
SM-170R

**Industrial Monitor, 17" True-Flat Industrial
Grade 5-wire Resistive Touch**

User Manual

Version 1.0

Revision History

Version	Release Time	Description
1.0	2026, 06	Initial release

Contents	i
Preface.....	ii
Copyright Notice	ii
Declaration of Conformity	ii
CE	ii
FCC Class A.....	ii
RoHS	iii
SVHC / REACH	iii
Important Safety Instructions	iv
Warning	v
Replacing Lithium Battery	v
Technical Support	v
Warranty	vi
Chapter 1 - Introduction.....	1
1.1. Specifications	2
1.2. Inside the Package	3
Chapter 2 - Getting Started.....	5
2.1. Dimensions.....	6
2.2. External I/O port Overview	7
2.2.1. Panel-mount hook.....	7
2.2.2. USB Type A port.....	7
2.2.3. DC-IN Power input.....	7
2.2.4. VGA port	7
2.3. Driver Installation	7
Chapter 3 - Installation and Maintenance.....	9
3.1. Installation Method Decsription.....	10
3.1.1. Panel-mount Installation	10
3.2.1. VESA Installation	11
Chapter 4 - OSD Key Description.....	13
4.1. OSD Key.....	14
4.1.1. Adjust screen image offset.....	15
4.2. Adjust screen brightness	15
4.3. Change OSD Language	16
4.4. Auto detection signal source.....	17

Copyright Notice

All Rights Reserved.

The information in this document is subject to change without prior notice in order to improve the reliability, design and function. It does not represent a commitment on the part of the manufacturer.

Under no circumstances will the manufacturer be liable for any direct, indirect, special, incidental, or consequential damages arising from the use or inability to use the product or documentation, even if advised of the possibility of such damages.

This document contains proprietary information protected by copyright. All rights are reserved. No part of this document may be reproduced by any mechanical, electronic, or other means in any form without prior written permission of the manufacturer.

Declaration of Conformity

CE

The CE symbol on the computer indicates that it is in compliance with the directives of the European Union (EU). A Certificate of Compliance is available by contacting Technical Support.

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This kind of cable is available from ARBOR. Please contact your local supplier for ordering information.

Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

FCC Class A

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE:

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 which case the user will be required to correct the interference at his own expense.

RoHS

ARBOR Technology Corp. certifies that all components in its products are in compliance and conform to the European Union's Restriction of Use of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2002/95/EC.

The above mentioned directive was published on 2/13/2003. The main purpose of the directive is to prohibit the use of lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE) in electrical and electronic products. Member states of the EU are to enforce by 7/1/2006.

ARBOR Technology Corp. hereby states that the listed products do not contain unintentional additions of lead, mercury, hex chrome, PBB or PBDB that exceed a maximum concentration value of 0.1% by weight or for cadmium exceed 0.01% by weight, per homogenous material. Homogenous material is defined as a substance or mixture of substances with uniform composition (such as solders, resins, plating, etc.). Lead-free solder is used for all terminations (Sn(96-96.5%), Ag(3.0-3.5%) and Cu(0.5%)).

SVHC / REACH

To minimize the environmental impact and take more responsibility to the earth we live, Arbor hereby confirms all products comply with the restriction of SVHC (Substances of Very High Concern) in (EC) 1907/2006 (REACH –Registration, Evaluation, Authorization, and Restriction of Chemicals) regulated by the European Union.

All substances listed in SVHC < 0.1 % by weight (1000 ppm)

Important Safety Instructions

Read these safety instructions carefully

1. Read all cautions and warnings on the equipment.
2. Place this equipment on a reliable surface when installing. Dropping it or letting it fall may cause damage
3. Make sure the correct voltage is connected to the equipment.
4. For pluggable equipment, the socket outlet should be near the equipment and should be easily accessible.
5. Keep this equipment away from humidity.
6. The openings on the enclosure are for air convection and protect the equipment from overheating. **DO NOT COVER THE OPENINGS.**
7. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
8. Never pour any liquid into opening. This may cause fire or electrical shock.
9. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
10. 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 manual.
 - e. The equipment has been dropped or damaged.
 - f. The equipment has obvious signs of breakage.
11. Keep this User Manual for later reference.

