Jog Move Interrupt

The JOG profiler provides flexible control over a single axis with the ability to command continuous (JOG FWD/REV), incremental (JOG INC) and absolute (JOG ABS) moves. JOG moves are not buffered, which means a new JOG command for an axis will immediately abort a JOG move in progress and execute the new command.

**Default abort behavior:** The JOG move in progress will ramp to zero velocity before starting the next move.

For example, an absolute jog move is commanded to position 5 inches. After 0.5 seconds, the same axis is commanded to absolute position 8. When the new command is issued, the axis has only reached a position of 2.25 inches. The axis decelerates to zero velocity, then starts the new move. The controller uses the current settings for acceleration, deceleration and velocity to generate a new profile with the desired final position of 8 inches.

AXIS0 JOG ACC 50
AXIS0 JOG VEL 5
AXIS0 JOG DEC 50
AXIS0 JOG ABS 5
DWL 0.5
AXIS0 JOG ABS 8

![Figure 1](image-url)
Jog Move Interrupt

Quinary Axis Flags, Bit Index 19: Jog Move Interrupt

Determines behavior of the Jog Profiler when a JOG move is in progress and another JOG INC or JOG ABS move is commanded. If the flag is cleared, the current JOG move will decelerate to a stop using JOG DEC before starting the next JOG move. When the flag is set, the next JOG move will continue at the current JOG velocity using the new commanded JOG position.

Operating System Required: ACR9000 OS 1.24
Products: ACR9000, ACR9030, ACR9040

For AXIS0, the Jog Move Interrupt flag is BIT 16147

Using the same example program, it can be seen that the axis continues at the programmed velocity when the second move is issued and completes the move to absolute position of 8 inches.

**Figure 2**
Jog Move Interrupt

Notes:

- If the axis is Jogging in the positive direction using any jog mode, a subsequent JOG FWD command will not ramp down regardless of the state of the Jog Move Interrupt flag.

- If the axis is Jogging in the negative direction using any jog mode, a subsequent JOG REV command will not ramp down regardless of the state of the Jog Move Interrupt flag.

- Any Jog move command opposite in direction to the current move in progress will cause the current move to ramp to zero velocity before changing direction, regardless of the state of the Jog Move Interrupt flag.

- Incremental Jog Move (JOG INC) while a Jog move is in progress
  - If the new move is JOG INC and the Jog Move Interrupt Flag is off, then the new JOG INC will begin counting after the axis has reached zero velocity. See Figure 3.
  - If the new move is JOG INC and the Jog Move Interrupt Flag is ON, then the new JOG INC will begin counting immediately. See Figure 4.

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Jog Move Interrupt

Notes: Incremental Jog Move (JOG INC) while a Jog move is in progress

• A JOG INC command in the same direction the axis is already moving will begin counting AFTER the first move has decelerated to zero velocity if the Jog Move Interrupt Flag is off. In the example below, the axis is at 2.25 inches when the JOG INC command is issued, decelerates to 2.5 inches, then moves 5 inches to reach a final position of 7.5 inches.

CLR 16147
AXIS0 JOG ACC 50
AXIS0 JOG VEL 5
AXIS0 JOG DEC 50
AXIS0 JOG ABS 5
DWL 0.5
AXIS0 JOG INC 5

Figure 3

• A JOG INC command in the same direction the axis is already moving will begin counting IMMEDIATELY if the Jog Move Interrupt Flag is ON. In the example below, the axis is at 2.25 inches when the JOG INC command is issued, then moves 5 inches to reach a final position of 7.25 inches.

SET 16147
AXIS0 JOG ACC 50
AXIS0 JOG VEL 5
AXIS0 JOG DEC 50
AXIS0 JOG ABS 5
DWL 0.5
AXIS0 JOG INC 5

Figure 4