

# Model OEM17-SVGA Product Manual

MANUAL NUMBER: 00431-226-1A

#### **FOREWARD**

This product manual provides information to install, operate and or program the referenced product(s) manufactured or distributed by Industrial Computer Source. The following pages contain information regarding the warranty and repair policies.

Technical assistance is available at: 1-800-480-0044.

**Manual Errors, Omissions and Bugs:** A "Bug Sheet" is included as the last page of this manual. Please use the "Bug Sheet" if you experience any problems with the manual that requires correction.

The information in this document is provided for *reference* only. Industrial Computer Source does not assume any liability arising from the application or use of the information or products described herein. This document may contain or reference information and products protected by copyrights or patents and does not convey any license under the patent rights of Industrial Computer Source, nor the rights of others.

Copyright © 1997 by Industrial Computer Source, a California Corporation, 6260 Sequence Drive, San Diego, CA 92121. Industrial Computer Source is a Registered Trademark of Industrial Computer Source. All trademarks and registered trademarks are the property of their respective owners. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

#### Guarantee

A thirty day money-back guarantee is provided on all **standard** products sold. **Special order products** are covered by our Limited Warranty, <u>however they may not be returned for refund or credit</u>. EPROMs, RAM, Flash EPROMs or other forms of solid electronic media are not returnable for credit - but for replacement only. Extended Warranty available. Consult factory.

#### Refunds

In order to receive refund on a product purchase price, the product must not have been damaged by the customer or by the common carrier chosen by the customer to return the goods, and the product must be returned complete (meaning all manuals, software, cables, etc.) within 30 days of receipt and in as-new and resalable condition. The **Return Procedure** must be followed to assure prompt refund.

#### **Restocking Charges**

Product returned *after* 30 days, and *before* 90 days, of the purchase will be subject to a **minimum** 20% restocking charge and any charges for damaged or missing parts.

Products not returned within 90 days of purchase, or products which are not in as-new and resaleable condition, are not eligible for credit return and will be returned to the customer.

## **Limited Warranty**

One-year limited warranty on all products sold with the exception of the "Performance Series" I/O products, which are warranted to the original purchaser for as long as they own the product, subject to all other conditions below, including those regarding neglect, misuse and acts of God. Within one year of purchase, Industrial Computer Source will repair or replace, at our option, any defective product. At any time after one year, we will repair or replace, at our option, any defective "Performance Series" I/O product sold. This does not include products damaged in shipment, or damaged through customer neglect or misuse. Industrial Computer Source will service the warranty for all standard catalog products for the first year from the date of shipment. After the first year, for products not manufactured by Industrial Computer Source, the remainder of the manufacturer's warranty, if any, will be serviced by the manufacturer directly.

The **Return Procedure** must be followed to assure repair or replacement. Industrial Computer Source will normally return your replacement or repaired item via UPS Blue. *Overnight delivery or delivery via other carriers is available at additional charge.* 

The limited warranty is void if the product has been subjected to alteration, neglect, misuse, or abuse; if any repairs have been attempted by anyone other than Industrial Computer Source or its authorized agent; or if the failure is caused by accident, acts of God, or other causes beyond the control of Industrial Computer Source or the manufacturer. Neglect, misuse, and abuse shall include any installation, operation, or maintenance of the product other than in accordance with the owners' manual.

No agent, dealer, distributor, service company, or other party is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. Industrial Computer Source reserves the right to make changes or improvements in any product without incurring any obligation to similarly alter products previously purchased.



Shipments not in compliance with this Guarantee and Limited Warranty Return Policy will not be accepted by Industrial Computer Source.

#### **Return Procedure**

For any Limited Warranty or Guarantee return, please contact Industrial Computer Source's Customer Service at **1-800-480-0044** and obtain a Return Material Authorization (RMA) Number. All product(s) returned to Industrial Computer Source for service or credit **must** be accompanied by a Return Material Authorization (RMA) Number. Freight on all returned items **must** be prepaid by the customer who is responsible for any loss or damage caused by common carrier in transit. Returns for Warranty **must** include a Failure Report for each unit, by serial number(s), as well as a copy of the original invoice showing date of purchase.

