JANOME

JR3000 SERIES
Desktop Robot
[JR3200 / JR3300 / JR3400 / JR3500 /JR3600]

EN

Broaden your manufacturing potential with our

The JR3000 Series is a multifunctional robot designed with both cell production sites and automated inline installation in mind. With a rich catalog of functions including Fieldbus compatibility, a built-in LAN port as standard equipment, software that makes camera installation easy and the ability to control up to two external motors, the JR3000 is ready to fill many different manufacturing roles.

Increased Structural Rigidity

We've made the robot even more rigid, which in turn makes it faster (maximum speed up to 900mm/s), more accurate, and able to operate non-stop for extended periods.
We've stabilized the tracking function at high speeds. When a camera is attached to the Z-mechanism, the oscillation when the robot comes to a stop is greatly reduced, thereby cutting the wait time by approximately 50% (compared to previous Janome models).

Hidden Robot Cable

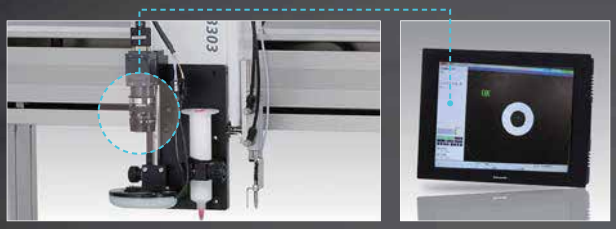
New for desktop robots, the Z-axis cable is built into the Y-axis housing; a compact design ideal for workspaces with height limitations.

Fieldbus Compatibility, Ethernet (LAN) Included as Standard Equipment

Choose among "CC-Link", "DeviceNet" or "PROFIBUS" modules.
A LAN port is included as standard equipment, so you can control several robots from one PC!

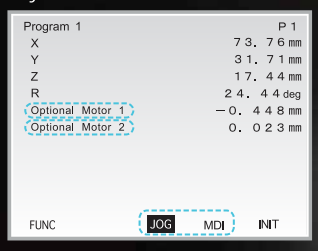
Easy Camera System Installation

To keep up with increasingly refined manufacturing methods, we've strengthened our camera functions. With functions such as automatic calibration, CCD camera adjustment function with a counter and more, we've enhanced the robot's camera functionality adding more ways to make use of a camera system.



Control up to 4 Axes and 2 External Motors

Program up to 2 pulse string input type devices, such as a stepping motor or pulse motor, the same as handling the robot axes from the teaching pendant. Set up a turntable to change the workpiece direction; install a conveyor and control it from the robot; the choice is yours.

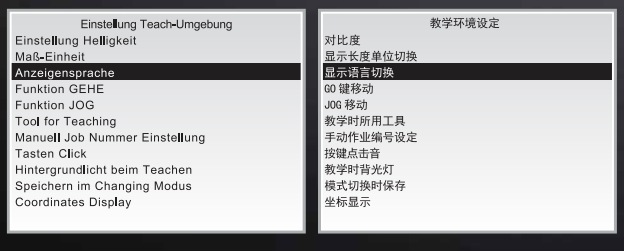


Make settings in either JOG or MDI Modes.

Multilingual Display

We've equipped the teaching pendant with 10 different display languages so that operators from as many different countries as possible can easily program and operate the robot.

Display Language Examples



German Chinese

flagship desktop robot.

Wide Variety of Model Variations

How to Read the Model Number

JR3	20	3	E	-	A		C
JR3000 Series	X, Y Axes Stroke	No. of Axes	Encoder		Operation Panel Specifications		Power Supply Specifications
	20 : 200×200mm 30 : 300×320mm 40 : 400×400mm 50 : 510×510mm 60 : 510×620mm	2 3 4	E:Included N:Not Included		A:Installed Switch Specifications B:Switchbox		C:90-125V/180-240V～ 50/60Hz (No Outlet) 180-240V～ 50/60H\Hz (200V Outlet) (mainly EU, Korea) J:90-125V 50/60Hz (mainly Japan)

