

JoiTech Robot Specification

Yuji Oshima^{*1}, Shun Kitamura^{*2}, Kenji Doi^{*3}, Kohei Suga^{*4},
Takashi Takuma^{*3}, Kazuaki Tanaka^{*1},
Hiroki Mori^{*1}, and Minoru Asada^{*1}

^{*1} Adaptive Machine Systems, Graduate School of Engineering
Osaka University, Osaka, Japan

^{*2} Mechanical Engineering, Faculty of Engineering

^{*3} Dept. of Electrical and Electronic Systems Engineering

^{*4} Dept. of Mechanical Engineering

Osaka Institute of Technology, Osaka, Japan

robocup@er.ams.eng.osaka-u.ac.jp

1 Specifications

The team JoiTech utilizes a robot, Tichno-RN which has 22 degree of freedom. Mechanical structure of Tichno-RN was developed by Vstone Co.,Ltd. Its link structure and a front view are shown in Fig. 1, and the detailed specification is shown in Table 1.

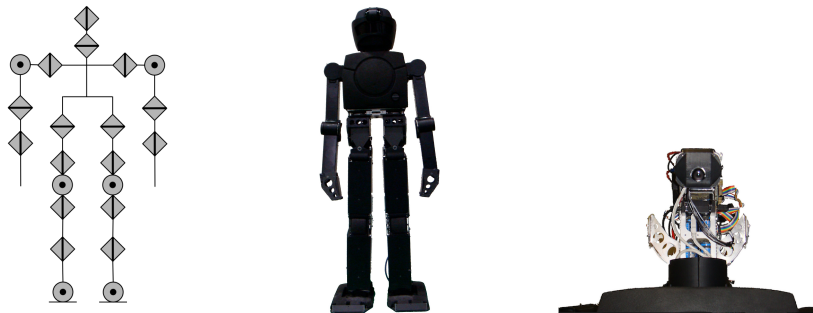


Fig. 1. Tichno-RN robot

Table 1. Tichno-RN hardware specifications

| Tichno-RN | | |
|-------------|---|--------------------------------|
| Height (mm) | 1400 | |
| Weight (kg) | 25 | |
| DOF | 22 | |
| Actuators | VS-SV410, VS-SV1150, VS-SV3310 | |
| Camera Type | SenTech STC-C33USB-BTL | |
| Controller | Main Controller | Sub Controller |
| CPU | Panasonic Let's NOTE Core2Duo 1.6GHz | VS-RC003HV ARM7TDMI LPC2148 |
| ROM | 222 GB (HDD) | 512 KB |
| RAM | 2 GB | 40 MB |
| OS | Windows7 | None |