Warning

This monitor and its components contain very delicately Integrated Circuits (IC). To protect the this monitor and its components against damage caused by static electricity, you should always follow the precautions below when handling it:

1. Disconnect your monitor from the power source when you want to work on the inside.
2. Use a grounded wrist strap when handling computer components.
3. Place components on a grounded antistatic pad or on the bag that came with the monitor, whenever components are separated from the system.

Replacing Lithium Battery

Incorrect replacement of the lithium battery may lead to a risk of explosion.

The lithium battery must be replaced with an identical battery or a battery type recommended by the manufacturer.

Do not throw lithium batteries into the trash can. It must be disposed of in accordance with local regulations concerning special waste.

Technical Support

If you have any technical difficulties, please consult the user manual first at:

<https://www.arbor-technology.com>

Please do not hesitate to call or e-mail our customer service when you still cannot find out the answer.

<https://www.arbor-technology.com>

E-mail: info@arbor.com.tw

Warranty

This product is warranted to be in good working order for a period of one year from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster.

Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, or inability to use this product. Vendor will not be liable for any claim made by any other related party.

Vendors disclaim all other warranties, either expressed or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to the hardware, the accompanying product's manual(s) and written materials, and any accompanying hardware. This limited warranty gives you specific legal rights.

Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.

Chapter 1

Introduction

1.1. Specifications

LCD Display	
Size/Type	17 inches TFT LCD Panel
Max. Resolution	1280(H) x 1024(V)
Ratio	4:3
Luminance	250 nits
Contrast Ratio	1000:1
Backlight Type	LED
Backlight Lifetime	50,000 Hrs
Touch Type	Industrial-grade 5-Wire Resistive Touch
Touch	35,000,000 times
View Angle	CR ≥ 10: θ_x 170°(H)/ θ_y 160°(V) CR ≥ 5: θ_x 178°(H)/ θ_y 170°(V)
External I/O	
USB Port	1 x USB for Touch
Video Port	1 x HDMI 1 x VGA 1 x DVI
Power Requirement	
Power Input	12V DC-IN by 2-pin phoenix connector
OSD Menu	
ON/OFF	Power ON/OFF
MENU	Menu / Confirm
Auto	Signal input switch / Quit
+	Up / Increase
-	Down / Decrease
Mechanical	
Front Panel	Aluminum alloy
Rear Cover	SECC
Dimension	392.4 x 327.7 x 44 mm
Cut-Out	382.2 x 317.5 mm
Mounting	Panel Mount, Wall and VESA-mount
Weight	4 kg
Ingress Protection	Front Panel IP66
Environmental	
Operating Temp.	-10°C ~ 60°C (14 ~ 140 °F), ambient w/ air flow
Storage Temp.	-40°C ~ 70°C (-40 ~ 158 °F)
Operating Humidity	5% ~ 95% @ 40°C (non-condensing)

Vibration	5 ~ 500Hz, 2Grms operation
Shock	Operation: 10G@11ms Non-operation: 30G@11ms

1.2. Inside the Package

Upon opening the package, carefully inspect the contents. If any of the items is missing or appears damaged, contact your local dealer or distributor. The package should contain the following items:

Item	Description	Q'ty
SM-170R	17" Industrial Monitor	1
Accessory	Panel Hook (4pcs in one package)	2
	USB Cable	1
	VGA Cable	1
	Screws package	1
	2-pin terminal block	1

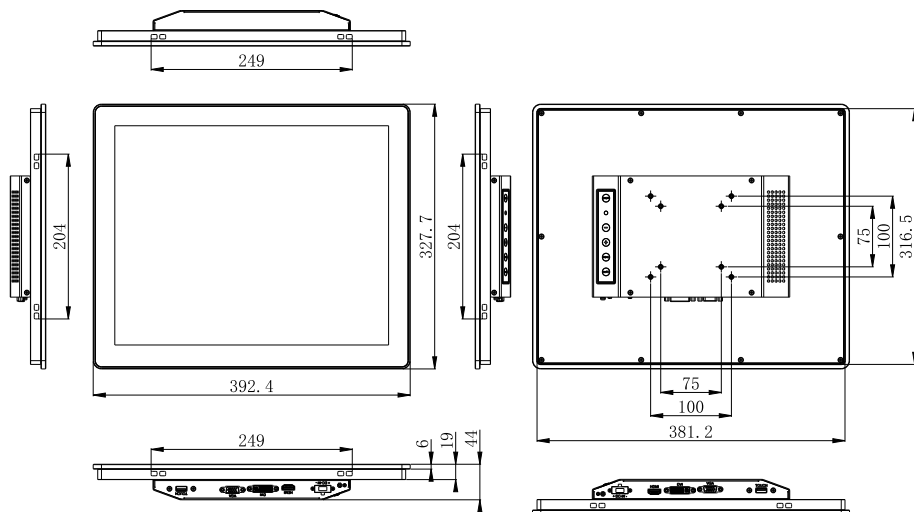
This page is intentionally left blank.

