Support software for PC

APPLICATION
TRANSERVO — Compact single-axis robots
FLIP-X — Single-axis robots
PHASER — Linear motor single-axis robots
XY-X — Cartesian robots
YK-X — SCARA robots
YP-X — Pick & place robots
CLEAN
CONTROLLER
INFORMATION
Robot positioner
Pulse string driver
Robot controller
iVY/ Electric gripper
Option

VIP+ Windows
Visual Integrated Programming

■ Applicable controllers ▶ RCX221 | RCX222 | RCX141 | RCX142 | RCX240 | RCX240S

VIP+ is an easy to operate application software that makes tasks such as robot operation, writing-editing programs, and point teaching easy to visually understand.

Features New support software VIP with improved ease of use

1 GUI updated for enhanced usability

The user interface has been improved with the VIP Windows function kept as it is so as to achieve more ease of use.
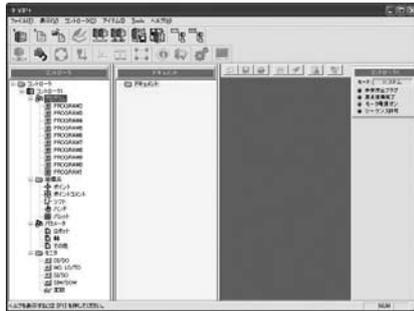
2 Data displayed in the tree view form

The data included in the controller is displayed legibly.

3 Fully equipped tool bar

Each of various functions can be executed by simple one click on the tool bar.

4 Expanded monitor function

The I/O conditions and variables in the controller can be monitored at real time. In the advanced mode, it is also possible to attach any label (Note) to general purpose input/output and others.

Note. The label is stored in PC.

5 Data operation using the new drag & drop function

The data can be stored easily by using the drag & drop function. Likewise, the stored data can be restored to the controller by operating the mouse only.

Select the data to be stored.

Drag the selected data to the document window and drop it there.

Specify the file name and this completes the storage procedure.

6 Input the data in the work sheet form (Parameter, Point data)

It is also possible to copy and paste the data from the other spread sheet (chart calculation software).

7 Syntax coloring when editing the program

When reserved words (character string reserved as the robot language) are inputted, they are colored automatically, making them noted at one glance for easier program editing.
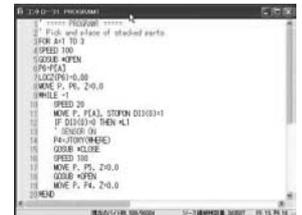

8 Program execution monitor

The step being performed during the program execution can be monitored. Thus, it ispossible to check which step is performed without stopping the program, thereby debugging of the program is made much easier.

9 List appointing (point where the system is restored)

It is possible to create the system restoration point at any timing. By doing so at important points in the system constructing process when, for example, something faulty is found after the system was changed, the system can be returned to the state before such change easily.
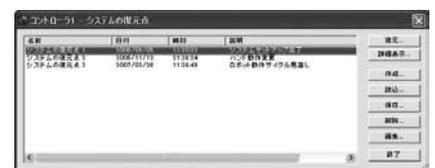
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VIP+

■ VIP PLUS function

1 Easy to use

With a number of robot operation items provided on one screen, any operator can operate easily without memorizing the menu construction.

2 Programming editing

The program, point, parameter, shift, and hand can be edited on the PC alone. Equipped with the function selector having the command searching function which enables to input the robot language with ease.
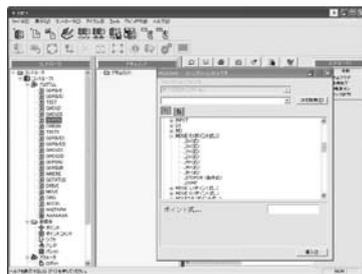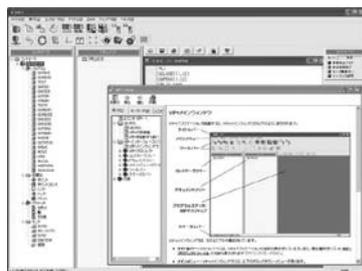
3 Data check function

