



Software Features of Han's Robot Controller

Function Name: Use of the End Function Button

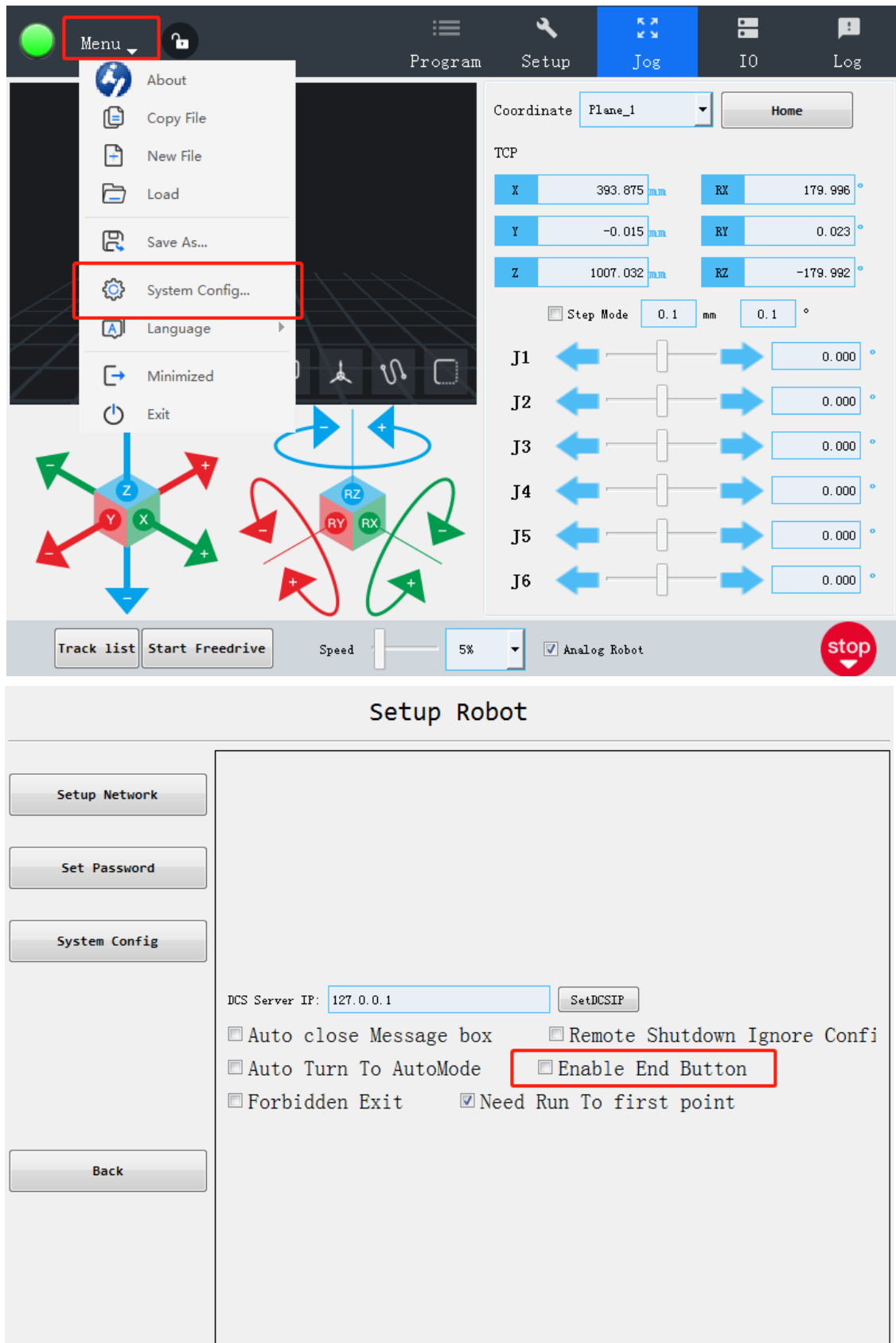
Version : V1.0.1



Elfin3, Elfin5, Elfin10

Shenzhen Han's Robot Co., Ltd.
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How to set the End button enabled.



1. Foreword

Please note: To ensure product safety, and to avoid accidental movements Caused by buttons being triggered during robot installation and teaching.

Our company decided that this button function will be turned off every time After closed.

1.1. Program purpose

This article explains the use of the end function buttons of Han's robot in detail, so that users are familiar with and master the Han's machine.