To reduce risk of damage, returns of product must be in an Industrial Computer Source shipping container. If the original container has been lost or damaged, new shipping containers may be obtained from Industrial Computer Source Customer Service at a nominal cost.

# **Limitation of Liability**

In no event shall Industrial Computer Source be liable for any defect in hardware or software or loss or inadequacy of data of any kind, or for any direct, indirect, incidental, or consequential damages in connection with or arising out of the performance or use of any product furnished hereunder. Industrial Computer Source liability shall in no event exceed the purchase price of the product purchased hereunder. The foregoing limitation of liability shall be equally applicable to any service provided by Industrial Computer Source or its authorized agent.

Some Sales Items and Customized Systems are **not** subject to the guarantee and limited warranty. However, in these instances any deviations will be disclosed prior to sales and noted in the original invoice. **Industrial Computer Source reserves the right to refuse returns or credits on software or special order items.** 

#### **Advisories**

Three types of advisories are used throughout the manual to stress important points or warn of potential hazards to the user or the system. They are the Note, the Caution, and the Warning. Following is an example of each type of advisory:

**Note:** The note is used to present special instruction, or to provide extra information which may help to simplify the use of the product.



#### **CAUTION!**



A Caution is used to alert you to a situation which if ignored may cause injury or damage equipment.



#### **WARNING!**



A Warning is used to alert you of a situation which if ignored will cause serious injury.

Cautions and Warnings are accented with triangular symbols. The exclamation symbol is used in all cautions and warnings to help alert you to the important instructions. The lightning flash symbol is used on the left hand side of a caution or a warning if the advisory relates to the presence of voltage which may be of sufficient magnitude to cause electrical shock.

Use caution when servicing any electrical component. We have tried to identify the areas which may pose a Caution or Warning condition in this manual; however, Industrial Computer Source does not claim to have covered all situations which might require the use of a Caution or Warning.

You must refer to the documentation for any component you install into a computer system to insure proper precautions and procedures are followed.

# **Table of Contents**

FOREWARD	iii
Guarantee	iv
Limited Warranty	
Return Procedure	
Limitation of Liability	
Advisories	
Chapter 1: Introduction	1-1
Specifications	1-2
Dimensional Drawings	1-4
Chapter 2: Installation and Operation	2-1
Installation	
Remounting the Control Panel	2-2
Horizontal Mounting	2-3
Vertical Mounting	2-4
Connection	2-5
Video Input Cable	2-5
Operation	2-6
Appendix A: Monitor Information	A-1
List of Figures	
Figure 1-1: OEM17-SVGA Front View	1-4
Figure 1-2: OEM17-SVGA Rear View	1-4
Figure 1-3: OEM17-SVGA Side View	1-5
Figure 1-4: OEM17-SVGA Top View	1-6
Figure 2-1: Control Panel Mounting	2-2
Figure 2-2: Horizontal Mounting Hole Pattern	
Figure 2-3: Vertical Mounting Hole Pattern	2-4
Figure 2-4: Connector Locations	2-5
Table 1: Video Input Cable Connections	
Figure 2-5: Monitor Controls	2-6

**Current Revision 1A** 

September 1997

This page intentionally left blank

# **Chapter 1: Introduction**

The OEM17-SVGA is a custom designed, OEM packaged 17 inch SVGA color monitor with 0.25mm Dot Pitch and up to 1600 x 1280 Resolution. The framework provides rugged construction to protect the monitor and provides the foundation for OEM's packaging. It has standard Horizontal frequency of 30-86KHz, Vertical frequency of 50-160Hz, and 135MHz Bandwidth. Input Power may range from 100 to 240VAC at 50/60Hz, and is auto-sensed. Power is supplied to the monitor using a standard U.S. power cord which is provided. Video input is by 15 pin D-Sub type connector port or by 5 BNC connector port.

