

Software Requirements

- You can download the required programs at:
<http://software.ipgphotonics.com/>
- Click the Welder folder and download and install the following programs:
 - ScanPack from the ScanPack folder
 - IPGWeld from the IPGWeld folder
 - Scan Controller Upgrade Utility from the Utilities folder
 - Optional: Stage Configuration Utility (for welding set ups with an external motion system or rotary axis)

Installing a Configuration File

Before you start running the scanner using IPGWeld, run the Scan Controller Upgrade Utility to select a correct configuration file for your laser:

- Click the “Lock” icon for the selected scanner (Figure 1).
- Click **Install Configuration Files**.
- In the Open window, go to:

C:\ProgramData\IPGP\ScanPack\Default\Lasers

- Select the folder for your laser from the list and click **Open** (Figure 2).
- Select the LaserSpecifications file and click **Open** (Figure 3).
- Once the configuration file is transferred, click **Exit** to close the Scan Controller Upgrade Utility.

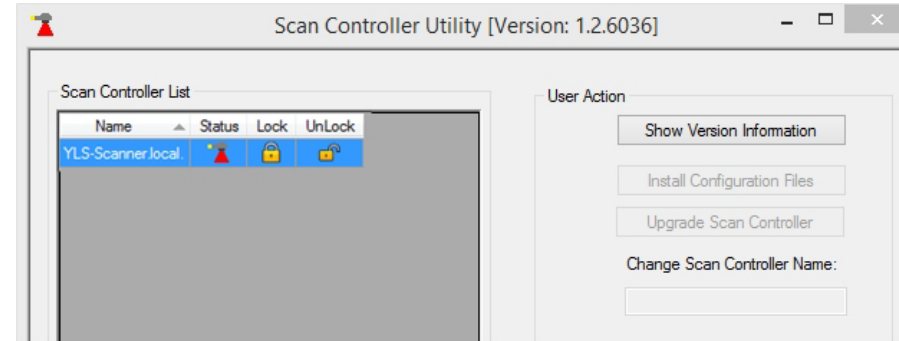


Figure 1

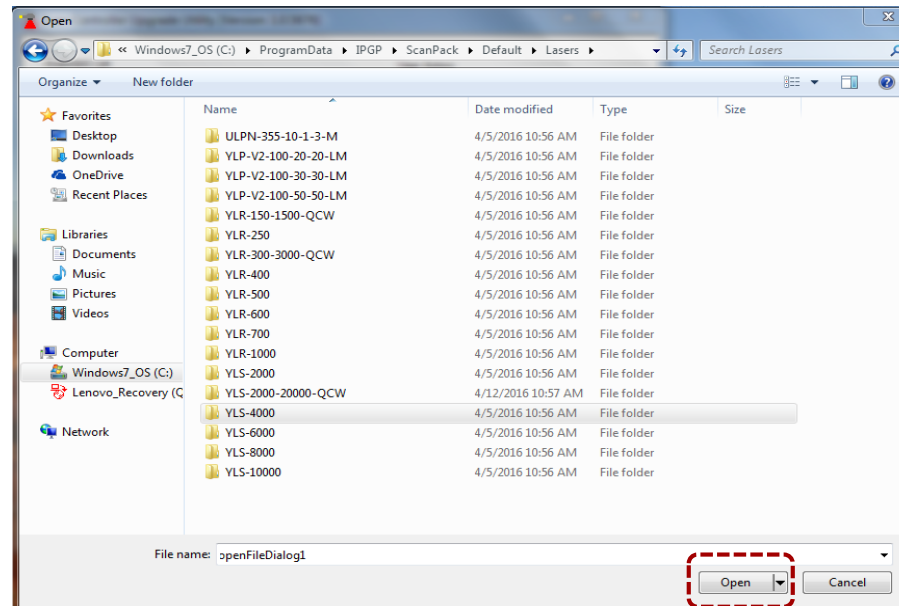


Figure 2

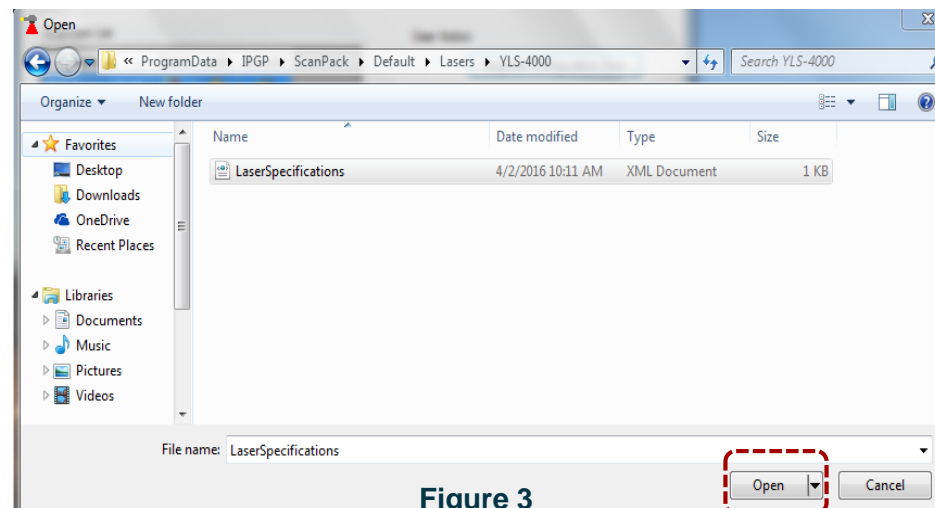
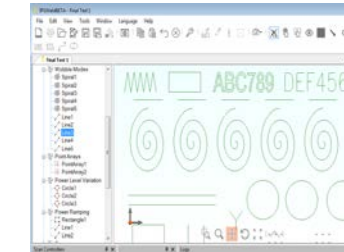
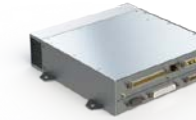


