STEM Robotics Platform

READ ME

Upon receipt of the product and prior to initial installation and operation, read these instructions thoroughly, and retain for future reference.

Welcome...

...to the Yaskawa Motoman family of robotic products. We at YASKAWA take pride in the work we do and would like to take this opportunity to thank you for your business. This READ ME document has been designed to help you install your new robotic system. Please review all the information before installing or operating your system.

Reference Documentation

Please review the following information before operating your system:

- FS100 Inform Language Manual
- FS100 Operators Manual
- FS100 Instructions Manual
- FS100 Maintenance Manual
- FS100 Option Instructions for Concurrent I/O Manual
- FS100 Brake Release Manual
- Third Party Manuals

Customer Support Information

If you need assistance, please contact Yaskawa Motoman Customer Support at the 24-hour telephone number (937) 847-3200. For routine technical inquiries, you can contact Yaskawa Motoman Customer Support at techsupport@motoman.com. When using e-mail to contact Yaskawa Motoman Customer Support, please provide a detailed description of your issue, along with complete contact information. Please allow approximately 24 to 36 hours for a response to your inquiry.

Please use e-mail for routine inquiries only. If you have an urgent or emergency need for service, replacement parts, or information, you must contact Yaskawa Motoman Customer Support at (937) 847-3200.

System Overview

The STEM Robotics Platform uses an Yaskawa Motoman MH5F or MHJF robot with a FS100 controller assembly.

NOTE

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<table>
<thead>
<tr>
<th>System</th>
<th>STEM Robotics Platform</th>
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<table>
<thead>
<tr>
<th>Robots</th>
<th>MH5F/MHJF</th>
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<tbody>
<tr>
<td>Primary Application</td>
<td>Educational</td>
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<tr>
<td>Controller</td>
<td>FS100</td>
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<tr>
<td>Software Version</td>
<td>Access this information on the Programming Pendant’s LCD display screen by selecting {MAIN MENU} - {SYSTEM INFO} - {VERSION}</td>
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<tr>
<th>Robot Serial Number</th>
<th>Located on the robot data plate</th>
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<tr>
<td>Robot Sales Order Number</td>
<td>Located on the robot data plate</td>
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CAUTION

Customer is responsible for safe guarding when purchased as a robot package.

NOTE

The speed of the STEM Robotics Platform is limited to 25% of maximum speed for safety reasons.
Installation

1. Unpack the STEM Robotics Platform components and roll to the desired location.
2. Using the supplied leveling feet, level the STEM Robotics Platform ensuring the casters are off the ground.

![CAUTION]

Use at least two people to install the removable extensions or injury may occur.

3. If equipped with removable extensions, lift one of the side extensions and align with the matching hinges. Drop shoulder screws through the matching pieces and secure with nuts. Repeat this step as required.
4. If required, provide shop air pressure (45-90 psi @ 2 CFM (max)) to the air manifold at the rear of the STEM Robotic Platform. Turn the shop air on and check for leaks. Fix as required.
5. If equipped with an air compressor, plug the compressor into an appropriate 110/120 VAC outlet. **DO NOT** plug the compressor into the STEM platform power strip. The power strip rating is not for the compressor. See compressor manual for details. Let the compressor build to full pressure and check for leaks. Fix as required.
6. Install the controller teach pendant.

![WARNING]

Read and follow all local and federal regulations when connecting the STEM Robotics Platform to a power source.

7. Connect the required power by referring to the block diagram below.

![Block Diagram]

8. Double-check the STEM Robotics Platform installation.
9. The STEM Robotics Platform can now have power supplied.

Specifications are subject to change without notice for ongoing product modifications and improvements.