The many user control functions are digital. Please refer to Appendix A for more information on the user controls.

The control panel is on a 24 inch harness and is re-mountable, if desired. Please refer to Chapter 2 for more information on the control panel.

## **Specifications**

#### Dimensions (W x H x D)

```
16.82 x 15.30 x 17.64in
427.2 x 388.6 x 448.1mm
```

#### Weight

46.5 lbs

#### **Physical Construction**

Chassis- 16 gauge steel, Gold zinc plate finish

#### **Active Display Area**

Factory Setting: 300mm horizontal x 225mm vertical (typical)

**Note:** Active Display Area is dependent upon signal timing used.

#### **Power Requirements**

100-240VAC, 50/60Hz

#### **Power Consumption**

120W (typical)

#### **Connectors**

Power Input- Three prong, grounded receptacle Video Input- 15 pin D-Sub type connector or 5 BNC

#### **Input Signal**

Analog R.G.B.: 0.7V/1.0 Vp-p, 75 ohms

#### **Synchronization Frequency**

Horizontal: 30 to 86 kHz Vertical: 50 to 160Hz

#### **Bandwidth**

135 MHz

#### **Picture Tube**

0.25mm dot pitch

## **Operating Environment**

 $0^{\rm o}$  C to  $40^{\rm o}$  C \$10% to 95% non-condensing relative humidity 0 to 10,000 feet

# **Dimensional Drawings**

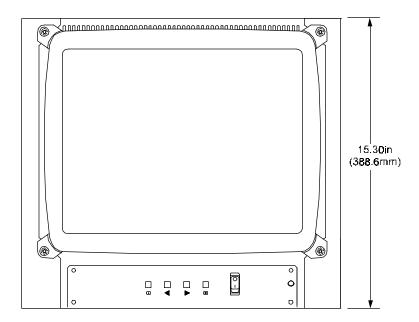


Figure 1-1: OEM17-SVGA Front View

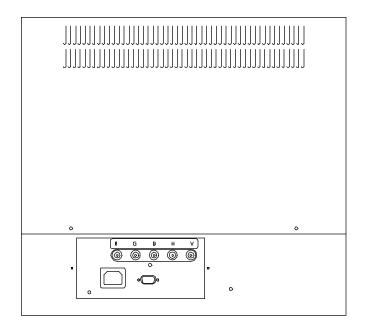


Figure 1-2: OEM17-SVGA Rear View

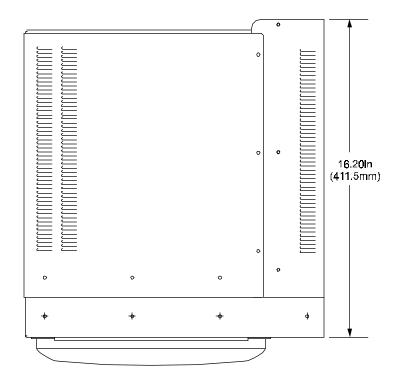


Figure 1-3: OEM17-SVGA Side View

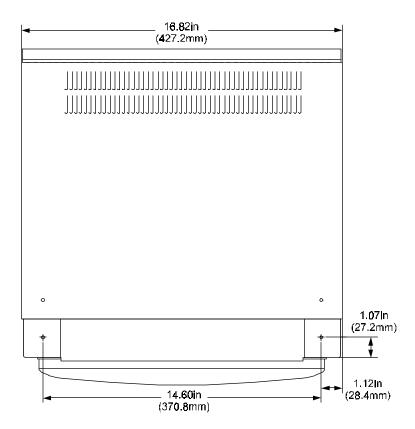


Figure 1-4: OEM17-SVGA Top View

# **Chapter 2: Installation and Operation**

Installation of the OEM17-SVGA monitor varies depending on the application; however, several basic steps will help to insure optimum operation of the monitor.

Note: The Electrical Safety Precautions (page vii) should be read and followed.

