nexa3D

XiP Pro Printer Pre-Installation Requirements

1. Technical Specifications

Printing Technology	LSPc (masked SLA)
Light Source	Structured Light Matrix, 405nm
Build Volume	292 x 163 x 410mm (11.5 x 6.4 x 16.1 inch)
XY Resolution	46 µm 7K (6480 x 3600)
User Interface	10" Touchscreen
Input File Format	.stl, .obj, 3mf
Weight	77kg (170lb)
Dimensions	622 x 447 x 897 mm (24.5 x 17.6 x 35.3 inch)
Crated Weight	90kg (198lb)
Crated Dimensions	990 x 990 x 1905mm (39 x 39 x 75 inch)
Electrical Requirements	100-240Vac, 50/60 Hz, 950W max IEC-320-C13 power connection (either NEMA 5-15P (NA) or CEE7/7 schuko (EU) cord included)
Connectivity	GigaBit RJ-45 Ethernet, WiFi, USB
Operating Environment	Air temperature between 20-25˚C (68-77˚F) and RH below 70%

2. Site Preparation Checklist

The purchaser shall ensure the following requirements are met prior scheduling installation.

2.1. Access

☐ The printer arrives on a small pallet inside a box. Ensure a means to unload the pallet from the truck (liftgate, forklift, ramp). Ensure physical access for the crate (double doors) or printer on wheels (single doors 30" or wider) to the installation location.

2.2. Unboxing and Platform

☐ XiP Pro must be placed on a stable, level platform with load rating > 100lb (50kg) per sq ft. Platform height of 30-36" (0.7-1.0m) is recommended. XiP Pro takes a 24" wide x 18" deep (60cm x 45cm) footprint on the platform.

☐ Due to 170lb (78kg) weight, 4 people are needed to lift XiP Pro from the skid to place on the platform. Or straps may be placed under the unit to use a mechanical lift.

2.3. Post Processing

☐ A means to wash excess resin from printed items and the build plate. This may be accomplished with the plastic bin included in the accessory kit, xWASH, or other wash tank. The operator shall provide suitable washing agent. Nexa3D suggests 99% isopropyl alcohol (IPA) or xCLEAN.

☐ A work surface for removing supports and cleaning workpieces in proximity to the printer.

☐ A means to post-cure parts, such as xCURE, is advised in order to achieve advertised material properties. The cure chamber requires spectrum including 405nm light source with intensity >10mW/cm^2 and optional heating to 60°C is recommended.

☐ Some resins require a programable oven capable of heating between 40-130°C

2.4. Health & Safety

☐ Ensure adequate ventilation in the cleaning area. Nexa3D suggests washing in a hood, or forced airflow that exchanges the room volume every 5 minutes or less.

☐ Ensure suitable storage and disposal receptacles exist for resin and wash agents.

☐ Ensure permits are in place for storage and use of chosen solvents per local regulations.

☐ Ensure class ABC fire extinguisher is in proximity to the printer and cleaning areas. Open flames are prohibited near the printer or solvents.

2.5. Facility

☐ Flooring shall be washable and impervious to liquids.

☐ Foundation shall be free from vibrations with magnitude greater than 0.5mm.

☐ The printer shall have .5m (1.5ft) clearance in back (access to power switch), and 1m (3ft) clearance in front for operation and maintenance.

☐ Electrical connection must be available for the printer (100-230VAC 50/60Hz single phase, 5 amp max draw at 120VAC). It is recommended to use an on-line uninterruptable power supply (UPS) with surge protection rated for at least 500W per XIP Pro printer.

- Light sources in the room should have negligible spectrum below 415nm (LED or Florescent bulbs preferred). Windows should have UV blocking film.
- Air shall be generally free of dust (away from sanding or powder handling activities)

2.6. Software – Minimum System Requirements

- Windows 10, 64-bit
- CPU – Intel core i7 or AMD Phenom II
- 16 GB RAM
- 10 GB free disk space
- Graphics Card – NVIDIA GeForce GTX 1060 or AMD Radeon RX 480

3. xCURE Installation Checklist

- Electrical connection must be available for xCURE (100-230VAC 50/60Hz single phase, 4 Amp max draw at 120VAC).
- Phillips head driver required to open the crate.
- xCURE is 110lbs, and requires 2-man lift to remove from the skid. It is intended to be operated on a 30" or 36" table or counter

4. xWASH Installation Checklist

- Electrical connection must be available for xWASH (100-230VAC 50/60Hz single phase, 1 Amp max draw at 120VAC).
- xWASH is 110lbs, and requires 2-man lift to remove from the skid.
- Ventilation is required for most solvents that can be used with xWASH. Minimum of 5min air exchange for the room where operated is recommended. Many customers prefer to operate under a hood.
- xWASH is intended to be operated on a 12"-24" (30-60cm) tall table. A commercial kitchen equipment stand works well. Draining fluid requires shallow collection containers if placed on the floor.
- Spill containment is strongly recommended under the xWASH. There is risk of spill when loading and removing solvent, and drips are typical when loading and unloading workpieces.
- xCLEAN parts washing fluid is an industrial chemical capable of stripping many paints coatings, and adhesives. It may crack ABS, PC, or PVC containers and pipes. It will cause swelling with Butyl and Viton seals. Floor and wall protection is recommended. Don't dispose in drains.
- It is the customer's responsibility to perform a safety and waste collection assessment for the solvent selected for use with xWASH. Contaminated solvents should be treated as Hazardous Waste, and can typically be recycled with distillation type solvent recycling systems. Contact Nexa3D support for more information.