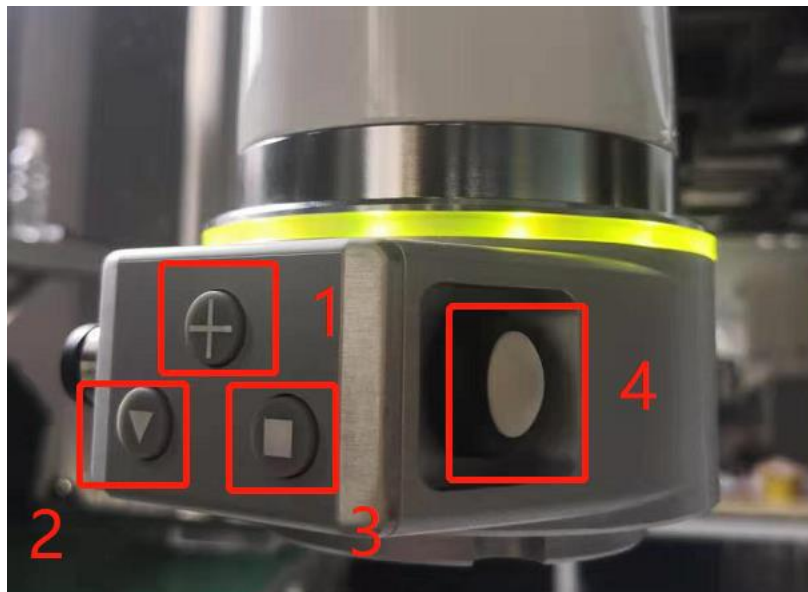
The robot's end button function, so that the robot can be better used in the actual application process, to obtain a better experience.


1.2. List of hardware devices






This solution is applicable to Han's robot models: Elfin3, Eflin5, Elfin10

2. Brief description of the end button

As shown in the figure below, there are 4 buttons at the end.



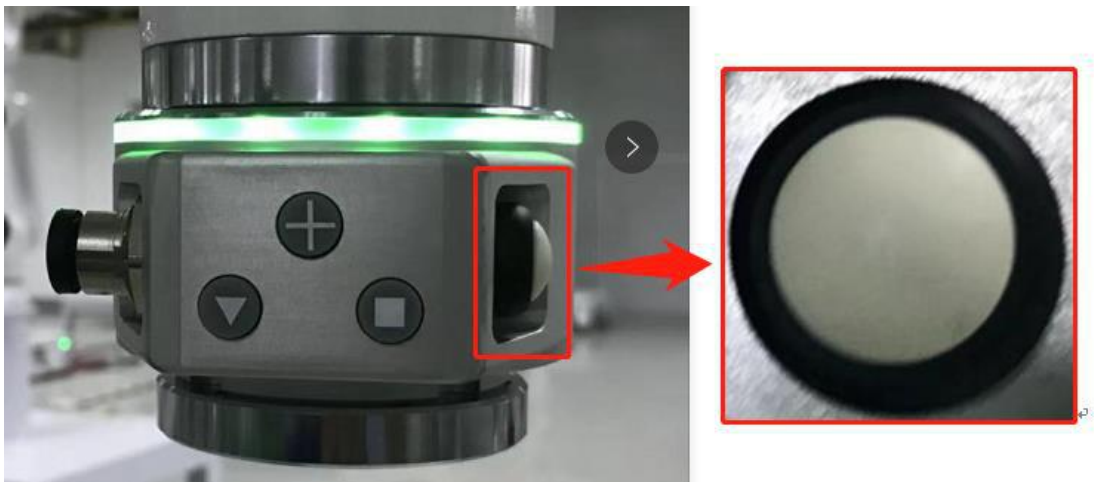
Serial number	icon	Brief function	Note
1		Button for adding and saving point information in free drive mode	

2		Function button of "Compile Script / Run Script"	
3		"stop button"	
4		Function button "Enter / Exit Free Drive Mode"	
5	 	Simultaneously click: 1、 In disable status, enable the robot 2、 In error mode, reset and enable the robot	

3. 3. Example of end button function

3.1. "Enter" and "Exit" Zero Free Drive Mode

Buttons num4 "Enter" and "Exit" in free-drive mode are shown in the figure below:



(1) When the robot is in the normal operation manual mode (the end ring light is displayed as steady green at this time), long press (about 1 second) button 4 and then release it, the robot will enter the zero force teaching mode (at this time The end ring light is displayed as: steady blue).