Chapter 2

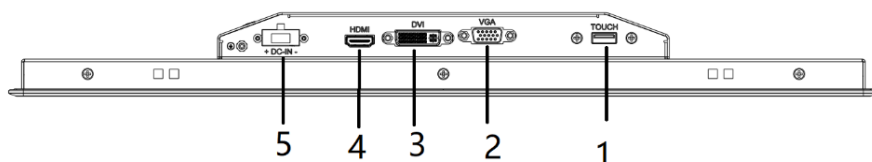
Getting Started

2.1. Dimensions

The following illustration shows the dimensions of the monitor, with the measurements in width, depth, and height called out. (Unit: mm)



2.2. External I/O port Overview



No.	Name	No.	Name
1	USB port	4	HDMI port
2	VGA port	5	2pin DC-IN
3	DVI port		

2.2.1. Panel-mount hook

Use the accessory hook for panel for Panel-mount installation. For detailed installation method, see [3.1. Installation Method Description on page 10.](#)

2.2.2. USB Type A port

When LINK IN is connected to the host PC, the host PC can be directly connected through this USB port for resistive touch.

2.2.3. DC-IN Power input

This product supports 12V input.

2.2.4. VGA port

Connect the VGA port to the host for display. 1.5m VGA cable is recommended.

2.3. Driver Installation

To install the drivers, please visit our website at www.arbor-technology.com and download the driver pack from the **Download Center**.

This page is intentionally left blank.

Chapter 3

Installation and Maintenance

3.1. Installation Method Description

This product series supports multiple installation methods, including Panel-mount and VESA-mount.

3.1.1. Panel-mount Installation

1. Position the product into the mounting hole.
2. Take out the mounting clip from the accessory box and insert it into the mounting hole on the side of the product.
3. Tighten the screws on the buckle to secure it.

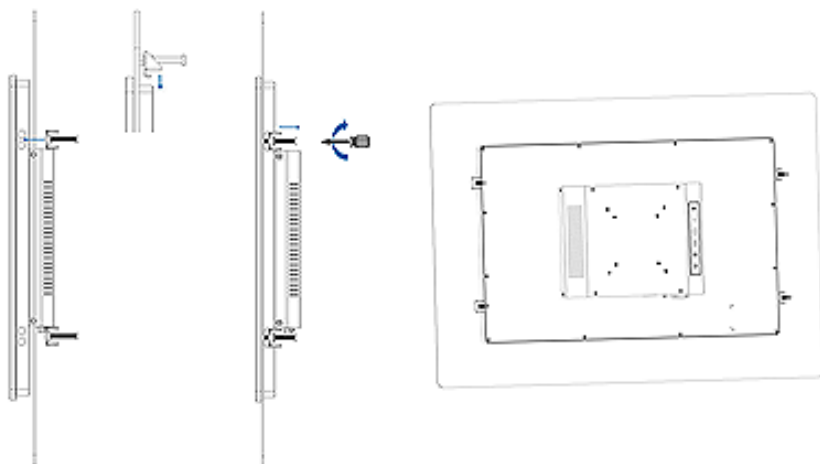


Figure 3-1-1 Panel-mount

3.2.1. VESA Installation

Use 4 screws to fix the VESA bracket to the 75 x 75mm or 100 x 100mm VESA hole on the back cover of the product as Figure 3-2-1.