Figure 3

High-Power 2D Scanner Quick Start



IPG High Power
Scanner Head



IPG
Controller



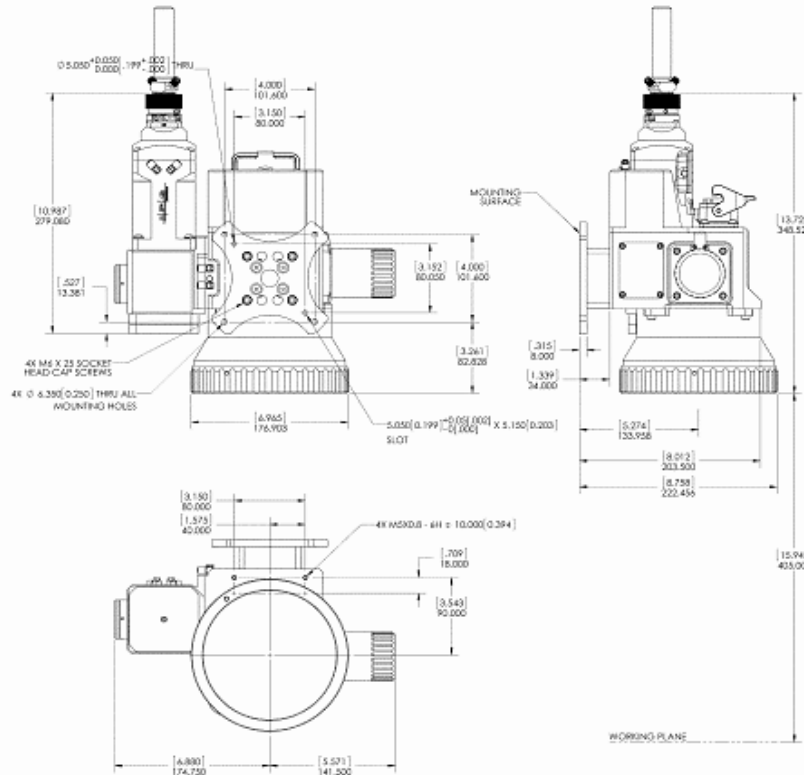
IPGWeld
Software

Setup Requirements

- Two power supplies for the scanner:
 - 24 V/10 A for the galvos
 - 24 V/1 A for housekeeping
- Water cooling for the scanner head:
 - DI water, temperature 25-30 C
 - Flow rate minimum 0.75 l/min
- Air knife is recommended to protect the cover slide window from contamination.
 - Recommended air flow for a 9-inch air knife: 30 scfh / 100 psi (hose ID minimum: ½ in)



