

Dragon Tiger DT-40pro Scanner User Manual

Technical Data:

Optical angle	60 ° max.
ScanSpeed	30,000pps ILDA at 15° 40,000pps ILDA at 8° 50,000pps ILDA at 6°
Mirrors	High quality medium film glass ,reflectivity>95% at 400-700nm
Mirrors size	5mmX10mmX0.6mm
Signal Input voltage	± 5V-± 10V

Power requirements: 110V-230V AC Output ± 24V 1A

Thank you for purchasing the Dragon Tiger scanner system!

These scanners will provide many years of maintenance free high performance service.

Please read this manual carefully before use.

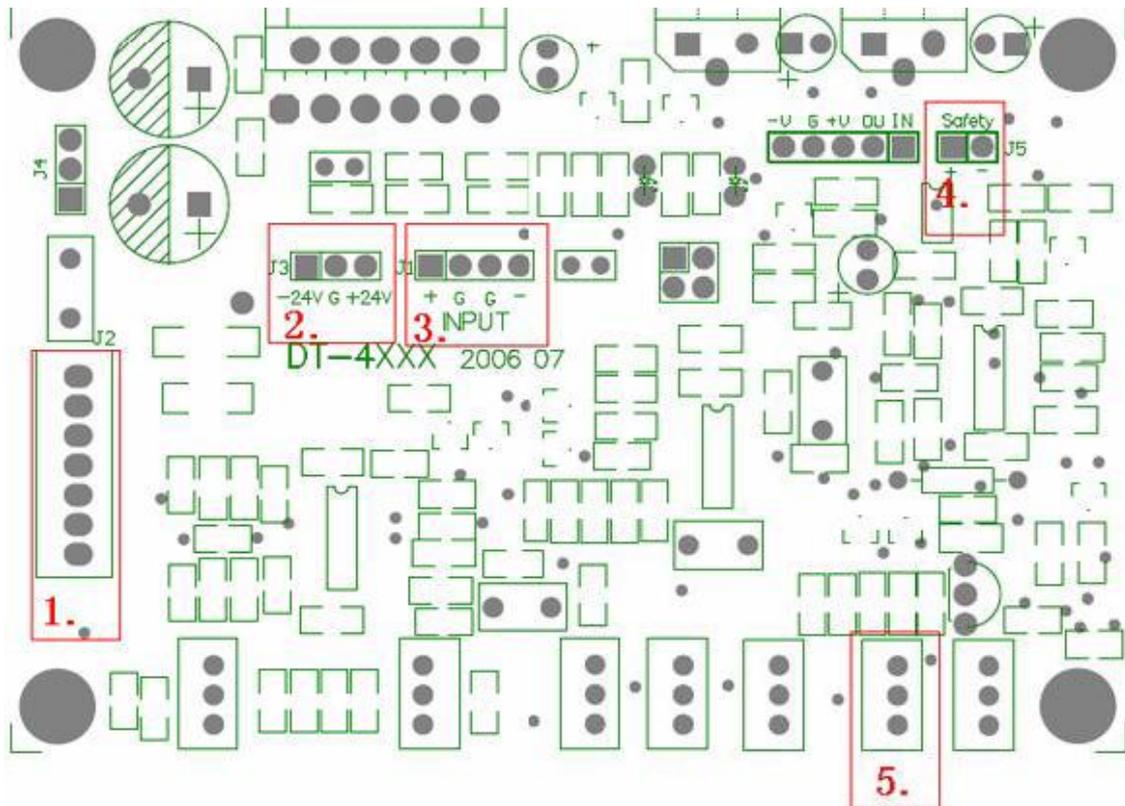
Please carefully check scanners, amps, and accessories for any shipping damage. The basic system include

- 2 X/Y galvo in a heavy metal mounting assembly
- X and Y driver amps
- X and Y scanner cables
- one ±24 volt power supply with cable
- one 3mm inner hex wrench
- mount base plate(60X60X3mm),you can easy install the mount in your case
- 4mm screw for install mount
- 3mm screw for install amps
- heat conducting unguent
- two 1.5A fuse.
- assembly for the signal input with a master gain control.

The scanners must be installed very carefully, preferably by a person skilled in electronics. Any mistakes in attaching the wire connectors can result in scanner damage. Please check these very carefully. These are labeled very well and the connections are very intuitive and obvious. Connectors are polarized and therefore can connect only one way.

Look at the picture very closely so you do not make any mistakes.

- 1: Connect the scanner cable to the Scanner
- 2: Connect the 3 pin cable to the power supply
- 3: Connect the input cable assembly top each scanner using the 2 pin connectors.
“— “ is default input,if you want to “+” input,please change the 2 pin input cable by yourself.
- 4:Connect the safety system.
- 5: If the X/Y output not balance,you can adjustment free by yourself.



The ground wires in the connectors are very easily located as they have black insulation on them. You will need to know this when connecting the input cable to the laser control system.

6: The X and Y scanners and amps are individually labeled X and Y. The X amp has been factory tuned to the X scanner, and the same with Y, so be sure to connect these correctly. When you turn-on the power supply to scanner, DON'T MOVE ANY PARTS, BECAUSE WHEN THE GALVO LOST THE FEEDBACK SIGNAL OR THE diode LOST voltage, the galvo's shaft will deflection in center, in a short time Damage the galvo.

7: Scanners are factory adjusted and no adjustment should be necessary. If you decide to adjust the scanners yourself, please obtain permission from the manufacturer. Then you may return the scanners for a free readjustment, if needed. You will be required to pay postage both ways.

8: Any attempt to disassemble the scanner will void the guarantee.

9: Any use of the scanner other than for normal intended laser use can damage the scanner and will void the guarantee. This can include using different driver amps, modifying the scanner amps, or modifying the scanners.

10: When first using the scanners, please keep the gain and draw speed of the display image low. Too large or too fast a display can trigger the protection circuit and also could possibly damage the scanners or amps. The use of common sense will go a long way to avoid any problems. Don't overdrive the amps. Always keep the laser display down to where the scanners can easily display the image without excessive noise or heat. The protection circuit kicks in for an overdrive condition and will reset itself within a few

seconds if the laser image gain or speed is brought way down. It will produce a very distorted image when kicked in.

11: When ending a laser display session or show, be careful and use common sense so you don't overdrive the scanners with a signal spike. Stop the image display, then turn the scanner system off. Finally turn off the laser control system. This will prevent any large signal changes from thumping the scanner amps. The same thing is done in a high power audio amplifier system- the power amps are turned off first, (similar to the scanner amps) then the mixer is turned off (similar to the laser control system).

12: These driver amps require cooling. Please use any common 12 volt computer fan to cool the driver amps. These fans can be run on 5 volts, will supply sufficient cooling, and will be almost silent. Add a sufficient heat sink to each amp. Adding a fan to the galvos is also a good idea.

13: System components are guaranteed for two year to be free from defects. (Free back shipping by postal at 3-4 weeks,if you want to one week by express,payment \$40).

Please contact Dragon Tiger Scanners for any questions concerning this system.

Contact Dragon Tiger Scanners at dtelectronic@163.com