Mounting holes for the monitor are provided on the sides of the unit. When using these holes, ensure the proper length screw is used. The maximum screw length allowable into the chassis will vary, but it is very important that a correct length screw is used. A screw that is too short will not secure the monitor properly; a screw too long could possibly damage the monitor circuitry. Please refer to **Figures 2-2** and **2-3** for specific information.

Care should be taken not to block any of the ventilation slots provided in the monitor.

When selecting a location to mount the monitor, ensure proper ventilation will be maintained. Do not mount the monitor near a heat source. Also, do not block or cover any ventilation slots on the monitors chassis. Electrical power must be connected to the unit with a certified power cord for the country where the equipment is to be used. Position the monitor near its power source or receptacle to help prevent damage to the power cord.



#### **CAUTION!**



Do not position the monitor where the power cord will span over a traffic area or where it may be bent or pinched. Damage to the power cord could result in injury to personnel or damage to equipment.

If the power cord is damaged or is not suitable for the country of use, replace with a 3-conductor, 18AWG (0.75mm<sup>2</sup> cross sectional area) cord, certified to the local electrical codes.

Manual Number: 00431-226-1 Page 2-1

#### Installation

#### **Remounting the Control Panel**

The OEM17-SVGA is delivered with the control panel mounted just under the screen. The control panel has been designed for easy removal, and has an extra 24 inches of cable length to allow mounting in another location. If you wish to mount the control panel somewhere else, remove the two retaining screws from the bottom of the monitor (See **Figure 2-1**). Mounting holes are provided as shown in the illustration.

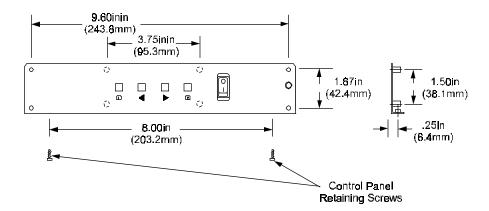


Figure 2-1: Control Panel Mounting

Page 2-2 Manual Number: 00431-226-1

## **Horizontal Mounting**

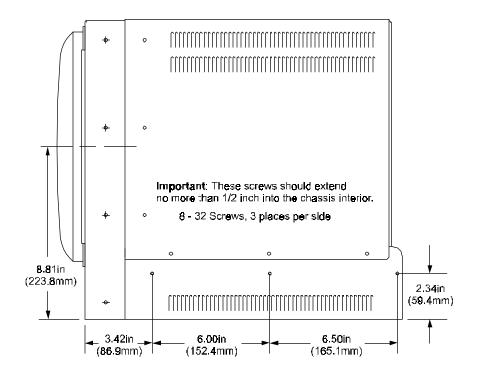
If you wish to use the horizontal side mounting holes (for example, to mount the monitor on rail slides), please refer to **Figure 2-2**.



#### **WARNING!**



The mounting screws must be the proper length. If too long a screw is used it may contact high voltage inside the monitor case.



**Figure 2-2: Horizontal Mounting Hole Pattern** 

Manual Number: 00431-226-1 Page 2-3

#### **Vertical Mounting**

If you wish to use the vertical side mounting holes, please refer to **Figure 2-3**.



#### **WARNING!**



The mounting screws must be the proper length. If too long a screw is used it may contact high voltage inside the monitor case.

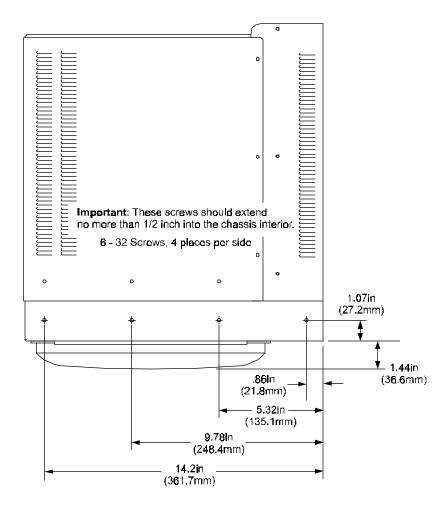


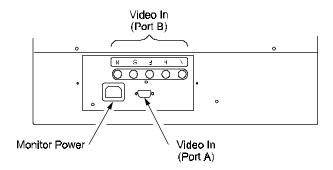
Figure 2-3: Vertical Mounting Hole Pattern