Mechanical Layout: Scanner Head



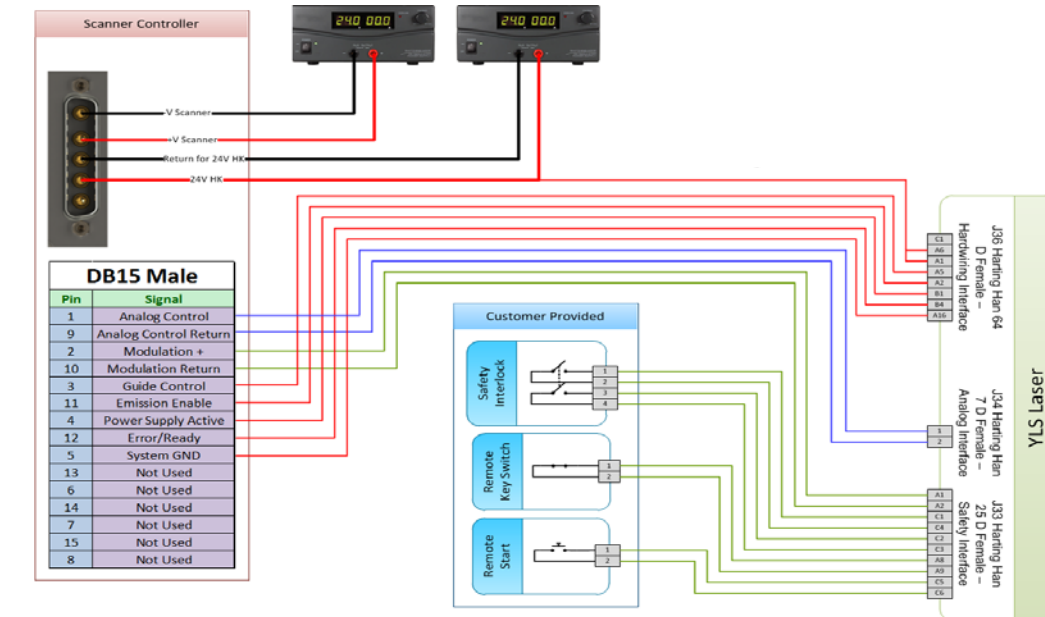
Power Supply Connector



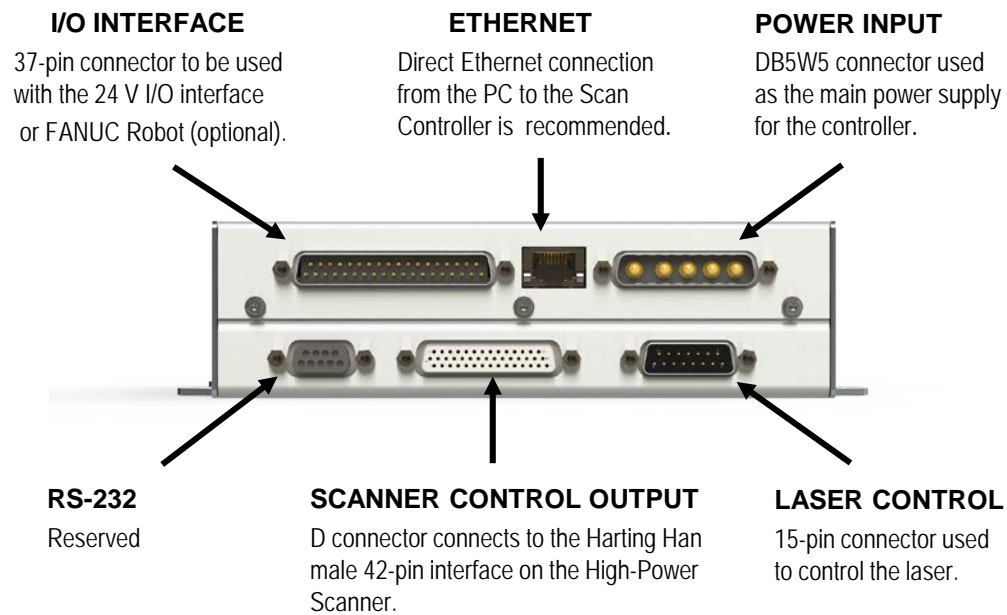
Pin	Function	Description
A1	Not Used	
A2	+V Laser HK	House Keeping Power 24V
A3	Return	Return For HK
A4	+V Scanner	Isolated Scanner Power (+V)-(-V) = 24V to 30V
A5	-V Scanner	

System	Voltage	Current
Laser HK	24V +/- 5%	< 1A
Scanner	24-30V +/- 5%	10A Peak - 2A Average

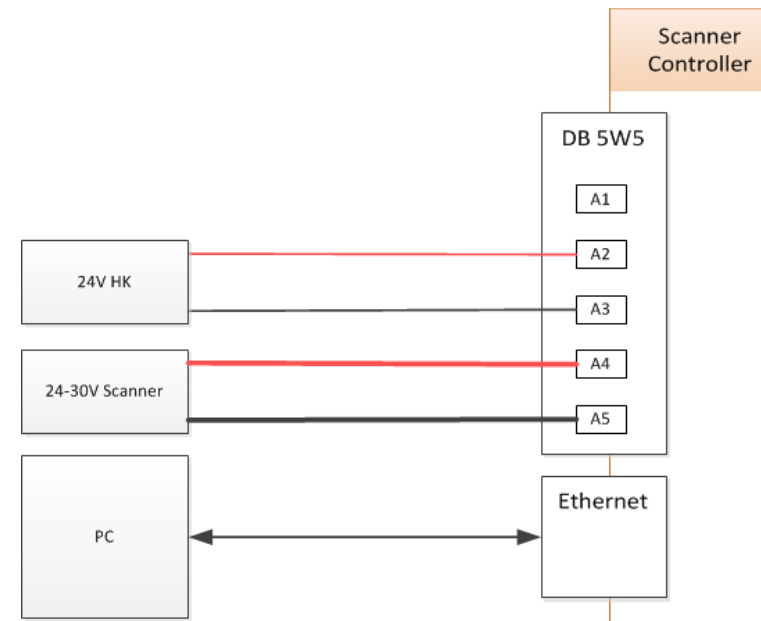
Wiring a YLS-Series Laser



Controller Box Interface Connections



Power Supply Configuration



Notes: - Power supply must have excellent transient response.
- Power supply return must not be connected to earth ground

Wiring a YLR-Series Laser