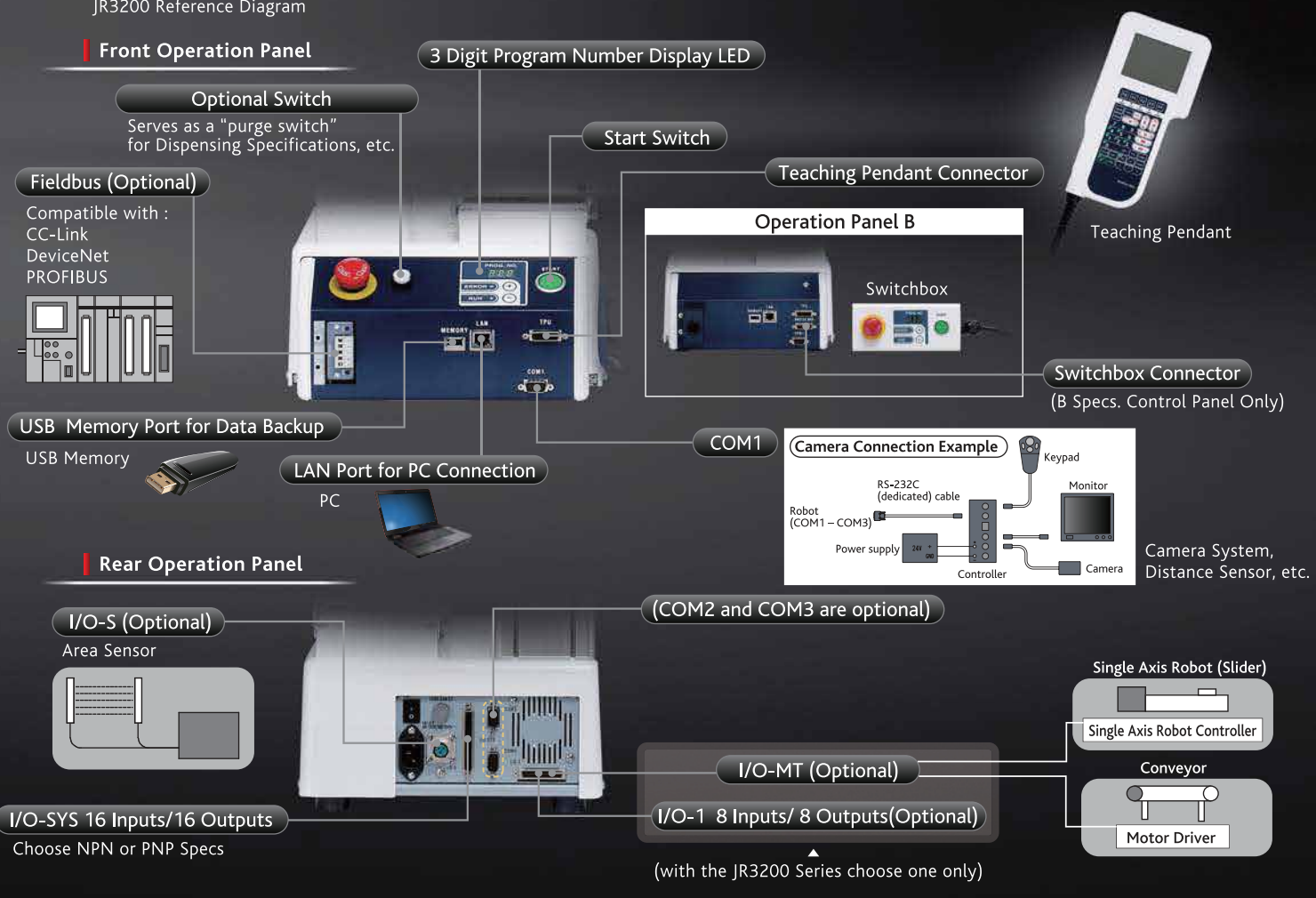
An encoder-equipped version which detects motor "step-outs" ; a twin column type for the JR3400, useful for jobs that place a great load on the Z-axis; an elevated type with an extended Y-axis column for handling tall workpieces; we offer several optional variations to meet customer requirements. Also, CE compliant types are available for all models.

Available Options at Time of Order

- Fieldbus Add-on (choose CC-Link, DeviceNet or PROFIBUS)
- I/O-MT Add-on (for up to 2 external motors)
- 3400 Series Double Column Type
- Elevated Column Type (open height)
- Optional Switch (Purging Switch Function for Dispensing Specs.)
- I/O-1 Add-on (8 Inputs/8 Outputs)
- Internal I/O Power Supply Add-on (DC24V Rating 2.1A)
- I/O-S Add-on (for Interlock connector)
- COM2, COM3 Add-on (for external devices)
- Ejector (air suction for screw tightening)

Part Names and Explanations

JR3200 Reference Diagram



Software

System software for everyone, from first-time users to veteran operators.

The JR3000 features specialized software for each application that even a new programmer can use. Take advantage of a variety of proven command strings for easy robot teaching.

