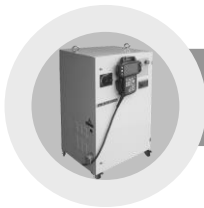




WARNING

**INSTALLATION SHOULD ONLY BE
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Hi5 Controller Function Manual

Interrupt





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Figure 1.1 Interrupt processing 1-2





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1

Overview of Functions



1. Overview of the functions

Interrupt

1.1. Introduction

Interrupt is one of the program's calling functions. When the robot operates in the interrupt monitoring area, predefined programs will be called and executed when the predefined interrupt conditions are met. When the execution of the said program is completed, the robot will return to the position of the program that was being previously executed, and will proceed to continue with the work.

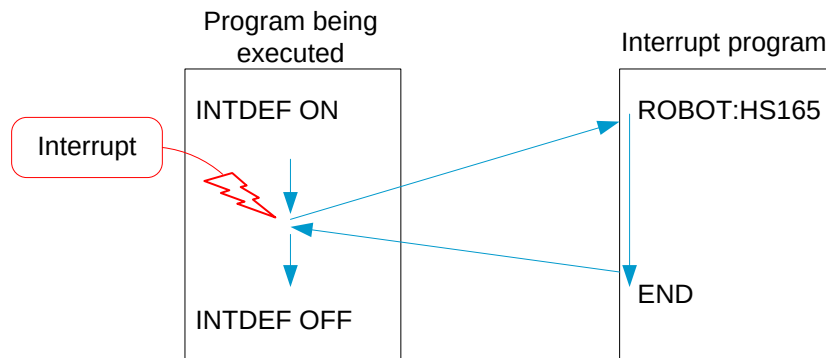


Figure 1.1 Interrupt processing

1.2. Overview of the functions

- Only operates within the interrupt monitoring area.
- Full support for arithmetic expression as the interrupt condition expression.
- While an interrupt program is being executed, other interrupt processes (multiple interrupts) will be also allowed.



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How to use



2. How to use

Interrupt

2.1. Summary

In order to use the interrupt function, the INTDEF command needs to be used. Users input the desired interrupt numbers, condition expression, and the programs to be called when an interrupt occurs. INTDEF ON needs to be used to activate the function and INDEF OFF needs to be used to deactivate the function.

2.2. Interrupt command statement (INTDEF)

Description	Defines a new interrupt or deletes the defined interrupts		
Grammar	INTDEF <Define/Delete>,NO=<Interrupt No.>,<Interrupt condition>,PN=<Program to call>, [Allowed only one time]		
Parameter	Define/Delete	Defines a new interrupt or deletes a defined interrupt. In the case of a deletion, the parameters after the third will be ignored.	ON/OFF
	Interrupt No.	Inputs the number of the interrupt that will be defined or deleted.	1-8
	Interrupt condition	Inputs the condition to generate an interrupt. (EX. DI1=1, AI4=3.5, P*.X=P1.X)	
	Program to call	Input the number of the program to call when the interrupt condition is met.	1-9999
	Allowable only one time	To be used when the first interrupt needs to be processed without processing multiple interrupts that could occur within the interrupt monitoring area.	SINGLE
Example	INTDEF ON,NO=1,DI5=1,PN=991,SINGLE INTDEF OFF,NO=1		

2.3. Interrupt variable (_INT.)

2.3.1. Interrupt number (_INT.NO)

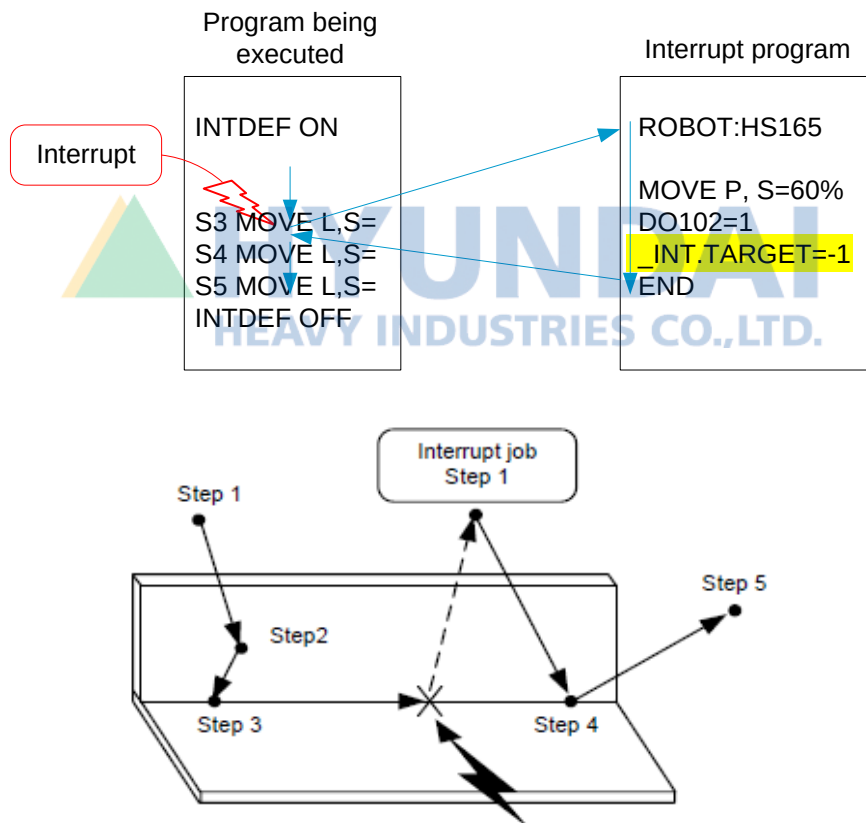
Description	Manage the number of interrupts that occurred. For example, when an interrupt condition is met, the same program can be called. This can be used when the called program from which interrupt condition is generated needs to be checked.
Grammar	_INT.NO=2
Example	IF _INT.NO=2 THEN



