ICP DAS

PISO-PS200

PCI Bus, High-speed 2-axis Motion Control Card with FRnet Master

⚑ Features

- Independent 2-axis motion control
- Support for hand wheel and jog functions
- 2-axis linear / 2-axis circular interpolation function
- Continuous interpolation function
- Programmable T/S-curve acceleration and deceleration
- A maximum of 4 MHz pulse output rate for each axis
- Pulse output types: CW/CCW or PULSE/DIR
- 32-bit encoder counter for each axis
- Encoder pulse input types: A/B Phase or Up/Down
- Programmable automatic homing for each axis
- Programmable software limits
- Expandable Remote I/O: 128 DI & 128 DO via a two-wire FRnet interface

◼ Introduction

The **PISO-PS200** is a 2-axis stepping/pulse-type servo motor control card that can be used on any IPC with a 5 V PCI bus, and is suitable for general-purpose motion control applications. This card equipped with one FRnet Master which allows the fast remote I/O of the IPC to be expanded easily. The two-wired FRnet interface allows a maximum 128 DI and 128 DO channels, which are automatically scanned within a period of 2.88 ms.

In addition to its wide speed range, this intelligent motion controller also has a variety of motion control functions built in, such as 2-axis linear interpolation, 2-axis circular interpolation, T/S-curve acceleration/deceleration, numerous synchronous actions, automatic homing, and others. A major advantage is that the majority of the PISO-PS200 motion control functions are performed by the high-performance motion ASIC with little load on the processor. The motion status, FRnet I/O, and the other I/O cards on the IPC can still be monitored while driving the motors.
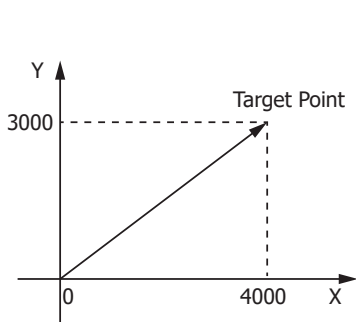
As the low CPU loading requirements of the PISO-PS200 is minimal, one or more motion cards can be used with a single IPC. ICP DAS also provides a variety of functions and examples that can be used to reduce the need for additional programming, making it a highly cost-effective solution for motion control application developers.
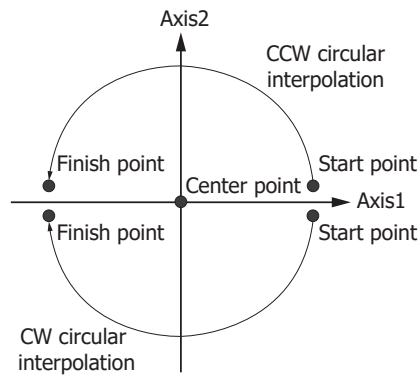
◼ Specifications

Model	PISO-PS200
Software	
OS Support	Windows 7/10 32/64-bit Windows XP/2000 32-bit
Utility	EzGo Utility
Hardware	
Connector	37-pin D-Sub
General	
No. of Axes	2
Operation Mode	Semi-closed Loop
Speed Profile	T-curve
Position Control Mode	Incremental mode
Command Type	Pulse Command
Axis I/O	
Servo Interface Output	SVON
Mechanical Switch Input	Home, LMT+/-, NHOME, EMG
Servo Interface Input	INP, ALM
Encoder Input	
Ring Counter Mode	32-bit
Mode	A/B Phase, Up/Down
Counting Rate	4 MHz (Max.)
Counter Width	32-bit

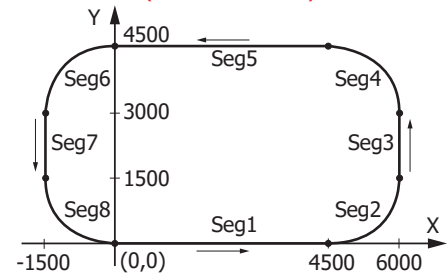| Model	PISO-PS200
Pulse Output	
Mode	CW/CCW, PULSE/DIR
Counter Width	32-bit
Rate	4 MHz (Max.)
Interpolation	
Cicular	2 axes
Linear	2 axes
Digital Input	
Channels	Local: 2 DI, Expandable: 128 DI
Isolation (with DN-8237)	2500 Vrms optical isolation
Digital Output	
Channels	Local: 2 DO, Expandable: 128 DO
Isolation (with DN-8237)	2500 Vrms optical isolation
PC Bus	
Type	5 V PCI bus
Power	
Consumption	+5 V @ 500 mA
Environment	
Operating Temperature	-20 ~ +75°C
Storage Temperature	-30 ~ +85°C
Humidity	5 ~ 85% RH, Non-condensing

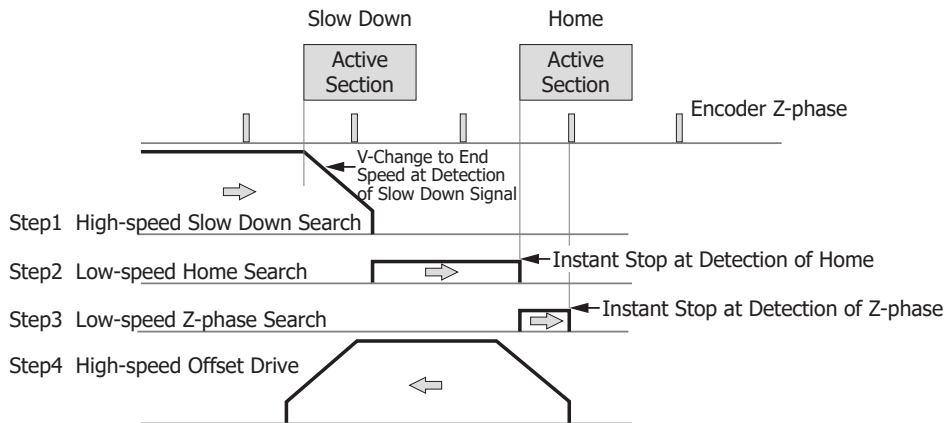## ■ Features of Motion Function

2-Axis Linear Interpolation

2-Axis Circular Interpolation

8 Segments Continuous Interpolation Motion
(Linear + Circular)

Continuous Interpolation

4 Steps Automatic Home Searching

■ Ordering Information

PISO-PS200	PCI Bus, High-speed 2-axis Motion Control Card with FRnet Master

■ Accessories

DN-8237UB	Photo-isolated Universal Snap-on Wiring Terminal Board
DN-8237GB	Photo-isolated General Purpose Wiring Terminal Board
DN-8237MB	Photo-isolated Snap-on Wiring Terminal Board for Mitsubishi MELSERVO-J2 Servo Amplifier
DN-8237PB	Photo-isolated Snap-on Wiring Terminal Board for Panasonic MINAS A4/A5 Servo Amplifier
DN-8237YB	Photo-isolated Snap-on Wiring Terminal Board for Yaskawa Sigma II/III/V Servo Amplifier
DN-8237DB	Photo-isolated Snap-on Wiring Terminal Board for Delta ASDA-A Servo Amplifier
CA-3715DM-H CA-3730DM-H CA-3750DM-H	37-pin D-Sub Male-Male Cable for Terminal Board (180º), Length 1.5 M / 3.0 M / 5.0 M