Note: When the robot is not enabled, the button will be enabled before entering the zero-force teaching mode.

(2) When the robot is in the zero-force teaching mode (at this time, the end ring light is displayed as blue always on), press and hold (about 1 second) button 4 and then release, the robot will exit the zero force teaching mode and return to the normal operation manual mode (at this time, the end ring light is displayed: steady green).

3.2. Add and save point information

Button 1 for adding and saving point information is shown in the figure below:




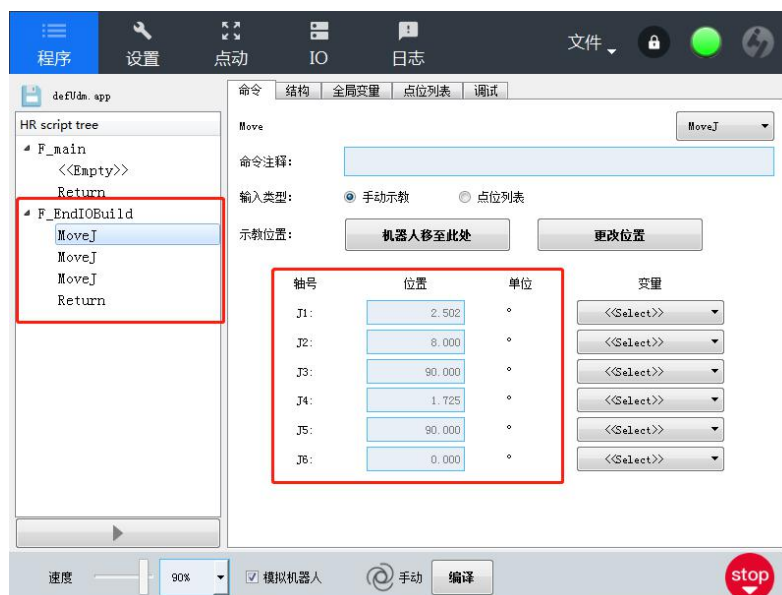
(1) When the robot is in "Zero Force Teaching" mode, press button 1 " " once, and the point information of the current position will be saved in the controller.

Note: 1. Each time you press the button, you need to hold it for about 1 second before releasing it.

2. When the point information is saved successfully, the ring light will be off for 0.5 second to indicate that the operation is valid.

(2) The saved point information will form a specific script program function F_EndIObuild in the "program" interface of the controller, as shown in the figure below. .


Note: The saved point information is not formed in the script program in real time. When the button 2 " " is clicked, all the saved point information will be displayed in the script program.




3.3. Compile and run the script


Button 2 for compiling and running the script is located as shown in the figure below:



(1) When the button 1 " " has been used to save the point information that needs to be taught, and exit "zero"

In the "force teaching" mode, pressing button 2 " " once will form a specific script program function F_EndIObuild on the "program" interface of the controller. All the point information saved before teaching will automatically form MoveJ The statement is added to the function F_EndIObuild, and the robot will enter the "automatic operation" mode. At this time, the ring light will display: green breathing light status.

At this time, click the run button, the robot will perform cyclic motion according to the previously taught points.


(2) When the robot is already in the "Automatic Run" mode, press the button 2 " " once again, the robot will run the script program function F_EndIObuild, and circulate between the previously saved point information.

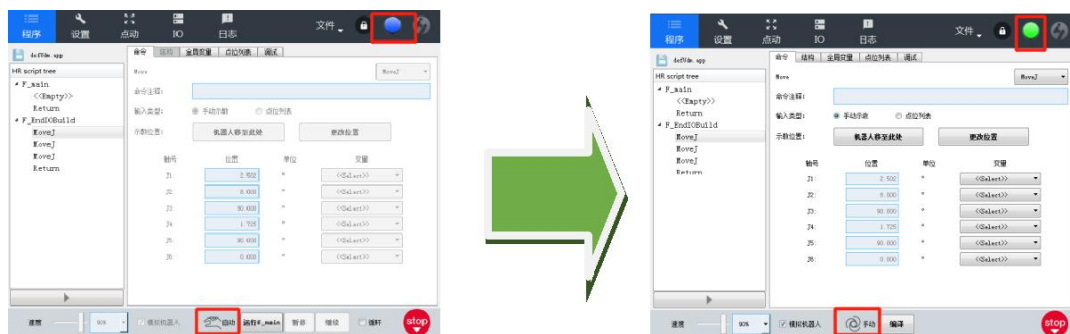
Note: 1. Each time you press the button, you need to hold it for about 1 second before releasing it.


