JAKA Cobot

Just Always Keep Amazing

SDK v2.1.14 Release Notes

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1. Release Informatio

1.1 Release Date

2024/09/30

1.2 Version Information

This SDK version 2.1.13 is compatible with 64-bit Linux and Windows systems.

Other detailed information is as follows:

typology	version number	note
Adaptive Controller	1_7_1_40/1.5.X	X64 / X32
SCB	03_11_R	/
PSCB	03_13_PR	/
Zu, C, PRO series servo	R3200	/
MiniCobo series servo	R2200_MINICOBO	/

1.3 Version Features Clarification

This version is compatible with all the functions before 2.1.11, and the new additions include: get/set system variable interface get/set_system_var(), query motion status information interface get_motion_status(); to solve the following feedback problems: 10004 port is often disconnected from the problem of crashing, inpos is not allowed to judge the problem, the problem of blocking the motion can not be blocked, the first boot of the control cabinet SDK call get_robot_status will crash the first time power on. The problem of blocking motion, the problem that when the control cabinet is first turned on and SDK calls get_robot_status, it will crash when it is first powered on.

For more information about SDK2.1.14, please refer to the documentation of the corresponding version.

2. Version Features

2.1 new feature

（1）Get related motion state interface

get_motion_status()

From it, you can get the inpos flag, the controller's motion queue length queue, the motion line currently being executed motion_line, and the queue_full flag to determine whether the motion queue is full.

（2）Setting/getting system variables

set_system_var(); get_syatem_var()

The original tcp command has this interface, and some overseas colleagues also feedback that they need this function, so we added this interface on 2.1.14.

（3）Add partially embedded S interfaces

- add zero_end_sensor(), get_tool_drive_state(), get_tool_drive_frame(), set_tool_drive_frame()
- add get_fusion_drive_sensitivity_level(), set_fusion_drive_sensitivity_level()
- add get_compliant_speed_limit(), set_compliant_speed_limit()
- add get_torque_ref_point(), set_torque_ref_point()
- add get_end_sensor_sensitivity_threshold(), set_end_sensor_sensitivity_threshold()

2.2 Function Optimization

（1）Rewrite port 10004 return mechanism

Previously, most of the customer feedback SDK problems are due to the large amount of data returned from port 10004, resulting in decompression failure, and then crashed, so in the version of the redefinition of the data return mechanism of port 10004, it is expected to solve this problem (after testing has not been reproduced crash problem)

（2）Fix blocking motion block not working

Previously, there was feedback that setting blocked motion, then the interface would return early, but the

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robot was still moving; after testing with version 2.1.14 of the SDK, we haven't reproduced this problem.

（3）Solve inpos inaccuracies

Previously, there is feedback that the robot is still in motion, read in place signal has been displayed in place; suspect the direction, because the inpos flag before the version is also obtained through the 10004, may be because of the 10004 port problem caused by the data is not refreshed, or read the previous state flag, and the 10004 port crash time has a randomness.

（4）Solve the problem that the control cabinet will crash when it is first powered on and get the status with SDK for the first time.

2.1.11 and previous versions (excluding 2.1.5) will appear, when the control cabinet is initially powered on, continuously call get_robot_status to get the status data, and then control the robot to power on through the joystick or APP, 100% reproduced the SDK crash problem, after the quiz, on 2.1.14 this problem has not been reproduced for the time being, and is expected to be solved.

（4）C/C++ header file optimization

2.1.14 The header file of the external version provided by 2.1.14, the annotations are all unified into English annotations, which is convenient for overseas customers to understand and use, see the header file provided by the SDK package for details;

The header file has added the copyright information and introduction about the company.

（4）SDK Documentation Manual

2.1.14 The user manual provided is proofread and perfected as a whole, and any errors are kindly corrected.