

Handling Alarms

Introduction

When an Alarm appears on the pendant, your first instinct may be to contact Yaskawa for help. However, there are a number of things you can do to better understand what the alarm means, get more detail about the specific alarm you are seeing and find recommendations on what to do to eliminate the issue. This document will review steps you can take to understand and resolve alarms on your own and cover what information you need to provide to Yaskawa if you do need additional assistance.

team at partnersupport@motoman.com for updates or clarification.

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. Please contact the Partner Support

Gathering Alarm Information

Alarms will be displayed in the "General Display Area", indicated by the red box in the graphic to the right. Minor Alarms (numbered 4xxx to 9xxx) can be cleared by touching the "RESET" soft key on the display.

In this example, note we have one alarm displayed. The display includes the alarm number (4110), the alarm name (SHOCK SENSOR ACTION) and additional codes explaining the alarm.

Alarms are different from Error Messages which will display in the "Message Line" area, indicated by the green box. Error Messages can be cleared by pressing the CANCEL key. Additional information on Error Messages is available at the same links provided below.





Shared Integration Experience

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Interpreting Alarm Data

If you do not understand why the alarm occurred or what it means, the first step should always be to move the cursor to highlight the alarm number (if there are more than one) and press the SELECT key. This will provide more information regarding why the alarm occurred, including possible causes and actions (measures) to take to clear the alarm. (See graphic at the right.) There will also be soft keys on the display to return to the previous screen or attempt to reset the alarm. Depending on how much text is included in the alarm detail, you may also be able to scroll left and right or up and down using soft keys on the screen.

Alarms may be raised from multiple sources and for many reasons. Your alarm may be caused by an event related to your controller, your application, features enabled on the controller, etc. Because of this, there is no definitive list of all alarm codes. If you have retained the electronic copies of your manuals, you can search for "ALARM" to learn more. For complete and up-to-date versions of our documentation, browse to https://www.motoman.com/en-us/service-training/product-documentation

DATA	EDIT	DISPLAY	UTILITY	12 🗳 🖬 😣	10 🕒 👘	
ALARM DETAIL: 1 / 1						
ALARM 4110						
SHOCK SENSOR ACTION F0000 0000 0000 1						
ALARM CONTENT						
This alarm occurs if the shock sensor signal is detected.						
CAUSE						
Shock sensor activated						
MEASURE						
Shock sensor is activated. Select "OVERRUN&SHOCK SENSOR" under sub menu "ROBOT" to reset the sensor. After that, perform avoidance movement by jog operation.						
		RETURN		RESET		
Main Menu Simple Menu I/F Panel 🚺 Turn on servo power						

A good place to start looking for additional alarm detail is the Maintenance Manual for your controller. (There may also be an "ALARMS" Manual.) Direct links to the most popular controllers are provided below for your convenience.

Controller	Manual Name / Link		
DX100	Controller Maintenance		
DX200	Controller Maintenance		
FS100	Controller Maintenance		
XRC	Alarm/Error		
YRC1000	Alarm Codes		
YRC1000micro	YRC1000micro Alarm Codes		



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Reviewing Alarm History

It is can be helpful to review Alarm History to determine if an alarm is a one-time occurrence or has happened in the past. You may also find a pattern of alarms occurring together or at certain times of day. The Pendant keeps a log of the last 100 alarms of each type: Major Alarms, Minor Alarms, User Alarms (System), User Alarms (User), and Off-Line Alarms.

It also displays the login name of the user logged-on when the alarm occurred if individualized security levels are used.

To display the history of ALARMS:

- 1. From MAIN MENU, choose SYSTEM INFO.
- 2. Choose ALARM HISTORY.
- 3. Use the PAGE key for the next Alarm type, and SHIFT + PAGE for the previous page.
- 4. Move the cursor to choose a specific alarm; details for this alarm will appear at the bottom of the screen display.

NOTE: Errors are not registered in the pendant's ALARM HISTORY display.

Alarm History can also be saved to a USB memory device for review on a PC. To save Alarm History:

- 1. Insert a USB drive into the pendant.
- 2. On the Pendant, select EX. MEMORY, SAVE, SYSTEM DATA, then ALARM HISTORY DATA.
- 3. Press ENTER to save the file.

Engaging Yaskawa for Additional Support

It may be necessary to contact Yaskawa for assistance in interpreting or resolving alarms. If that is the case, be prepared to supply:

- the alarm codes
- the alarm details
- the situation which generated the alarm. (Did the alarm occur when the controller was first powered on? Does it only occur when a certain job is executed? If so, what does the job do and what step was being executed when the alarm occurred?)
- ALMHIST.DAT would be helpful but may not be necessary if this is the first time the alarm occurred.

The suggested resolution may also include directions to send a copy of your CMOS.BIN backup.



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The above information will help us to identify the cause of alarms and suggest action to clear the issue more quickly. You can contact our 24-hour Hotline at 937.847.3200. Select option 4 for Partner Support. Files can be sent to <u>partnersupport@motoman.com</u>