Provided with the equivalent data check function to that of a robot controller, it is possible to correct data errors before operation.
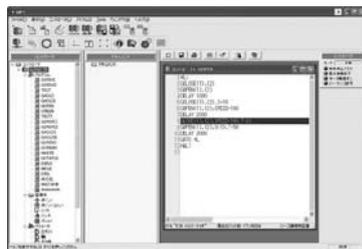
4 Help function

When more information is needed during operation, press the [F1] or [HELP] key, and the help screen will appear.
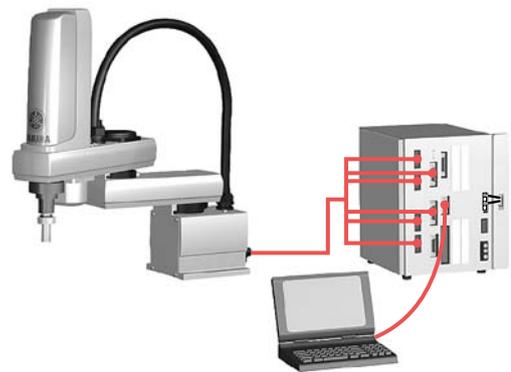
5 Robot operation

By connecting PC and controller with communication cable, robot operation will be available by the on-line command.

6 On-line editing

Connecting a PC and the controller with a communication cable enable to edit data from robot controllers just as with RPB / RPB-E.

7 Creating point data There are three methods available for creating the point data.

● MDI (Manual Data Input) teaching
The numeric keyboard is used to enter position coordinate data directly.
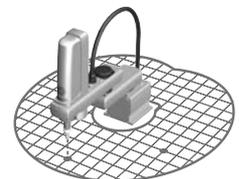
● Remote teaching
The robot arm is actually moved to the target position using the keys for point data registration.

● Direct teaching
The robot arm is manually moved to the target position with the servo motors off for point data registration.

Environment / Ordering method ▶ P.491

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■ Support software for PC VIP+

Model	KX0-M4966-00

■ Environment

OS	Microsoft Windows 2000 / XP / Vista (32bit / 64Bit) / 7 (32bit / 64Bit)
CPU	Processor that meets or exceeds the suggested requirements for the OS being used.
Memory	Suggested amount of memory or more for the OS being used.
Hard disk	40MB of available space required on installation drive.
Communication method	RS-232C, Ethernet Note. For Ethernet communication, Ethernet unit for RCX series controller is required.
Applicable robot controllers	RCX221 / RCX222 / RCX141 / RCX142 / RCX240 / RCX240S

Note. Microsoft and Windows are registered trademarks of Microsoft Corporation.
Note. ADOBE and ADOBE READER are registered trademarks of Adobe Systems Incorporated.
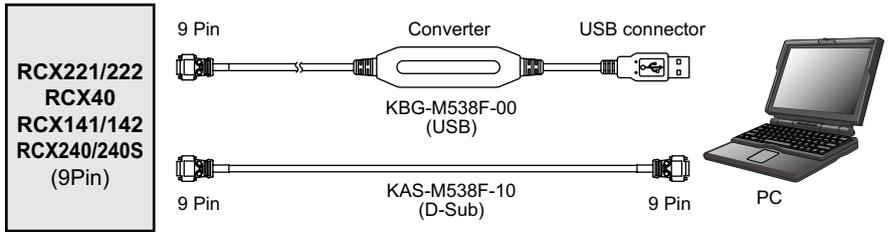Note. Ethernet is a registered trademark of Xerox Corporation.

■ Data cables (5m)

Communication cable for VIP+.
Select from USB cable or D-sub cable.

USB   **D-Sub**

Model	USB type (5m)	KBG-M538F-00
	D-Sub type 9pin-9pin (5m)	KAS-M538F-10

Note. Data cable jointly used for POPCOM, POPCOM+, VIP, VIP+.
Note. USB driver for communication cable can also be downloaded from our website (driver supports VIP+, POPCOM, and TS-Manager).

