

## Smart Pendant 2.0.3: Overview and Resources

### Introduction

Release 2.0.3 of the Smart Pendant software is available as of April 2021. This document provides a quick overview of the features and includes links to the upgrade files, and documentation.

### Smart Pendant 2.0.3 New Feature Overview

Below is a summary of the new features made available with release 2.0.3 of our Smart Pendant software. Additional information and demonstrations of some of these features is available in the webinar recorded on April 22, 2021. [The webinar recording is available at this link.](#)

- 3D Viewer
  - Simulate Robot Motion
  - Visualize Safety Zones
- Inform Improvements
  - SET Expression Editor
  - New INFORM Instructions
  - Usability Improvements
- New Safety Functions
  - Tool Change Monitor, Tool Angle Monitor
- 3rd Party Extension Apps Support
- Yaskawa Installation Packages (YIP)
- UI Performance Improvements



This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from [motoman.com](http://motoman.com). Please contact the Partner Support team at [partnersupport@motoman.com](mailto:partnersupport@motoman.com) for updates or clarification.

## Controller Software Dependencies

Smart Pendant 2.0.3 is fully compatible with our latest releases of software for the YRC1000Micro (YBS2.47) and YRC1000 (YAS 4.26) controllers. If you have an older version of controller software, you may not be able to access all Smart Pendant features. Below is an overview of the feature compatibility between versions of the Smart Pendant, YRC1000Micro (YBS) software versions and YRC1000 (YAS) software versions.

### Smart Pendant 1.4 features that require >= YBS 2.31, YAS 2.95

- Encoder Home Position Calibration
- Passcode and security level should match to the controller
- Safety Flash reset after using Software Pendant
- Support transferring safety related files to the controller with automatic Safety/PFL Board Flash reset
- Relative Job Conversion
- Setting and resetting safety mode password from Smart Pendant
- No indication of "/OV" status
- Unable to delete commented inform line
- Cannot use direct Teaching on YRC Pendant after using Smart Pendant Direct Teaching

### Smart Pendant 1.5 features that require >= YBS 2.35, YAS 3.10

- Automatic Tool Center Point Calibration
- Automatic measurement of Tool Properties for a General Robot
- Safety Logic Circuit Editor
- Safety Setting Screen - CRC Viewer
- Ethernet/IP and IO Allocation
- Maintenance Mode and Alarm Detection

### Smart Pendant 1.5.4 features that require >= YBS 2.42, YAS 4.12

- Add "Instance # Size" as Scanner Setting

### Smart Pendant 2.03 features that require >=YBS 2.42, YAS 4.26

- Torque Sensor Calibration for HC10 at Any Position with Tool
- Add local variables to variable panel

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## Software Download

The Smart Pendant upgrade files are available at [this link](#).

## Installation Instructions

NOTE: Once you are running the 2.0.3 version, upgrade procedures will be different (easier!) than those described below. *Please follow the instructions below to get to 2.0.3*

**(1) First verify that the controller system software version is compatible** with the current version of Smart Pendant software. See Below:

### *System Requirements*

To use all the new functions in 2.0.3, the system software version required is:

- YRC1000Micro Controller version: YBS2.46
- YRC1000 Controller version: YAS4.26

SP 2.0 is also backwards compatible with the versions greater than and equal to ones listed below. However, there are some known limitations when 2.0 is used with these versions.

- YBS2.35
- YAS3.10

**(2) Confirm that current version on the Smart Pendant is 1.3 or newer.**

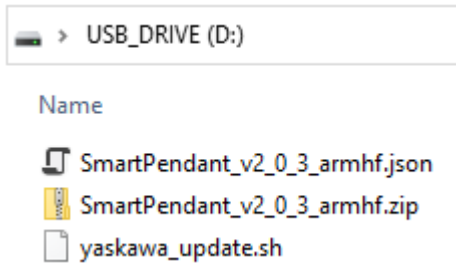
\*If updating from earlier than **Smart Pendant 1.3** or if your controller software version is not compatible with this Smart Pendant software version, please provide the Warranty ID of your system to:

- [Yaskawa customer support \(End Users\)](#)
- [Partner Support \(Resellers\)](#)

**(3) Download Smart Pendant update file** at [this link](#).

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(4) Unzip the “SmartPendant2.0.3-UpdateMedia-yai.zip” file on to a formatted USB drive. The file and folder structure should look as follows:



(5) Connect the USB drive to the Smart Pendant.

- USB port is located on the backside of the pendant (bottom-right corner)

(6) At "Management" level security, select "Systems Settings" / "General" and then press the {UPDATE PENDANT SOFTWARE}

- Pendant will start updating.
- Do not disconnect the USB drive until the pendant restarts.
- Pendant will automatically restart.

## Links to More Information

[Smart Pendant Instructions manual](#)

[Watch the 4/22/21 Webinar for Smart Pendant 2.0](#)

- [Download the Slide Deck](#)

[Smart Pendant Extension SDK](#)

[Smart Packager](#)

[Yaskawa Motoman Developer Portal](#)