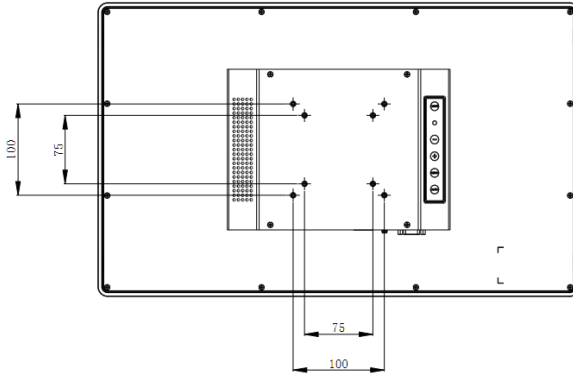


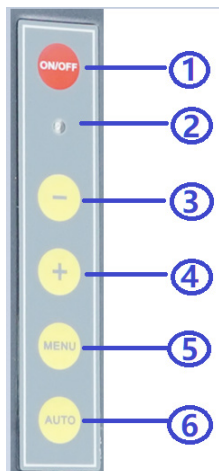
Figure 3-2-1 VESA-mount installation

This page is intentionally left blank.

Chapter 4

OSD Key Description

4.1. OSD Key



No.	Hot-Key	Function Definition
1	ON/OFF	Power On/Off (default: ON)
2	LED	Green LED lights up when powered is ON
3	-	Down / Decrease
4	+	Up / Increase
5	MENU	Menu / Confirm
6	AUTO	Signal input switch / Quit

Note:

Press the "MENU" button to pop up the OSD screen menu, and press "+" or "-" button to select from the six functions in the main menu.

Brightness, image settings, color settings, OSD settings, reset and other related operations.

4.1.1. Adjust screen image offset

Press the "-" key to automatically adjust the image to the center.

4.2. Adjust screen brightness

Method 1:

1. Press the "MENU" button to display the OSD menu, then press the "MENU" button to select the submenu, and press the "MENU" button for the third time to select the item to be adjusted;
2. Press the "+" key to increase the brightness, and press the "-" key to decrease the brightness;
3. Press the "AUTO" key to exit the item, press the "AUTO" key again to exit the submenu, and press the "AUTO" key a third time to exit the OSD menu. (Note: If you do not press the AUTO button, the OSD menu will automatically exit, the default is 10 seconds)

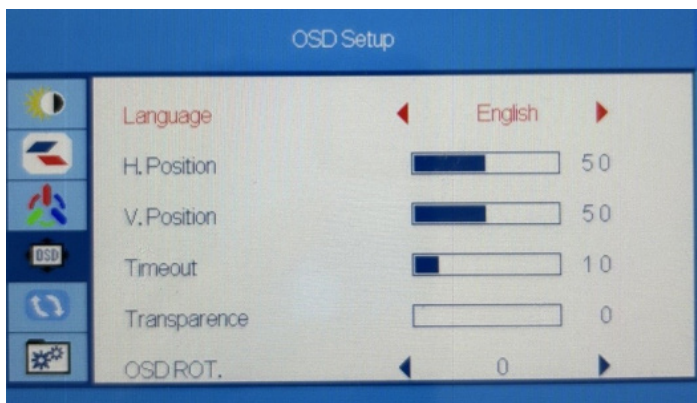
Method 2:

1. Press the "+" key directly, the OSD menu will appear, then press the "+" key to increase, and press the "-" key to decrease to adjust the brightness;
2. Press the "AUTO" key to exit the item, press the "AUTO" key again to exit the submenu, and press the "AUTO" key a third time to exit the OSD menu. (Note: If you do not press the AUTO button, the OSD menu will automatically exit after waiting for a few seconds)



4.3. Change OSD Language

1. Press the "MENU" key to display the OSD menu. Press the "+" or "-" key to move the left menu. When the OSD setting interface appears, press the "AUTO" key. Press the "AUTO" key again to select the language menu and modify the desired language.
2. Press the "AUTO" key to exit the item, press the "AUTO" key again to exit the submenu, and press the "AUTO" key a third time to exit the OSD menu. (Note: If you do not press the AUTO button, the OSD menu will automatically exit after waiting for a few seconds)



4.4. Auto detection signal source

1. Press the "AUTO" button to automatically detect the signal source and switch the signal. When the signal is switched, the screen will be black for a few seconds and switch to another display screen. The current signal source, such as LINK IN, VGA, will be displayed in the upper right corner of the screen.



2. If only one signal source is connected externally, after pressing the "AUTO" button, the screen will go black for a few seconds, and return to the original signal screen when no signal source is detected.