



HazPAC R9-8.4 ARM9 Touchscreen Computer

USER INSTALLATION GUIDE



ITEM#

H95101-8R

Warnings and Cautions

Prior to beginning the installation, carefully read, understand, and follow all related safety guidelines and documentation. This manual includes warnings, recommendations, and safety precautions that must be observed.

When so labeled, this equipment is suitable for use in

- Class I Division 2, Groups A, B, C and D
- ATEX / IECEx Zone 2
- non-hazardous locations

There are no non-incendive circuits or non-incendive field wiring within or associated with the unit.

There are no user-serviceable parts in the HazPAC R9-8.4 system. Do not disassemble the system. Contact the manufacturer if service or repair is required.

Only technically qualified service personnel are permitted to install or service the equipment.

Do not operate the system if it has received a sharp blow, been dropped, or otherwise damaged in any way. Contact the manufacturer for a replacement.

WARNING: EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.

AVERTISSEMENT: RISQUE D'EXPLOSION - NE PAS DEBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, A MOINS QU'IL NE S'AGISSE D'UN EMPLACEMENT NON DANGEREUX.

Conditions of Safe Use

This equipment must be installed in a hazardous location classified cabinet or panel rated as follows:

- Internal and external ambient of: -30°C to +60°C
- Minimum ingress protection rating of IP54
- ATEX / IECEx: Zone 2 or better
- US / CAN: Class I Div 2 or better
- Can only be opened with the use of a tool

Provision shall be made external to the equipment to provide transient protection at a level not exceeding 119V at the power supply terminals.

Product Overview

PROCESSOR

Atmel (AT91SAM9G45) — 400MHz RISC Processor
32KB Data Cache, 32KB Instruction Cache, Write Buffer
Integrated Memory Management Unit (MMU)

MEMORY

128MB DDR2 SDRAM
256MB NAND Flash

DISPLAY

8.4" 400 nit TFT LCD with LED backlight
640 x 480 Resolution
16-Bit Color

TOUCHSCREEN

5-wire Resistive Touchscreen with Glass Top

BUS INTERFACES

10/100 BaseT Ethernet
USB Device Port
Two USB 2.0 Ports
Dedicated RS-485 Expansion

INDUSTRIAL I/O

Two Isolated RS-485 Ports
One RS-232 Port, with Full Modem Control
Eight Open-Collector Outputs (5 – 30V; 2 with PWM)

Specifications

DIMENSIONS

Refer to CAD Drawing section for unit dimensions.

POWER

9 – 30VDC Input
15 W Max

Connector: 9 – 30VDC / GND on left side of enclosure
Manufacturer: Weco
Part Number: 121-M-211/02
Description: 2 Position Right Angle 5.08mm Header
Mates with: RIA Connect ASP0460202 2 Position 5.08mm Pluggable Spring Clamp Terminal
Wire gauge: AWG 18-20 (0.90mm² – 0.52mm²)

Use appropriately classified Limited Power Source, or LPS. Follow all applicable wiring codes and regulations.

ENVIRONMENTAL SPECIFICATIONS


Specification	Operating	Storage
Temperature Range	-30°C to 60°C	-40°C to 80°C
Humidity Range	10 to 90% R.H. Non-Condensing	10 to 90% R.H. Non-Condensing

CERTIFICATIONS / APPROVALS

- NEMA 4X, IP65 protection on front panel
- FCC Part15 Subpart B/ICES 003 Class A
- ETL 4000758
Conforms to ANSI/UL Std. 60950-1 2nd Ed.; CAN/CSA Std. C22.2 No. 60950-1-07; ANSI/ISA Std. 12.12.01-2013 & CAN/CSA Std. C22.2 No. 213-M1987 (R2013)
- CE marking
 - Low Voltage Directive (2006/95/EC) EN 60950-1
 - EMC Directive (2004/108/EC) EN 55022, EN 55024
 - ATEX Directive (94/9/EC) EN 60079-0, EN 60079-15
 - Certificate Number: ITS15ATEX18221X
- IECEx
 - Certificate Number: IECEx ETL 15.0015X

CLASSIFICATION

This equipment is suitable only for the locations with classification specified on the product nameplate, specifically:

- Non-hazardous
-  II 3G Ex nA IIC T5 Gc
- Class I Div. 2 Groups A, B, C, D T5


PRODUCT MARKING

HazPAC™ R9



MODEL NO: **H95101-8R**

SERIAL NO: **XXXXXXXX**

POWER RATING: **9-30V ~ 1.7A**

 **WARNING: EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS**

AVERTISSEMENT: RISQUE D'EXPLOSION - NE PAS DEBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, A MOINS QU'IL NE S'AGISSE D'UN EMPLACEMENT NON DANGEREUX

  II 3G ITS15ATEX18221X
Ex nA IIC T5 Gc IECEx ETL 15.0015X
Class I Div. 2 Groups A,B,C,D T5
-40°C ≤ Ta ≤ 60°C



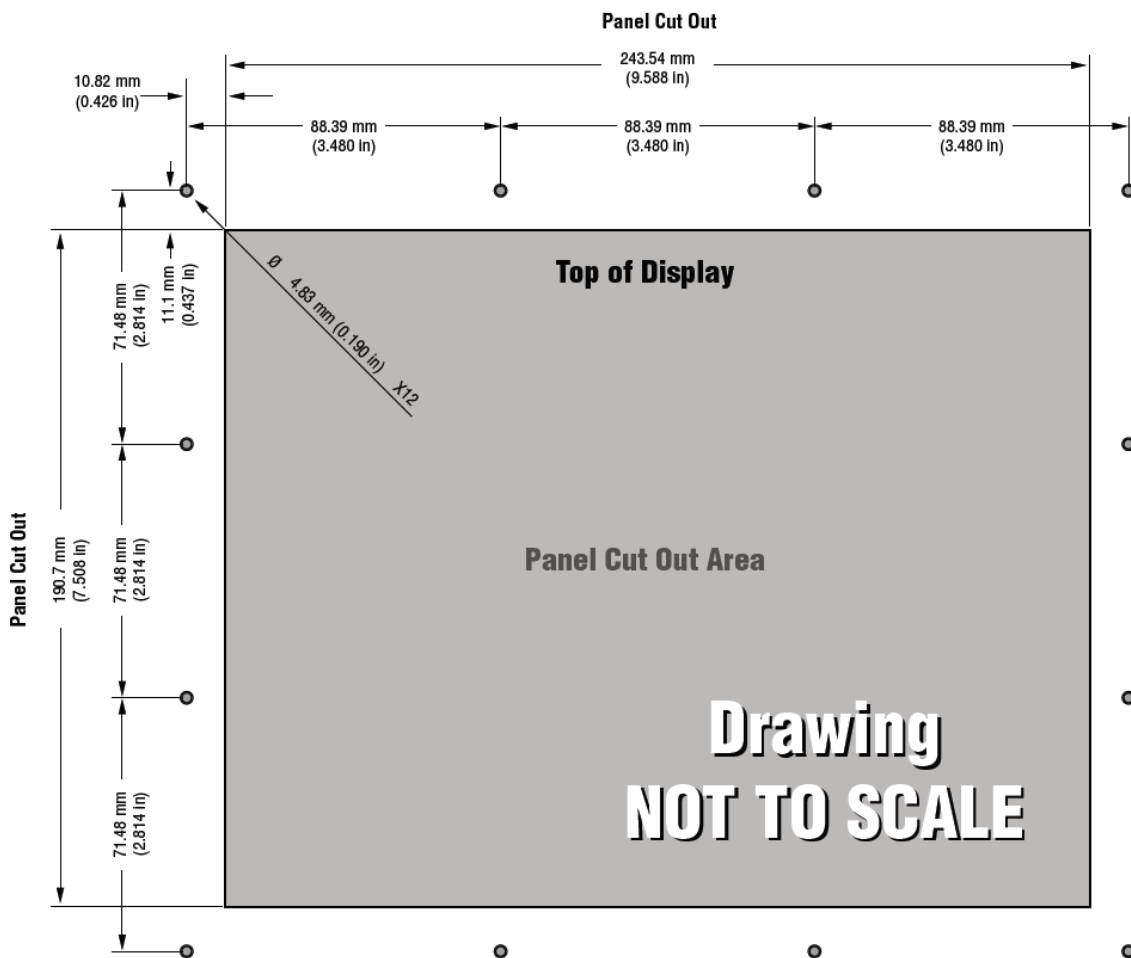
SEALEVEL Liberty, SC 29657 USA

864.843.4343
www.sealevel.com

Installation

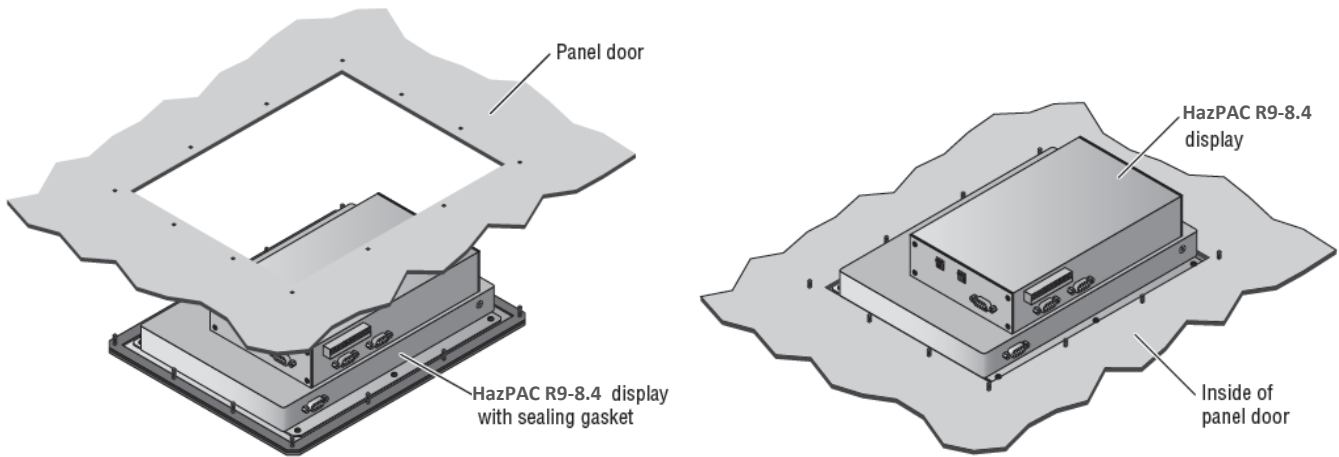
- Use appropriately classified Limited Power Source, or LPS. Follow all applicable wiring codes and regulations.
