7191AD User Manual

June 2017
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This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. SELLER makes every effort to provide clear and accurate technical information on the application of its products in the Operator’s Manual, and assumes no liability for misuse of the information.
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1. Introduction
Thank you for selecting a Daisy solution for your hazardous area operator interface needs. This manual contains drawings and component locations for installing and setting up Daisy Data flat panel operator interface systems. In addition, Daisy Data provides warnings, precautions, and methods to ensure that the electronic systems are safe for hazardous areas. This explains the theory behind the unique product and services provided by Daisy Data. Should you have any inquiries or concerns, please contact Daisy.

2. Applicable Ratings
National Electrical Manufacturers Association (NEMA) is the regulatory body that defines the criteria for electrical enclosures.

2.1. Applicable Ratings
NEMA defines a 4X enclosure as:

*“Type 4X Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (rain, sleet, snow, splashing water, and hose directed water); that provides an additional level of protection against corrosion; and that will be undamaged by the external formation of ice on the enclosure.”*

Please note that DAISY’s systems have been fully tested under the supervision of Factory Mutual (FM) to ensure compliance with the standards.

*Part of the NEMA definition of NEMA 4X Enclosures*
3. **Customer Service**

All Daisy systems pass detailed quality control configuration and inspection before being shipped. Daisy strives to create the highest quality systems, and chooses top quality parts. However, like most electronic devices, units may experience issues over time. Should you experience problems, or have any further inquiries or comments, please contact Daisy’s customer service department:

Business Phone  (717) 932-9999 x222  
Fax  (717) 932-8000  
Email  support@Makeitdaisy.com

Equipment returned to Daisy for service must be accompanied by a valid return merchandise authorization (RMA) number. Items or products shipped to Daisy without a valid RMA number will be refused. An RMA will be generated upon receipt of Company Name, Address, Contact, Product Model and Serial Numbers.

![Typical Model/Serial Number Tag](image)

Daisy Data Displays Inc. prides itself on offering best in class support for your products. Our technical support team can help you with installation, configuration, troubleshooting, and other support issues for all Daisy’s products.

4. **Software/Hardware**

Daisy data should be contacted for any hardware or software questions/issues. Additional SSD’s or operating systems can be supplied as needed. Be aware that any modifications or alterations without the assistance of Daisy Data could affect unit certifications and implied warranty.
5. 7191AD Specifications

This 19” Panel Mount X-Terminal is reliability and a necessity to your military operations. It is the perfect solution for your rack mount or panel mount applications.

STANDARD FEATURES AND BENEFITS

- Panel mount 19” color display has a resolution of 1280x1024 to fit your viewing needs.
- Integrated X-Terminal X11 release 6 compliant.
- Form, fit and function backwards compatible with model 7191AA, 7191AB & 7191AC.
- IPv6 and IPv4 complaint.
- Integrated 120 VAC or 24 VDC power supply.
- Integrated keyboard and mouse PS/2 ports. 100 Base T Network, RS 232 port (DB9).
- Glass-on-glass resistive touch screen and EMI window with enhanced, scratch-resistant hard coat meets MIL STD 461D and 462.
- 1.66GHz Intel, 19” Atom™ Processor 2GB RAM.
- Meets a variety of military standards including 810, 461 and 167.

OPTIONS AND ACCESSORIES

- Up to 16 GB RAM with i7 CPU upgrade.
FLEETMATE 7191AD SERIES SPECIFICATIONS

MATERIAL
Enclosure 304 Stainless Steel #4 Finish
Viewport Glass-on-glass Resistive Touch Screen
Design NEMA 4X Faceplate

PHYSICAL
19”
15.72” Height (H)
14.00” Height (H)
19.00” Width (W)
17.50” Width (W)
5.735” Depth (D)

Mounting

Weight 31 lbs.

ENVIRONMENTAL
Operating Temperature 0° to 50° C
Storage Temperature -25° to 60° C
Vibration MIL-STD-167-1A Section 5.1, Type 1
EMI/RFI 90-264VAC, 47-63Hz, 130-370VDC, 100 watts

ELECTRICAL
Voltage 90-264 VAC, 47-63 Hz
or 18-36 VDC

Brightness (Standard) 240 cd/m2
Backlight CCFL/LED
Surface Treatment Glass surface hardness of 6.5 Mohs

TOUCH SCREEN SPECIFICATIONS
Technology Resistive, Glass-on-glass
Resolution 210,000 point/in.

X-TERMINAL SPECIFICATIONS
CPU Intel® Atom™ 1.66GHz
Storage (Standard) 2GB RAM
Hard Drive 4GB Solid State Drive

CONNECTIONS
Network 10/100/1000 Mbps Ethernet (RJ45), IPv4 compliant
Serial RS232 port (DB9)

ORDERING INFORMATION
7191AD Panel Mount Network Computer, 19”

OPTIONS AND ACCESSORIES
247B Adds i7 Processor with 16GB RAM
813 24 VDC Input

*Specifications are subject to change without notice.
6. Component Identification

View the following block diagrams or photos to identify components of the 7191AD unit. For part numbers, go to Component/Wiring Assembly Parts List.