Page 2-4 Manual Number: 00431-226-1

#### Connection

To connect the monitor to your system, a suitable video controller card is required. Install the video card according to its instructions. Once this is accomplished, complete the following instructions:

- 1) Ensure power is OFF on the monitor and computer.
- 2) Connect the video cable from the Video In (Port A or Port B depending on the type of cabling used by your video card) to the video controller card. (See **Figure 2-4** for the connector locations.)



**Figure 2-4: Connector Locations** 

3) Connect the appropriate power cord to the monitor and an acceptable power source.

After the physical installation, the computer BIOS may need to be altered to take advantage of the display offered by your new monitor. Perform the alteration according to your CPU manual.

## Video Input Cable

Two video cables are provided with the 0EM17-SVGA. Both cables have a standard DB-15 connector on one end, but the other end is either another DB-15 connector or a set of five BNC connectors. Which cable you use will depend on your system. The cable connects to port A or B on the rear of the chassis, and to the video source. Please see **Table 1** for the pinouts of the DB-15 connector.

15-PIN D-SHELL CONNECTOR			
PIN	SIGNAL		
1	RED SIGNAL INPUT		
2	GREEN SIGNAL INPUT		
3	BLUE SIGNAL INPUT		
4	NC		
5	SELF TEST		
6	RED SIGNAL RETURN		
7	GREEN SIGNAL RETURN		
8	BLUE SIGNAL RETURN		
9	NC		
10	TTL GROUND		
11	COLOR TEST		
12	NC		
13	H-SYNC INPUT		
14	V-SYNC INPUT		
15	NC		

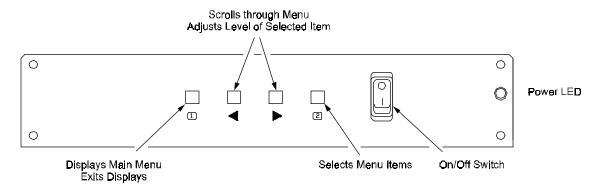
**Table 1: Video Input Cable Connections** 

# **Operation**

After the monitor is installed and connected to the computer, operation is as simple as turning it on and adjusting the display parameters to your preference. Turn power on the monitor by opening the front access door and pressing the power switch. For an illustration of the location of the power switch, please see **Figure 2-5**. Turn on the computer and allow the system to stabilize.

To adjust the display controls, run a program that uses a full screen, multi-color display. This will provide a full screen with contrasting colors to aid in adjustments.

The OEM17-SVGA monitor has adjustments for many display parameters to give you the optimum display under a variety of conditions. See **Figure 2-5** for a general description of the controls. For more detailed information on the controls, refer to Appendix A.



**Figure 2-5: Monitor Controls** 

Page 2-6 Manual Number: 00431-226-1

# **Appendix A: Monitor Information**

Manual Number: 00431-226-1 Page A-1

Insert View Sonic Users Guide pages, then discard this page.

Page A-2 Manual Number: 00431-226-1

## **BUG REPORT**

While we have tried to assure this manual is error free, it is a fact of life that works of man have errors. We request you to detail any errors you find on this BUG REPORT and return it to us. We will correct the errors/problems and send you a new manual as soon as available. Please return to:



Attn: Documentation Department P. O. Box 910557 San Diego, CA 92121-0557

Your Name:		
Company Name:		
Address 1:		
Address 2:		
Mail Stop:		
City:	State:	Zip:
Phone: ()		
Product: Model OEM17-SVGA		
Manual Revision: 00431-226-1A		

Please list the page numbers and errors found. Thank you!