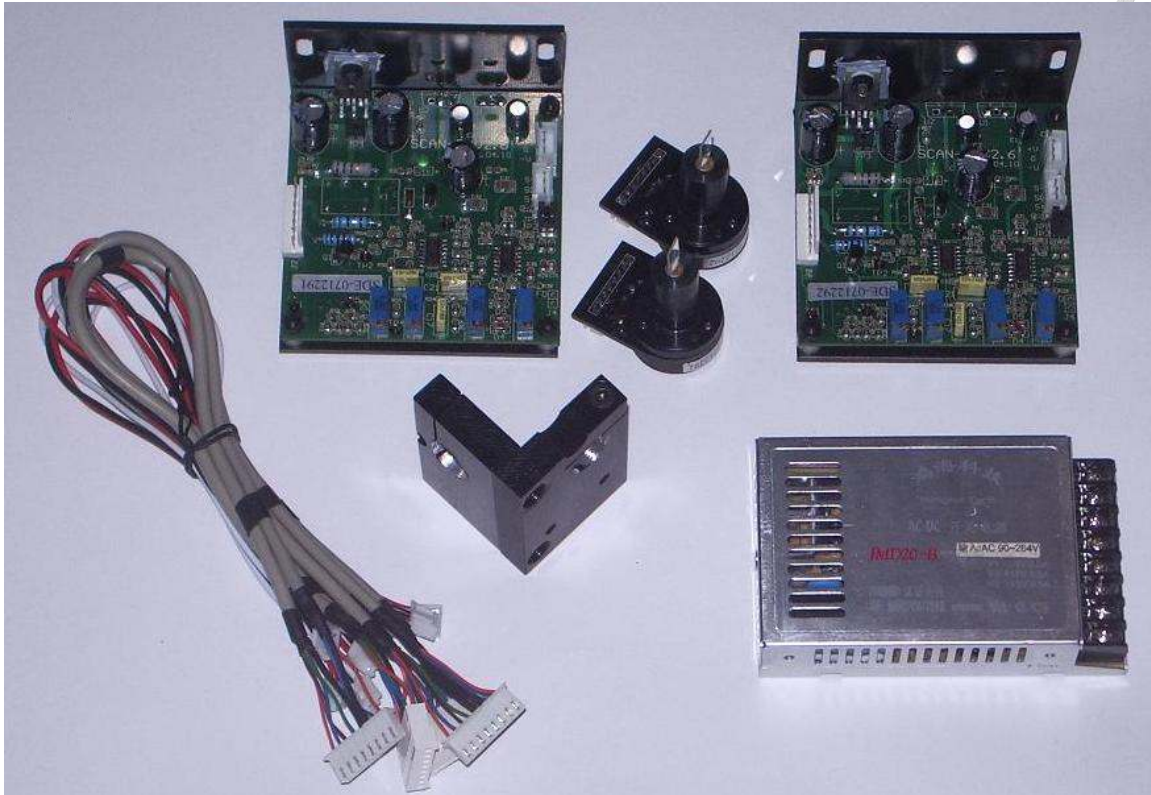


SCANPR020

20kpps, x-y laser scanner kit

User's Manual



Kit contents:

Please verify your scanner kit contains as per picture above:

- X and Y scanner
- Scanner mounting block
- X and Y scanner amp
- power supply
- 2 driver board to scanner cables
- 4 by 3 pin cables

If anything listed above is missing, please contact the place of purchase to have the missing items replaced.

Specifications:

- Driver's ship pre-adjusted (plug and play!)
- closed loop scanning system with optical feedback
- mirror size 5 x 10mm
- power supply input voltage 90-265VAC
- Damping, servo gain size trimpots per channel
- Compact driver board, 80 x 80 x 40mm
- 40° max optical scan angle
- Mirror reflectivity >90%
- Signal Input Voltage: -5v to +5v differential

Driver connections:

- Signal input -5v to +5v differential
- Power input +/- 15VDC
- Scanner connections via 7pin connector