**7191AD COMPONENT/WIRING IDENTIFICATION**

(Click on Thumbnails for detailed representation)
6.1. Unit Block Diagram
6.2. Unit Segments
6.3. Unit Enclosure

For part numbers, go to Component/Wiring Assembly Parts List
6.4. Display Enclosure
For part numbers, go to Component/Wiring Assembly Parts List
6.5. Component/Wiring Assembly Parts List

Should one or more of a unit’s major components fail, please refer to the corresponding part number when ordering replacements or contacting Daisy Data Displays customer support.

6.5.1. Unit/Display Enclosure Component Parts List

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>PART NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC/DC CONVERTER 24V 12V 125W</td>
<td>P010-000094</td>
</tr>
<tr>
<td>DC/DC CONVERTER, 24DC 12DC</td>
<td>I205-100002</td>
</tr>
<tr>
<td>PA, PCA, COMe Carrier Board</td>
<td>P310-005000</td>
</tr>
<tr>
<td>Terminal Strip</td>
<td>I640-001168</td>
</tr>
<tr>
<td>Ethernet Port</td>
<td>I061-100001</td>
</tr>
<tr>
<td>COM Port</td>
<td>I100-002131</td>
</tr>
<tr>
<td>Keyboard/Mouse Connector</td>
<td>I100-002130</td>
</tr>
<tr>
<td>CPU Assembly</td>
<td>I630-000003</td>
</tr>
<tr>
<td>Fan (DC), Thermal Management (2)</td>
<td>E906-000058</td>
</tr>
<tr>
<td>Industrial Slim-SATA SSD 4GByte</td>
<td>P062-004000</td>
</tr>
<tr>
<td>DDR3, SO-DIMM, 2GB (2)</td>
<td>A314-312000</td>
</tr>
<tr>
<td>D52S Module 1.8GHz</td>
<td>P050-200003-01</td>
</tr>
<tr>
<td>DVI-DVGA Video Controller Module</td>
<td>P050-000245</td>
</tr>
<tr>
<td>DC to AC Inverter</td>
<td>P070-000509</td>
</tr>
<tr>
<td>19.0” LCD Monitor</td>
<td>P000-000115-01</td>
</tr>
<tr>
<td>19.0” Resistive Touchscreen</td>
<td>P040-000085</td>
</tr>
<tr>
<td>OSD Keypad, 4 SW (MENU, -, +, SEL)</td>
<td>I301-000029</td>
</tr>
<tr>
<td>Ferrite EMI Suppressor (18MM)</td>
<td>E904-000004</td>
</tr>
</tbody>
</table>

6.5.2. Unit/Display Cable Assembly Parts List

<table>
<thead>
<tr>
<th>CABLE ASSEMBLY</th>
<th>PART NUMBER</th>
</tr>
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<tbody>
<tr>
<td>Power Cord</td>
<td>E000-030000</td>
</tr>
<tr>
<td>Power In Cable Assembly</td>
<td>I100-001429</td>
</tr>
<tr>
<td>OSD Keypad Cable Assembly</td>
<td>I100-002204</td>
</tr>
<tr>
<td>Ethernet Cable Assembly</td>
<td>I100-002134</td>
</tr>
<tr>
<td>Keyboard/Mouse Cable Assembly</td>
<td>I100-002130</td>
</tr>
<tr>
<td>COM Port Cable Assembly</td>
<td>I100-002131</td>
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<tr>
<td>Video Power Cable Assembly</td>
<td>I100-001879</td>
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<tr>
<td>VGA Cable Assembly</td>
<td>I100-002128</td>
</tr>
<tr>
<td>Backlight Cable Assembly</td>
<td>P050-000580</td>
</tr>
<tr>
<td>LVDS Cable Assembly</td>
<td>P070-000568</td>
</tr>
<tr>
<td>Touch Screen Cable Assembly</td>
<td>I100-002129-01</td>
</tr>
</tbody>
</table>
7. Unit Installation/Mounting Diagram
Refer to the following unit mounting diagrams for mounting hole placement and hardware usage.

7.1. Hole Mounting Diagram
7.2. Unit Mounting Placement/Hardware
Use supplied hardware to mount the unit.
8. **Touch Screen Recalibration**

Each 7191AD has its touch screen inspected and calibrated by a Quality Control technician before leaving Daisy Data Display’s facility. However, over time, operators may find that the unit’s touch screen becomes slightly inaccurate and using the human machine interface (HMI) becomes more difficult. If this occurs, the computer’s touch screen software may simply need to be recalibrated. Follow the steps below to recalibrate your touchscreen:

1. In order to find the calibration application, from the desktop, click and hold the right mouse button and select **Configuration**.
2. Once the Configuration window opens, click on **Edit Settings**. Leave the password field blank, and select **Enter**.
3. On the next screen, select **X-Config** to start the touch screen calibration application.
4. Finally, follow each step of the on-screen instructions included in the calibration application to complete touch screen calibration.

If this does not resolve the inaccuracies, there may be a hardware issue which needs to be resolved. In this case, contact Daisy Data Customer Support at: (717) 932-9999.

9. **Operating System**

For information about the X Window System, including operations, and for accessing technical documentation, please visit: www.x.org/wiki/
10. Revision History

<table>
<thead>
<tr>
<th>REVISION</th>
<th>CHANGE DESCRIPTION</th>
<th>DATE</th>
<th>AUTHOR</th>
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<tbody>
<tr>
<td>-</td>
<td>Initial Release</td>
<td>6/9/2017</td>
<td>BM</td>
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