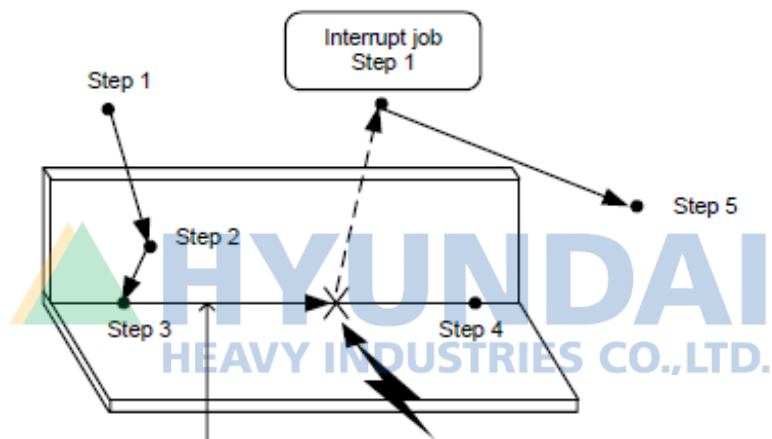
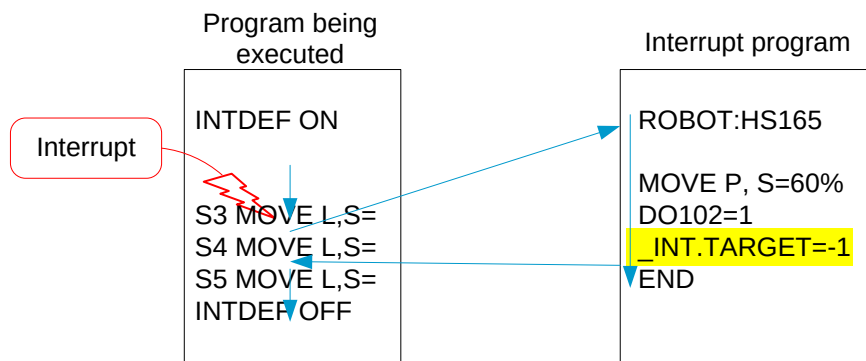
2.3.2. Interrupt number (_INT.TARGET)

Description	Manages the state of reaching the target position. For example, while the robot is moving, if the interrupt condition is met, after the execution of the called program has ended, it needs to be moved back to the position of the program that was being executed. In this case, the position can be adjusted and used.
Grammar	_INT.TARGET=1 (-1, 0, 1)
Example	_INT.TARGET=-1 "Not reaching the target position" _INT.TARGET=0 "Matching the target position" _INT.TARGET=1 "Exceeding the target position"

Example) _INT.TARGET=-1



Example) `_INT.TARGET=1` or `0`







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3

Others



3. Others

Interrupt

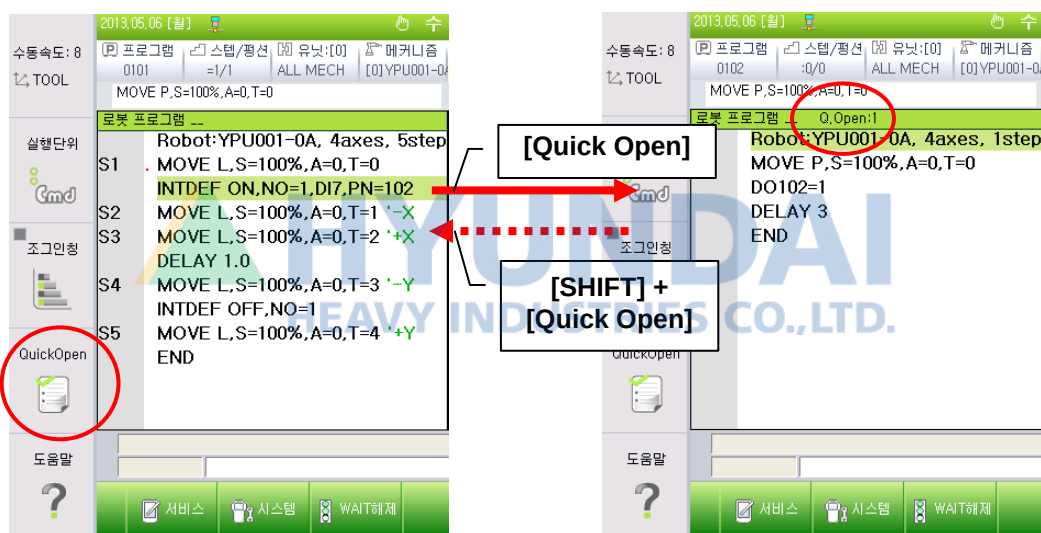
3.1. Interrupt deletion time

When the following operations take place, all the defined interrupts will be automatically deleted.

- (1) Start after inputting [R...] + [ENTER].
- (2) Start the program cycle.
- (3) Start after changing the steps or functions.

3.2. [Quick Open]

In the interrupt definition command sentence (INTDEF ON, NO=1, DI1=1, PN=10), press the [Quick Open] key to make it possible to edit the program (0102.JOB) to call when an interrupt occurs. It is possible to recover to the previous state when the [SHIFT] + [Quick Open] keys are pressed.



3.3. Problem processing

[E1351: As the same number, interrupt is defined as duplicate]

This could occur when the definition is made again for a predefined interrupt number without deletions.



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