- Do not connect/disconnect equipment unless power has been switched off or the area is known to be non-hazardous.
- Peripheral equipment must be suitable for the location in which it is used.
- This equipment must be installed in a hazardous-location classified panel rated as follows:
 - Internal and external ambient of: -30°C to +60°C
 - Minimum ingress protection rating of IP54
 - ATEX / IECEx: Zone 2 or better
 - US / CAN: Class I Div 2 or better
 - Can only be opened with the use of a tool

PANEL CUT OUT

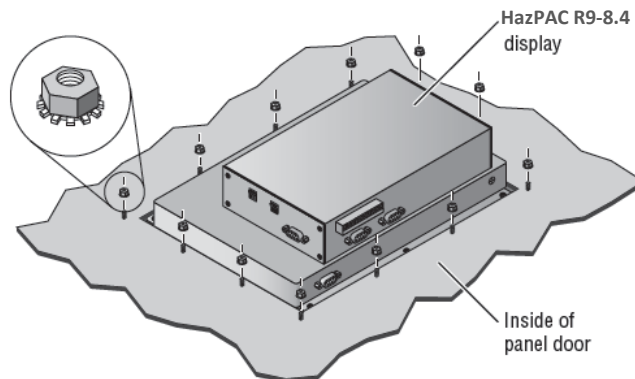


INSTALLATION INSTRUCTIONS

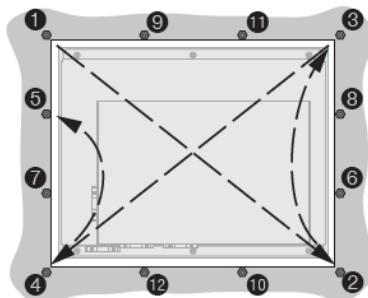
- Place the HazPAC R9 in position; the twelve studs go through the twelve holes on the panel mounting plate (see figures below).



