quad Input Select 3	
PC input	Horizontal Position	Adjust the H-Position of the screen's image	RGB Only
	Vertical Position	Adjust the V-Position of the screen's image	RGB Only
	Clock	Adjust the Clock of the screen image	RGB Only
	Phase	Adjust the Phase of the screen's image	RGB Only
	Auto Adjust	Auto Position of the Screen's Image	RGB Only
PIP Mode	Off	Multi Windows off	
	PIP	Picture in Picture Select	
	PBP SBS	Picture By Picture Select	
	Triple PIP	Triple Display Select	Max Resolution Is 3840x2160 30Hz
	Quad PIP	Quad Display Select	Max Resolution Is 1920x1080 60Hz

### 3.3 Touch Drivers

The CRV-430WP 43" curved touch monitor doesn't need any special drivers to enable the touch function, if the system doesn't include an inbox touch driver, please contact Advantech customer service.



# Appendix **A**

## Troubleshooting

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## A.1 Introduction

If the monitor is malfunctioning or does not operate according to the user manual, refer to the following instructions before calling the Advantech service center.

If unable to correct the faults using the instructions provided below, please contact your distributor or the Advantech service center.

## A.2 Troubleshooting

### **The image is displayed incorrectly/the full screen image does not appear**

- Ensure that the screen resolution on the motherboard is correct.

### **The screen image is not centered**

- Adjust the horizontal and vertical position of the OSD or select the “Auto” option for automatic adjustment.

### **No signal**

- The display is powered on but is not receiving or displaying output signals from the computer. Check all power switches, power cables, and VGA signal cables and ensure that both ends of all cables are properly connected.

### **Going to sleep**

- If the system goes to sleep, either the display has been set to power-saving mode or is experiencing a sudden signal disconnection problem. Check the BIOS system settings and/or Windows configuration. Then check both ends of the power cable connected to the computer.



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