OI-SNP
Instruction Manual
Rev.A

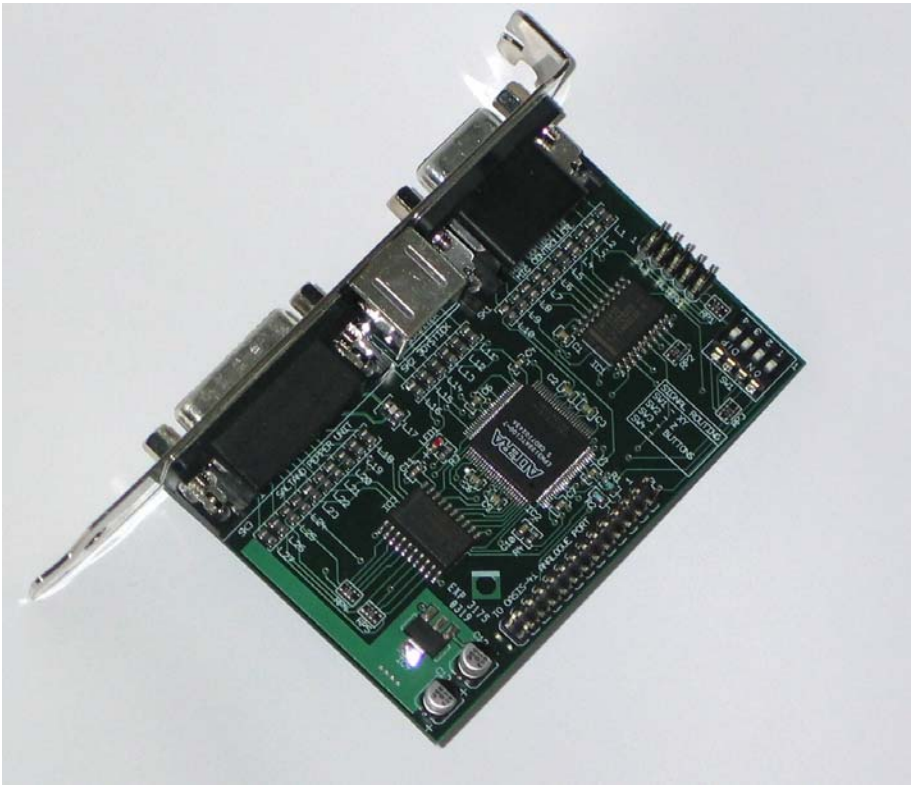

Fig 1

Introduction

The OI-SNP interface card is designed to allow the OASIS-4i PCI Controller Card to use the Leica Smart Move input device as a control for manual positioning of X, Y and Z axes. This document describes the installation, operation and functionality of the interface.

Installation

Please observe anti-static precautions when handling any electronic components. Switch off and unplug the PC from the mains supply before starting the installation procedure.

The OI-SNP is mounted to a PC back-plate for easy mounting in a PC slot near to the OASIS-4i card. Fix the OI-SNP to the PC chassis with the usual locking screw, unless the PC has a different method for holding cards in place.

Attach the supplied 26 way ribbon cable between PL2 on the OI-SNP and PL7 on the OASIS-4i card, taking care to align pin 1 on each connector with the red stripe on the ribbon cable, as shown below. Pin 1 is marked on the silk-screen of both cards.

