

## Nachi AW Robot Controller

AW Robot controller is the previous version to the AX controller. Still it boasts high performance, multi-tasking operation. Reliability and safety are important features of this controller. At present, this controller is only available with Toyota Specifications. Toyota spec. AW controller comes with Toyopuc PLC and IDEC/JSK safety unit as standard.

### Control Features

- 50 mm short pitch movement - 30% faster
- High speed interference detection
- Advanced 32-bit high speed DSP motion control
- Improved maintenance access
- Protection for motor control circuit
- Amplifier power loss reduced by 40%

### Enhanced Software Features

- Improved robot motions - path unaffected by speed change.
- Customizable pendant display function
- High speed CPU produces smooth operation
- Maintenance support function

## Teach Pendant

- Easy to use - ergonomic design.
- Color graphic Windows® style display with pull-down menus.
- Touch Screen is standard
- Double Deadman switch setting - standard

## Open Concept

- Extends to industry standard bus (ISA/PCI)
- Supports Windows® applications (additional board required)
- PC operation ease with industrial reliability



**CONTROLLER**

Toyota Specifications

## Specification Table

<b>Features</b>	
Controlled Axes	Simultaneous 6 axes (standard), additional 10axes optional
Memory Capacity	28,000 robot program points
Memory Type	IC RAW with battery back-up
CPU	32 bit microprocessor
Positioning Device	Absolute Encoder
Drive System	Fully digital with DSP controlled AC Servo Motors
<b>Control Cabinet</b>	
Unit	Free standing, NEMA 12
Dimensions	Height : 1,180 mm Width : 600 mm Depth : 550 mm
Weight	260 Kg
<b>Programming Features</b>	
Program Selection	999 programs (BCD), 10 programs (discerte)
Programming	Teach and Playback ; program using robot language and recorded points
Robot Language Supported	SLIM
Display Unit	Windows® style GUI User programmable menu display Colour graphics with fine resolution
System Software	Flash ROM
Application Software	Additional customized software support for Spot Welding, Sealing, Spray painting, Arc Welding, Palletizing and other applications. Integrated Spot (Nachi or Medar) Integrated Arc (Nachi)
Additional Features	User macros, User co-ordinates, Multi robot control and E manuals for maintenance support
<b>Equipment Interface</b>	
Interface	PCMCIA port/3.5" FDD/ RS232C/ RS422/ Ethernet
Inputs / Outputs (Standard)	32 inputs DC 24 V ; 32 outputs DC 24 V
(Optional)	56 inputs DC 24 V ; 48 outputs DC 24 V 120 VAC capabilities expandable upto 40 inputs/outputs
Inputs / Outputs (Optional)	AB RIO Node adapter (full rack) Device Net
Field Bus (Max 4 Channels)	Device Net, Profibus and others supported
Analog Signal	Input : 2 channels ; Output : 3 channels
Additional Features	Extended bus, ISA, PCI, CPCI
<b>Power Supply</b>	
Standard	480 VAC ±10%, 3 Phase, 50 or 60 Hz
Optional	575 VAC ±10%, 3 Phase, 50 or 60 Hz (Canada) Other available
<b>Environment</b>	
Ambient Temperature Rating	0 to 45 degrees C
Ambient Humidity	20 to 85% RH
Cooling Method	Heat Exchanger

‡ Nachi Australia reserves the right to change specifications without notice.

**Australia:**

(Head Office) NSW  
3/23-29 South Street, Rydalmere,  
NSW 2116.  
Ph: (02) 9898 1511 Fax: (02) 9898 1678

(Queensland Office)  
3/855 Boundary Road, Coopers Plains,  
QLD 4108.  
Ph: (07) 3345 7388 Fax: (07) 3849 0612

(Victoria Office – Main Robot Div. Setup)  
Nachi (Australia) Pty. Ltd.  
38, Melverton Drive, Hallam,  
Victoria 3803.  
Ph: (03) 9796 4144 Fax: (03) 9796 3899  
[www.nachi.com.au](http://www.nachi.com.au)

**Japan:**

(Head Office – Sales)  
Nachi Fujikoshi Corp.  
2-4-1 Hamamatsu-cho, Minato-ku,  
Tokyo 105-6125.  
Ph: 03-3435 5111 Fax: 03-3435 5144  
[www.nachi-fujikoshi.co.jp/eng](http://www.nachi-fujikoshi.co.jp/eng)

**NACHI**  
NACHI (AUSTRALIA) PTY. LTD