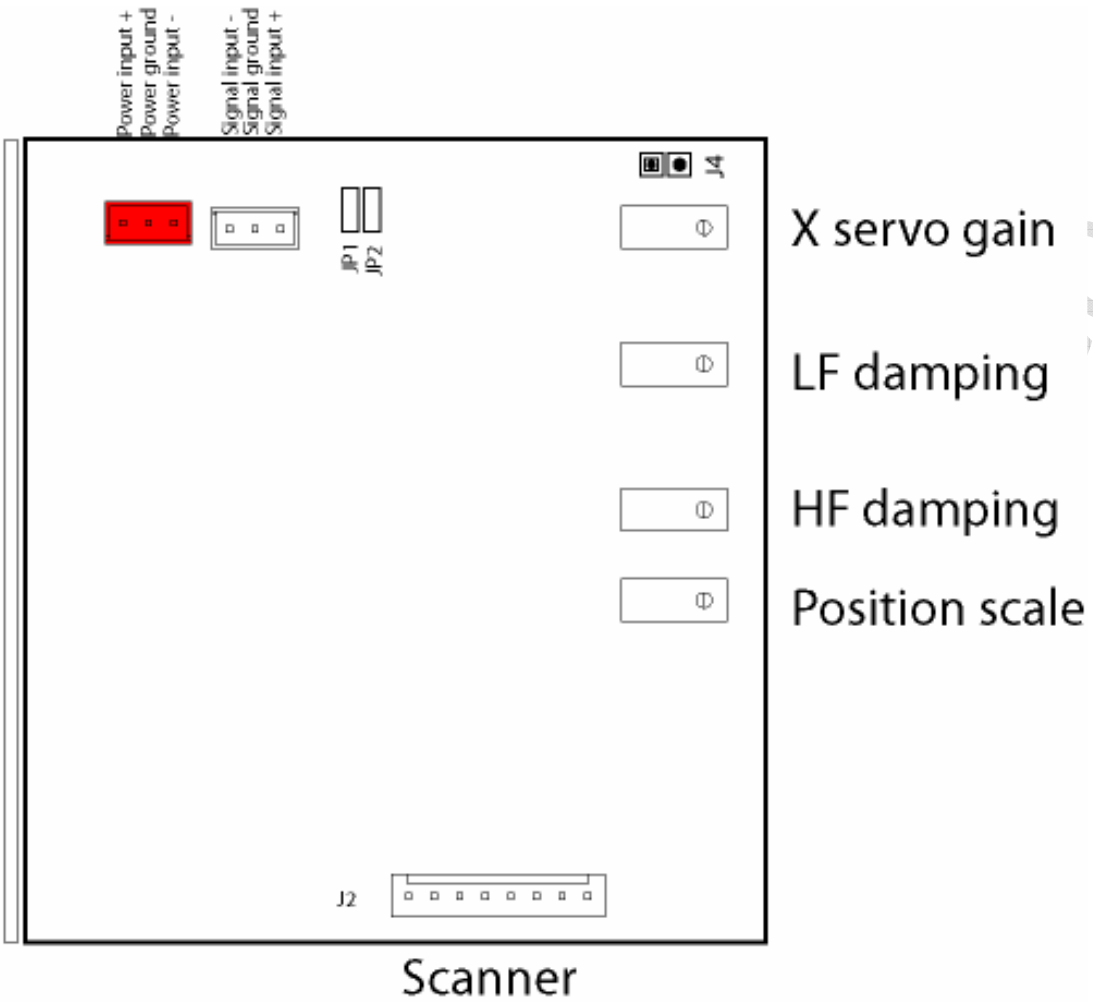
Assembly

Please refer to the diagram on the next page for pinout details of the scanner driver board. Assembly of the scanner kit is straightforward. Here are a few tips to aid the constructor.

- Mount the scanners, driver board and laser onto a suitable base. See following pics for how to orientate scanners in mounting block
- The driver boards will need to be suitably heatsinked, as it will run warm during normal operation
- Connect the scanners to the driver board using the supplied 7 pin cables. **Match up the serial number of the x scanner to the driver board x-output, and vice versa for the y scanner.**
- Connect power to each driver board using 2 of the 4 supplied 3 pin cables. Cut the plug off one end of the cable and strip the ends. Following the diagram on the following page, screw the cables into the PSU. **A legend on the top panel of the psu indicates what voltages V1, V2 etc, are. The drivers are not reverse voltage protected, so a error here will damage the scan amps.**
- Power supply connection to your mains supply is made via the screw down terminals. Please pay careful attention to safety here, and ground the metal casing of the power supply.
- The signal input is 'differential'. Expected signal input voltage is -5v to +5v (10V p-p). If using with the program board, you will need to connect the signal input - to signal ground.
- **If you are using the program board with these scanners, please refer to the program board manual for setup and use instructions.**



Mount this side to suitable heatsink



JP1 and JP2

These jumpers serve to invert the associated scanner. To invert, remove both jumpers, rotate them 90 degrees. The axis will then be inverted.

J4

J4 is the position output to fit to a scan fail board.

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Please send any comments to dave@luminavp.com , feedback is appreciated!