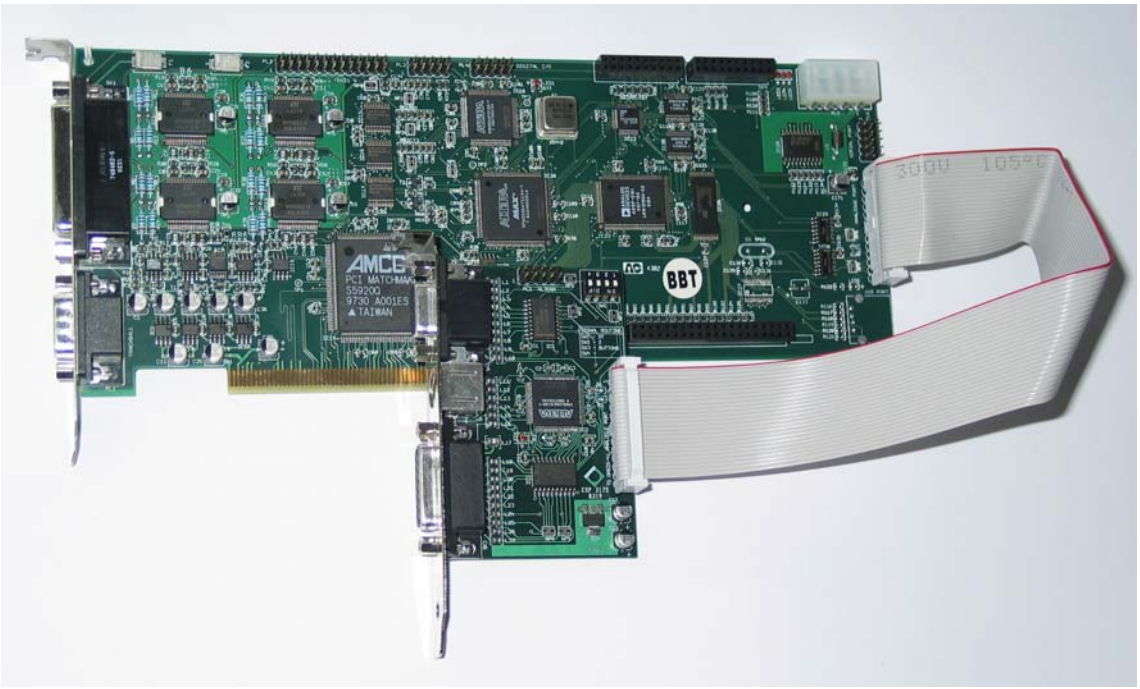

Fig 2

Connectors

The bottom connector on the PC bracket is a 15 way female D-type socket which connects the the Leica Smart Move controller.

The 8 way mini-DIN socket in the middle of the bracket is for attaching an OI-JOY2 or OI-JOY3 joystick unit (via an adapter cable or with a modified joystick cable connector).

The top connector on the PC bracket is a 15 way High-Density D-type socket which connects to the MIC controller 'XYZ Control' input. This is to allow pass-through of some or all of the Smart Move controller signals to the MIC Controller.

Configuration

On the top right hand corner of the PCB is a 4 way DIP-switch which controls the following functions:-

Switch	ON	OFF
1	XY controlled by MIC	XY controlled by OASIS-4i
2	Z controlled by MIC	Z controlled by OASIS-4i
3	Buttons controlled by MIC	Buttons controlled by OASIS-4i
4	Z control input is Smart Move	Z control input is joystick digi-knob

For example if the OASIS-4i is being used to control the XY stage, and the MIC controller is being used to control Z, the lamps and the turret, then set switch 1 to OFF, and switches 2 and 3 to OFF. The MIC controller's XYZ-Control input must be connected to the OI-SNP module's top connector (SK1), for the signals to be passed through to it.

Operation

The DSP code stored in the OASIS-4i may need updating before the OI-SNP module can be used. Contact Objective Imaging if in doubt as to which version of DSP code is compatible.

Once the OASIS-4i DSP code has been updated, it will also be necessary to change a Flash memory setting to select the Smart Move Controller as the input device. Normally this is done using the OIFlashCfg.exe utility program. If you run this program and go to the 'Settings -> Misc' page, you will see a 'Joystick Type' value near the foot of the page, as shown.

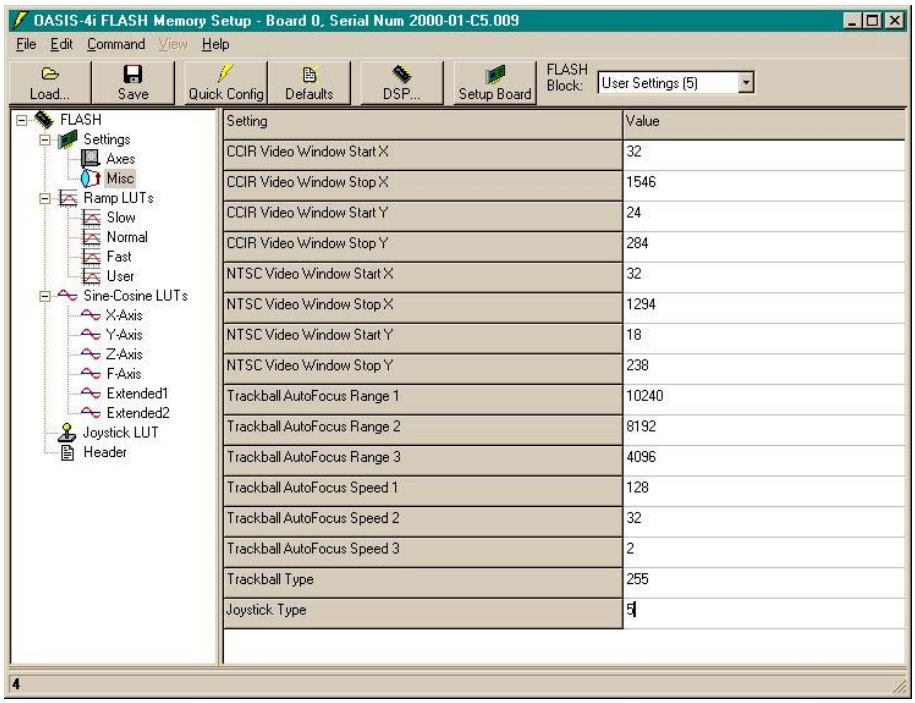

Fig 3

This value can be set to the following options:-

Value	Input type
1	OI Standard 2 or 3 axis joystick – button is autofocus
2	OI Standard 2 or 3 axis joystick – button is turbo-mode
3	Leica Lamp Controller
4	Leica Joystick Unit
5	Leica Smart Move + OI Joystick - button is autofocus
6	Leica Smart Move + OI Joystick - button is turbo-mode

It is not necessary to have a joystick fitted as well as the Smart Move Controller, but it is possible to have both. The normal value for Leica would be 5.
After changing the value, don't forget to press the 'Save' button on the toolbar to store it in the Flash memory.

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