X-Y MOTION SYSTEM
AND
COMPUTER CONTROL

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1.0 GENERAL:
The moving X-Y table included with this laser system is a high precision, rugged unit and is controlled via an intelligent motor drive and PC AT Computer.
The controlling software is U.S. Laser's "Friendly Motion".   Refer to that manual section for programming and operation.

2.0 FEATURES:
The motion control and computer set offer: M-Function outputs, M-Function inputs, linear and circular interpolation, D.C. motor drives, .0001 inch programmability, 3-1/2" floppy and hard disk program storage, RS232 interface and color display.

3.0 X-Y MOTION:
The X-Y motion covers 6" x 6" of travel. It is mounted on an aluminum tooling plate to provide rigidity and long term stability. The unit includes rigid stages on crossed roller bearing ways, ball bearing lead screws, brushless servo motors, and   high precision linear encoders.

4.0 COMPUTER CONTROLLER:
The motion system controller provides programmable speed and positional control of the motion stages. The controller is housed in the lower section of the center frame bay. It is directed via a PC AT computer which is located directly above the controller electronics. The monitor displays program information and table position.
The controller also offers M-Function Inputs and Outputs, some of which are interfaced to the laser system as follows:

M100/M101	Q-Gate ON/OFF
M102/M103	Open Shutter/Close Shutter
M104/105	Open Dump Shutter/Close Dump Shutter

NOTE: Even numbers initiate M-Functions. To cancel an M-Function, enter the next higher odd numbered M command. For example, to cancel M102, enter M103.

Control of the laser power supply current and the Q-switch frequency are provided via RS232 interface. Consult the "Friendly Motion" software manual section for further information.