3.4. Stop running button

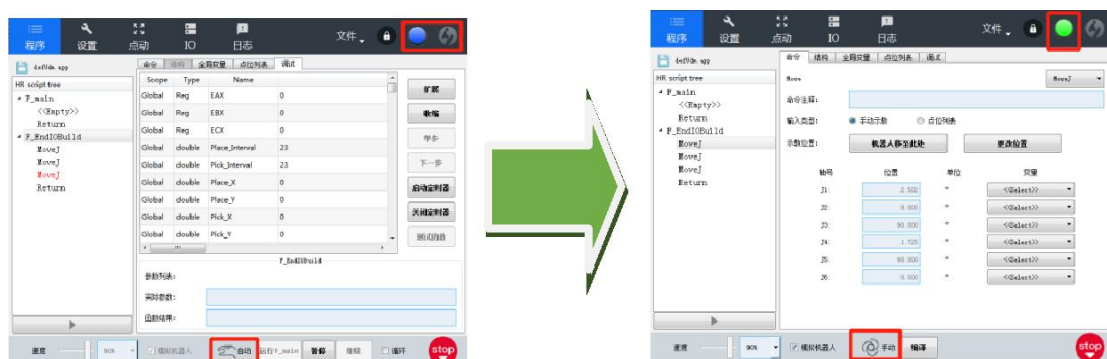
Stop button 3 is in the position shown below:



(1) When the robot is in the "automatic running" mode, press the button 3 , the robot will exit the "automatic running" mode, as shown below:





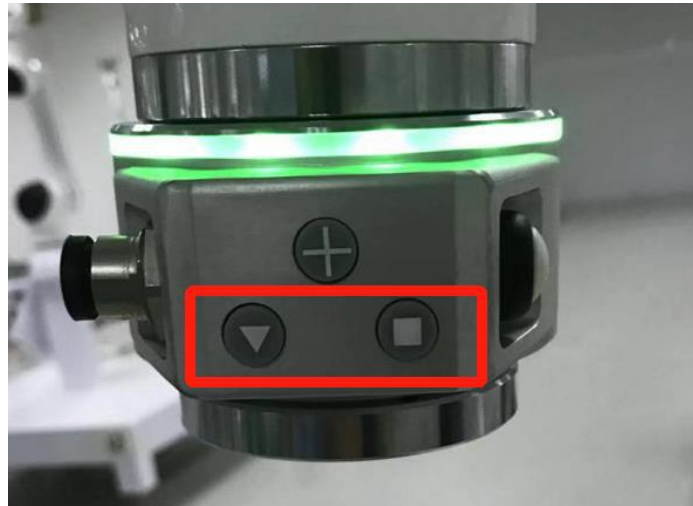
(2) When the robot is running the script, press the button 3 , the robot will stop moving and exit the "auto run" mode, as shown below:



Note: 1. Each time you press the button, you need to hold it for about 1 second before releasing it.



3.5. Enable operation

When the robot is not enabled, press the button 2 "" and the button 3 "" at the same time, hold it for 1 second and then release it to trigger the enable operation.



Note: 1. Each time you press the button, you need to hold it for about 1 second before releasing it.

3.6. Reset and enable operation

When the robot is in an error state, by pressing button 2 "" and button 3 "" at the same time, holding it for 1 second and then releasing it, you can trigger the Reset operation then enable the robot.



Note: 1. Each time you press the button, you need to hold it for about 1 second before releasing it.

4. Definition of ring light color

The end of the robot is designed with a ring-shaped LED light, and the running state of the robot will be feedback through the display status of the ring light. The corresponding meaning is shown in the following table.

Serial number	State of the ring light	meaning	Note
1	No light	The robot is in "no power" mode	
2	Green (always on)	After the robot is enabled and in normal manual mode	
3	Green (breathing light)	The robot is in "automatic" mode	
4	Blue	The robot is in "FreeDrive" mode	
5	Yellow	Robot is in a safety collision error	

6	Red	Robot is in error status	
7	White	Robot is in disable mode	