



## PISO-PS200

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

### 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
<b>General</b>	
Number of Axes	2
Slot Interface	5 V PCI bus
Pulse Output Rate	4 MHz (Max.)
Command Type	Pulse command
Resolution	32-bit
Pulse Output Mode	CW/CCW, PULSE/DIR
Operation Mode	Semi-closed Loop
Linear Interpolation	2 axes
Circular Interpolation	2 axes
Speed Curve Profile	T/S-curve
Synchronous Action	-
Ring Counter Mode	32-bit
Position Control Mode	Incremental mode
Position Compare Trigger	-
Encoder Interface	A/B pulse, Up/Down
Encoder Counter	32-bit

### 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

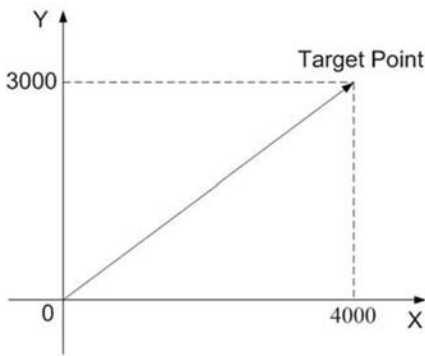


### Software Support

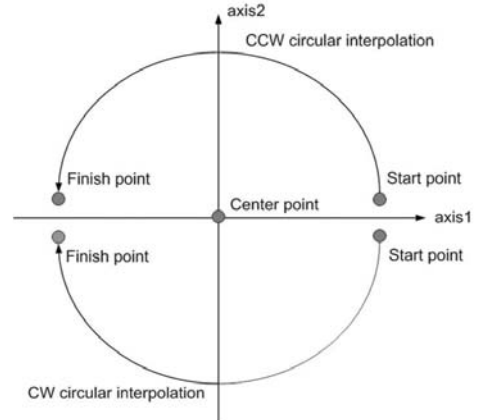
Windows Driver/DLL/Lib	Windows 7/10 32/64-bit Windows XP/2000 32-bit
DOS Library	-
Labview Development Kit	-
Linux Library	-

Model	PISO-PS200
Encoder Counting Rate	4 MHz (Max.)
I/O Isolation (with DN-8237)	2500 Vrms optical isolation
Connector	37-pin D-Sub
<b>Motion Relative I/O</b>	
Mechanical Switch Input	Home, LMT+/-, NHOME, EMG
Servo I/O Interface	Input: INP, ALM; Output: SVON
<b>Digital Input</b>	
Digital Input Channels	Expandable: 128 DI
<b>Digital Output</b>	
Digital Output Channels	Expandable: 128 DO
<b>Power</b>	
Power Consumption	+5 V @ 500 mA
<b>Environmental</b>	
Operating Temperature	-20 ~ +75°C
Storage Temperature	-30 ~ +85°C
Ambient Relative Humidity	5 ~ 90% RH, non-condensing

## Features of Motion Function

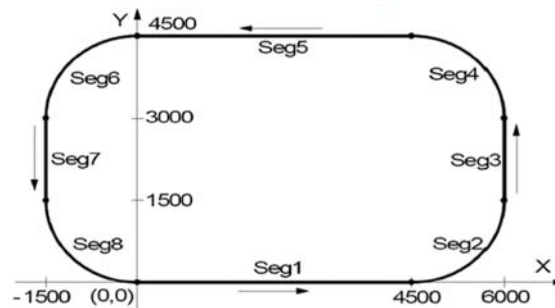


2-Axis Linear Interpolation

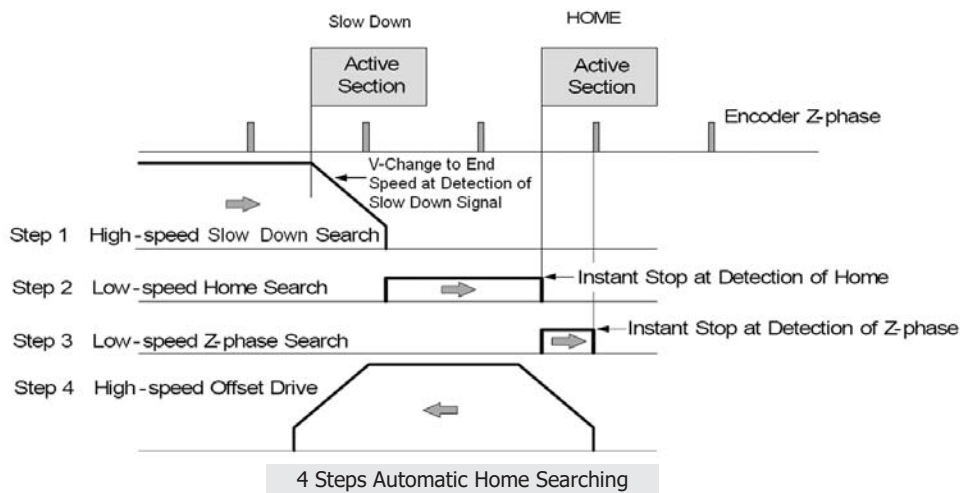


2-Axis Circular Interpolation

### 8 Segments Continuous Interpolation Motion (Linear+ Circular)



Continuous interpolation



4 Steps Automatic Home Searching

## Ordering Information

<b>PISO-PS200</b>	PCI Bus, High-speed 2-axis Motion Control Card with FRnet Master
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## 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 (180°), Length 1.5 M / 3.0 M / 5.0 M.