■ Controller and data cable connection diagrams

RCX221/222
RCX40
RCX141/142
RCX240/240S
(9Pin)

Controller

9 Pin   Converter   USB connector

KBG-M538F-00 (USB)

KAS-M538F-10 (D-Sub)

9 Pin   9 Pin   PC

Programming box
RPB/RPB-E

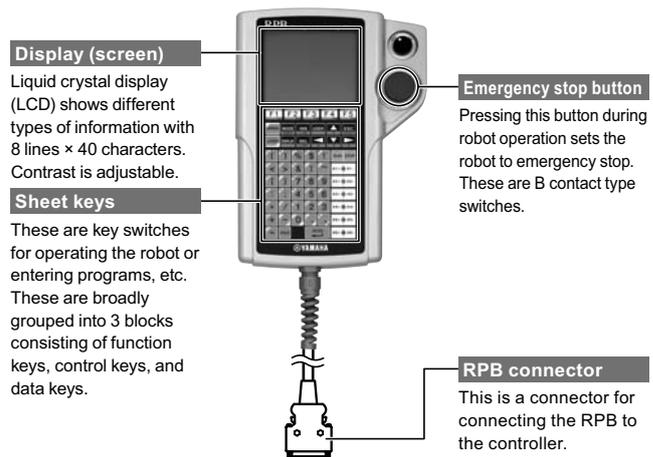## ■ Applicable controllers ▶ RCX221 RCX222 RCX240 RCX240S

Customers using the RCX141 / RCX142 controllers should use the connector converter cable (See P.519.)

All operations can be performed from this device including manual robot operation, programming entry and editing, teaching and setting parameters. The display works interactively with the operator so even an absolute beginner can easily learn how to use programming box.
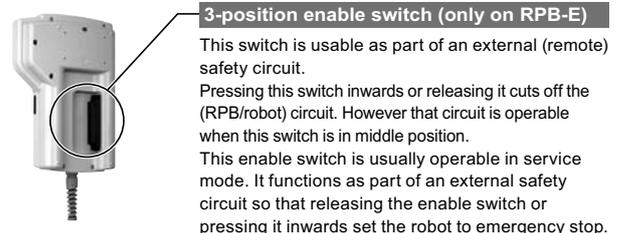
■ RPB / RPB-E basic specifications

Name	RPB	RPB-E
External view		
Applicable controllers	RCX221 / RCX222 / RCX240 / RCX240S	
Model	KBK-M5110-10	KBK-M5110-00
Display	LCD (40characters 8 lines)	
Emergency stop button	Normally closed contact point (with lock function)	
Enable switch	–	3-position
CE marking	Not supported	Applicable
Operating temperature	0°C to 40°C	
Operating humidity	35% to 85%RH (non-condensing)	
Dimensions	W180 × H250 × D50mm (Strap holder, emergency stop button not included.)	
Weight	600g	
Cable length	5m (Standard), 12m (Options)	

■ Part names and function

Display (screen)
Liquid crystal display (LCD) shows different types of information with 8 lines × 40 characters. Contrast is adjustable.

Sheet keys
These are key switches for operating the robot or entering programs, etc. These are broadly grouped into 3 blocks consisting of function keys, control keys, and data keys.

Emergency stop button
Pressing this button during robot operation sets the robot to emergency stop. These are B contact type switches.

RPB connector
This is a connector for connecting the RPB to the controller.

■ RPB-E Rear side

3-position enable switch (only on RPB-E)
This switch is usable as part of an external (remote) safety circuit.
Pressing this switch inwards or releasing it cuts off the (RPB/robot) circuit. However that circuit is operable when this switch is in middle position.
This enable switch is usually operable in service mode. It functions as part of an external safety circuit so that releasing the enable switch or pressing it inwards set the robot to emergency stop.