TRAK® 3ntr 3D Printers

Printer Electrical Connection Quick Start Guide

Covers Current Models:

- 3ntr A2
- 3ntr A4
1 Electrical Connections

In this section, you will make the electrical connection to the printer and MMS unit (if applicable).

**CAUTION** – Employ a licensed electrician to help with electrical connection and wiring where these instructions are unclear, or your site installation specifics are different.

A2 printers are all configured for 220V US Power. A4 printers are typically configured for 110V US power; however, may be optionally configured for 220 V US power. If you have an A4 printer - refer to your order paperwork and/or contact the dealer to determine the actual power configuration for your A4 printer before proceeding.

1.1 Verify Input Power Source Voltage/Phase

3ntr printers configured for 220V (All A2 and some A4 Printers) are powered with a single phase 230V and a ground connection. The neutral line is not used. Verify socket wiring with a multi-meter before connecting printer/MMS unit or wiring printer cable.

![Figure 8.1 Printer surface plate re-installed in printer](image)
1.2 MMS Unit 220V Electrical Power Connection

NOTE: This section only applies if an MMS unit is to be used with the printer.

The MMS units connect to a 220VAC Single phase connection. In this case, the printer should also be configured for 220VAC Single phase power. The printer connects to the outlet on the top of the MMS unit. The power cable supplied with the MMS terminates in bare wires so that a plug compatible with your facility can be installed.

1) Obtain standard 220 VAC Single phase power cable OR wire supplied MMS cable following instructions in section below: “Wiring a Printer or MMS Power Cable for 220V Single Phase”

![Typical 3ntr A2 Printer or MMS Power Cable](image)

2) Plug power cable into MMS Unit
3) Plug cable into external power receptacle:

Figure 8.2.3 220 VAC Single Phase Plug and Receptacle
1.3 Standard 3ntr 220V Electrical Power Connections

1) Inspect power connection locations on printer/MMS units and supplied cables to ensure the connectors are matching and cables are for the correct voltage/phase as the printer.
2) Plug power cable into Printer

3) If there is no MMS unit, plug Printer cable into appropriate wall outlet (220VAC 15A Single Phase)
4) If there is an MMS unit, plug the Printer power cable into the power outlet on the MMS Unit
1.4 Wiring a Printer or MMS Power Cable for 220V Single Phase

NOTE – In most cases, re-wiring a power cable is not required. If your printer was designed for 220VAC power and was shipped with a standard 110 VAC cable, you will need to either A) contact your dealer and obtain the correct power cable (Preferred) or B) Have a qualified electrician wire one for your 220 VAC power source. The supplied cable is rated for the appropriate current in either case.

1) Wire Cable plug for 220VAC Single Phase as shown.

CAUTION – The neutral line is not used. Connecting it as if it were ground will damage other systems connected to the printer
2) Verify cable wiring with a multi-meter before connecting to printer/power. Measure between the printer power cable ground and any 110VAC wall socket ground. This should be zero "0" volts. If there is a potential present, it is likely a neutral line has been used where a ground wire should have been.

**CAUTION** – Do not connect the printer or any peripherals until the ground/neutral line has been sorted out and there is no potential between printer ground and the 110V ground.

### 1.5 3ntr A4 printer with 120 VAC US Power Connection

Plug in the printer cord to a normal 120 VAC 15A US outlet as with any appliance.