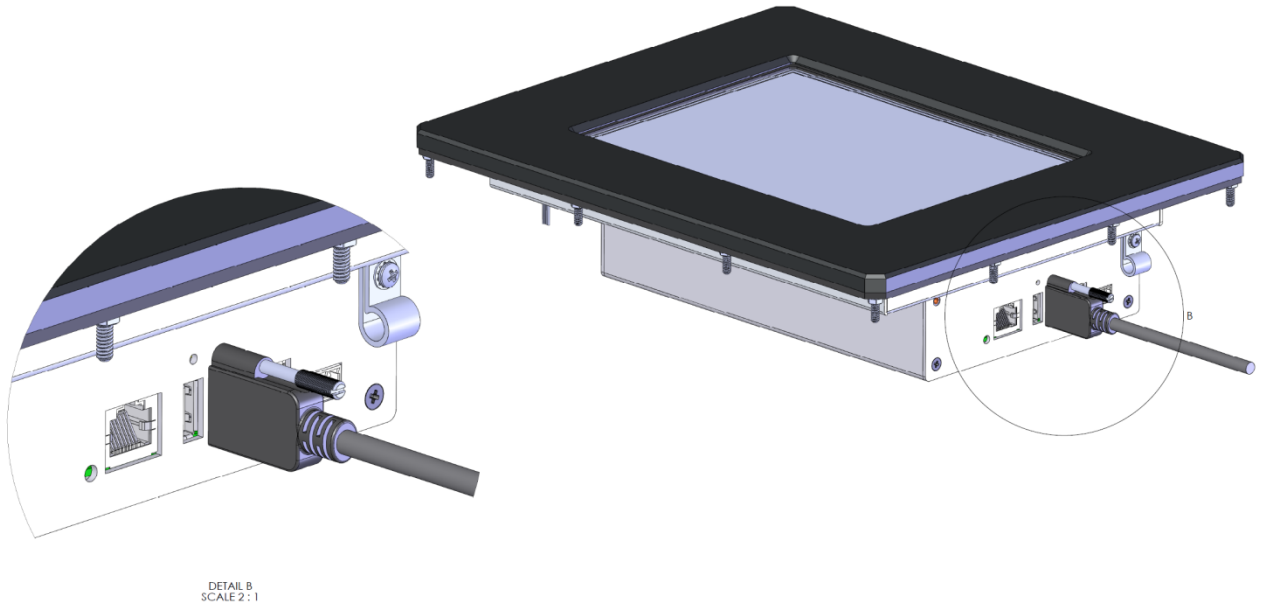
- Place the supplied 6/32" KEPS nuts on each of the twelve mounting studs. Fasten only hand tight.



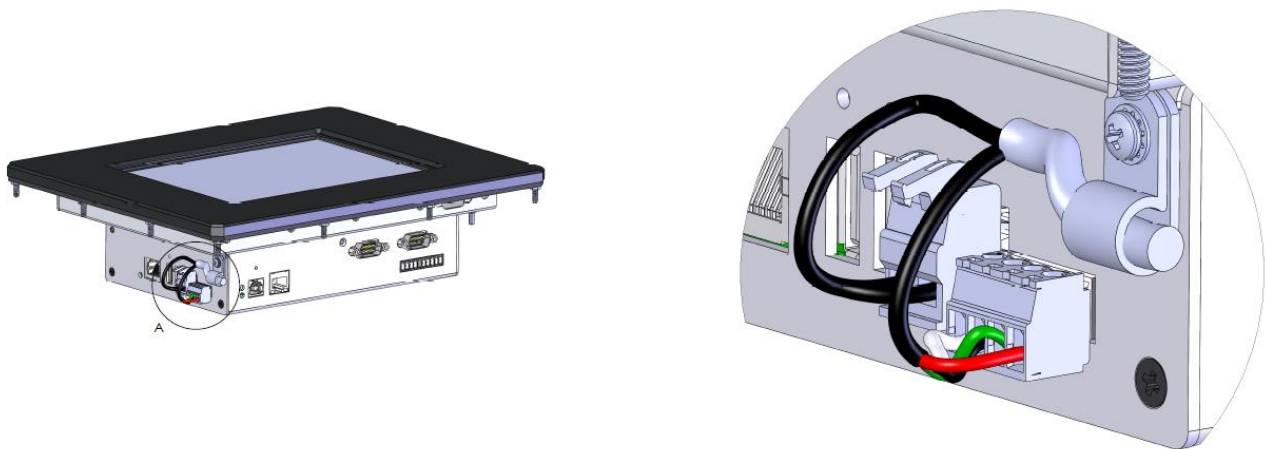
- After the display is properly positioned, tighten the nuts to 0.56 Nm (5 in lb) of torque in the sequence pictured below. Do not overtighten. Repeat the sequence to ensure proper torque values are retained.



