

Simple robot teaching system



Virtual Robot Programming System (VRPS)

Utilization of Virtual Reality (VR) Realize "Simple robot teaching" with intuitive operation





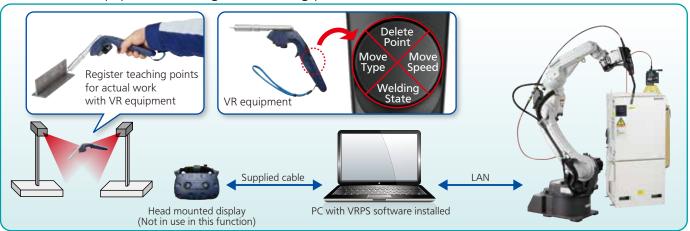
Efficiency Reduced teaching time by utilizing VR equipment

Usability > Allowed intuitive operation to the actual work

For everyone > No professional skill is needed for teaching

■Outline of "Simple robot teaching" system

It enables a user who is unfamiliar with robot operation to easily perform robot teaching. Use the VR equipment and register teaching points for the actual work.



■Product form





Panasonic representatives.

	Name	Remarks			
1.	Software (CD-ROM)	Product of Panasonic: YA-1VPCV1			
2.	USB license key	"			
3.	Torch model	"			
4.	PC	Customer preparation			
5.	VR equipment	Customer preparation (Our company specified equipment)			
6.	LAN cable	Customer preparation			

^{*}Please setup the PC/VR equipment at customer's end.

■Comparison of teaching time

(Measurements under the condition specified by our company)



(Weld section: Approx. 30 poin	ts)			
Teaching method	Teaching time	Correction time	Addition of weld commands	Total
Actual machine	2 hours (90 s/point)	None	Add while teaching	2 hours
Offline software	1 hour (45 s/point)	30 min.	The same as above	1.5 hours
VRPS (*)	Approx. 7 min. (5 s/point)	30 min.	Approx. 10 min.	47 min.

- About positional accuracy: Displacement will occur. Prior to operation, perform operating check and position correction.

Teaching points: Approx. 80 points

- To improve positional accuracy:

 1) Maintain the tracking of the head mounted display while teaching.
- 2) Operate the VR equipment about 30 seconds before performing calibration or teaching operation. 3) Adjust the TCP of the robot properly.
- 4) Perform the TCP adjustment of the torch model installed on the VR equipment.

Operating environment

VR equipment	HTC VIVE Pro (Our company specified equipment: For details, please contact Panasonic representatives.)
CPU	Intel® Core™. i5-4590 or the equivalent or higher class
Graphics	NVIDIA® GeForce® GTX 1060 or the equivalent or higher
Memory	4 GB RAM or more
Video output	DisplayPort 1.2 or higher
USB port	USB 3.0 port or higher, 2 ports
OS	Windows®10 or higher

Make sure that the applied PC should satisfy the above specifications or higher. If not, the software, especially graphic, won't run.

Safety precautions

Before attempting to use any welding product, always read the manual to ensure correct use.

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