CCD Camera Adjustment with Counter

Acquire up to 3,000 adjustment values when making camera position adjustments for the robot. After taking a series of camera shots, the robot can perform jobs while making a series of adjustments thereby shortening the cycle time.

The robot can make up to 3000 adjustments in one cycle.

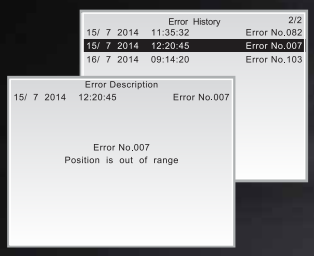
Common Settings for All Programs

You can make common settings for items which often use the same settings in multiple programs, such as "tool settings", etc. This is useful for shortening teaching time and revising parameters.

Program 1	Individual Settings
Program Name	TEST01
Individual Job on Start of Cycle	0
Cycle Mode	1 Cycle Playback
Position Data Type	Absolute
Work Home	Individual
PTP Condition	Individual
CP Condition	Common
Tool Data	Common
Move Area Limit	Individual
Valid/Invalid Settings of Move Axis	Common

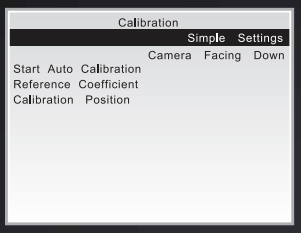
Error History

The time and date an error occurs is now displayed. Knowing when an error occurs is helpful for cause determination and analysis.



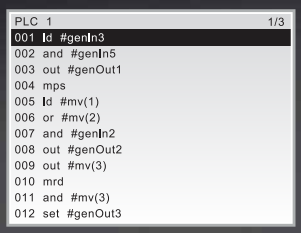
Automatic Calibration

Camera calibrates automatically when a new camera system is added.



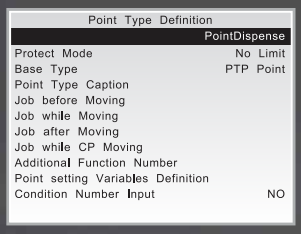
Simple PLC Function

A simple PLC which operates independently from the robot's functions is already built-in, so you do not need to purchase a separate PLC to handle simple interfacing with external devices.



Customizing Function

Register command strings that you often use and then when you need to teach a program it's easy! You can even create your our own software.

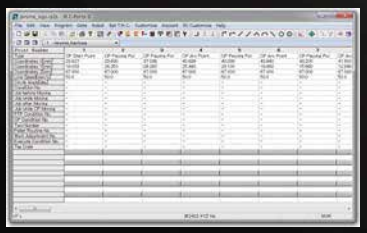


4 Axes Needle Adjuster Function

We offer devices to adjust the needle tip position for both 3 and 4 Axes types (for Dispensing Specifications).

PC Software "JR C-Points II" (Optional)

"JR C-Points II" is application software which allows you to create, edit and save teaching and customizing data all on your PC. Now it's even more user-friendly with a "Point Graphic Editing Function" which allows you to create and edit path data as a graphic drawing.

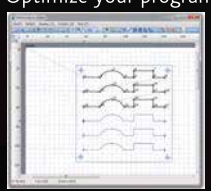


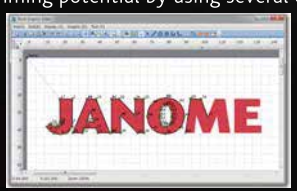
Set points and create and edit point commands more smoothly through numerical MDI (manual data input); even copy and paste coordinate data in the manner of spreadsheet software. Select the icons for the functions you often use from the toolbar.

Convert teaching data created for the JR2000N Series on JR C-Points software for use with the JR3000.

Point Graphic Editing Function Screen

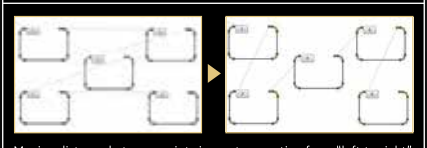
Create path data based upon DXF, Gerber or .JPEG background image data. Check and edit teaching data program paths.
Optimize your programming potential by using several different functions to create even better teaching data.


Set points based on DXF data for accurate positioning.

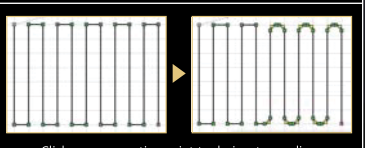


Refer to .JPEG images when teaching.

Point Order Sorting Function (shorter tact times)


Moving distance between points is great, so sorting from "left to right"

Corner Angle Rounding Function


Click on a connecting point to designate a radius