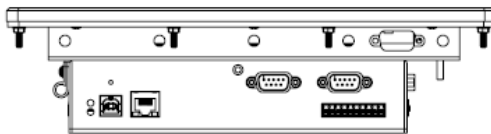
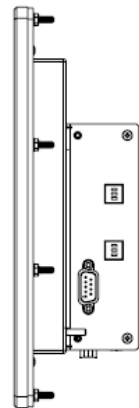
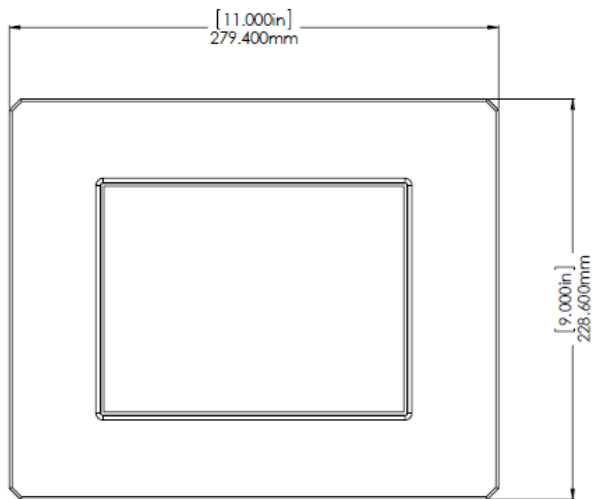
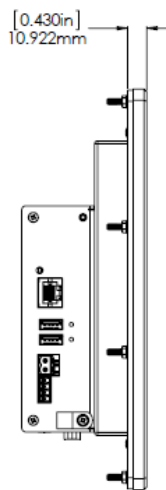
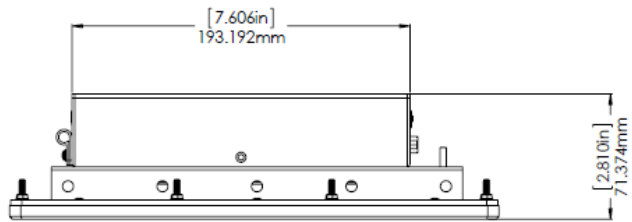
- USB and DB9 ports feature screw holes to achieve a secure connector attachment. Cables with matching screws have to be utilized during installation to maintain hazardous location certifications. USB ports require proprietary cables equipped with thumb screws supplied by Sealevel (as shown in the picture below). Refer to *Optional Items* section of the User Manual for more details.



- When connecting power source and/or RS485 terminal block ensure that the cables are routed through the cable clamp as shown in the picture below to provide a secure connection.



CAD Drawing



How to Get Assistance

When calling for technical assistance, please have the device installed and ready to run diagnostics. If possible, have your user manual and current settings ready.

The Sealevel website is an excellent resource located at www.sealevel.com. The most current software updates and user manuals are available via our homepage by clicking on the 'Drivers' or 'Manuals' links located under 'Technical Support.' Manuals and software can also be downloaded from the product page for your device.

The FAQ section of our website answers many common questions. Refer to this helpful resource by visiting www.sealevel.com/faq.asp.

TECHNICAL SUPPORT

Monday - Friday
8:00 am to 5:00 pm EST
Phone: +1 (864) 843-4343
Email: support@sealevel.com

RETURN AUTHORIZATION MUST BE OBTAINED FROM SEALEVEL SYSTEMS BEFORE RETURNED MERCHANDISE WILL BE ACCEPTED. AUTHORIZATION CAN BE OBTAINED BY CALLING SEALEVEL SYSTEMS AND REQUESTING A RETURN MERCHANDISE AUTHORIZATION (RMA) NUMBER.