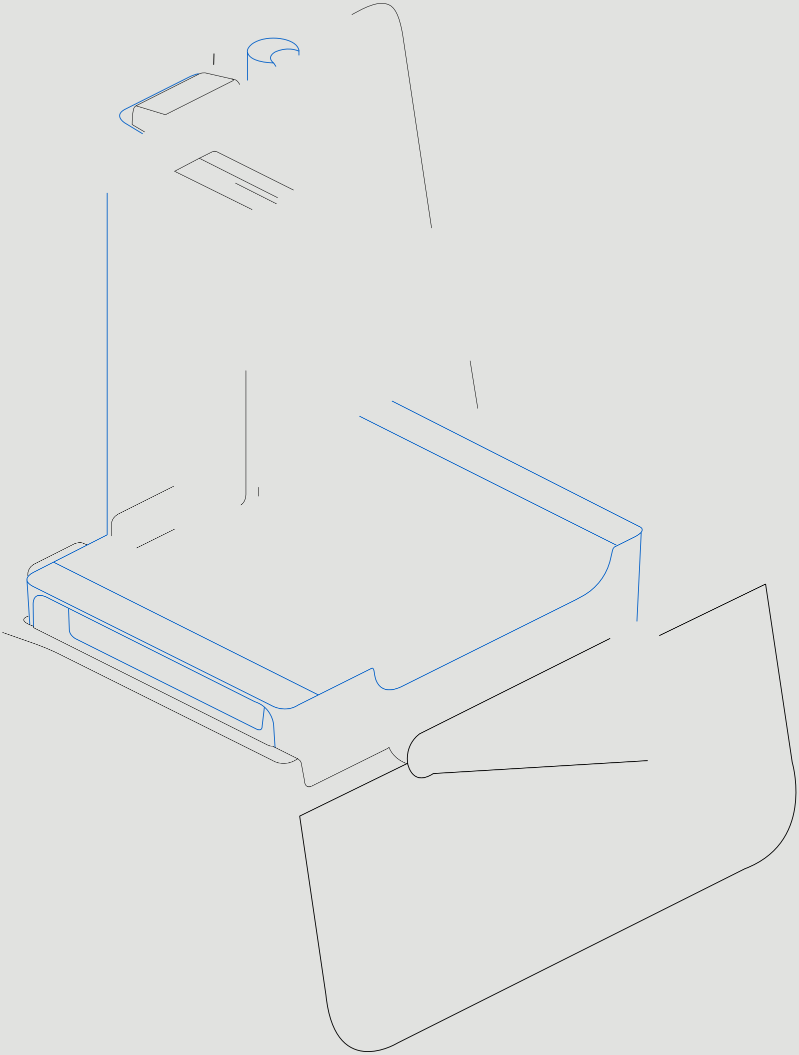
Ma a | Form 3B+



formlabs

[illegible]

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[illegible]

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[illegible]

[illegible]

[illegible]

1. Safety

Congratulations on purchasing the Form 3B+. On behalf of the Formlabs team, we thank you for your purchase. The instructions in this manual provide information for qualified persons to understand and safely set up and installation, operation, and maintenance of the Form 3B+ 3D printer. These instructions are intended for anyone who is installing, operating, maintaining, or otherwise interacting with the Form 3B+. Supervise young or inexperienced persons to ensure an enjoyable and safe operation.

1.1 Read All Instructions

Read and understand this manual and its safety instructions before using the Form 3B+. Failure to do so can result in serious injury or death. Keep all safety information and instructions for future reference and provide them to subsequent users of the product.

Follow all the instructions. This will avoid fire, explosions, electric shocks, or other hazards that may result in damage to property and/or severe or fatal injuries.

The Form 3B+ shall only be used by persons who have fully read and understand the contents of this user manual. Ensure that each person who uses the Form 3B+ has read these warnings and instructions and follows them. Formlabs is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.

1.2 Manuals, Documentation, and Information

Visit support.formlabs.com to:

- access the latest version of all Formlabs product documentation.
- contact Formlabs for product documentation, storage instructions, and technical information.
- submit any comments or feedback regarding what is good and what can be improved.
- Formlabs values comments from its users.
- request additional training.

1.2.1 Service and Support

Retain a record of the original purchase to request warranty services. Service options depend on the status of the specific printer's warranty. Include the serial name of the product when contacting Formlabs for product support.

Instead of a serial number, a Formlabs machine has a serial name, which is a unique identifier to track the history of manufacturing, sales, and repair, and to distinguish the storage of the connected software. The serial name is on the back panel of the machine in this format: AdjectiveAnimal.

Service providers of Formlabs products also provide support and service. To the extent that Formlabs or a certified service provider offers extended warranties, the terms of the separate warranty govern. For products purchased from certified service providers, contact the original service provider for assistance before contacting Formlabs.

For all support or service requests, including product information, technical assistance, or assistance with instructions, contact Formlabs Services or a certified service provider:

support.formlabs.com

USA
Formlabs, Inc.
35 Medford St.
Somerville, MA, USA, 02143

Germany
Formlabs GmbH
Nalepastrasse 18
12459 Berlin, Germany

1.2.2 a a

Th d c ec ed de a a . F ab es a a a f a F ab -b a ded ha d a e. U es , he e e es a ed, he Te f Se ice, i c di g he Wa a , c i e he e i e ag ee e be ee a d F ab i h ec he Se ice a d a d c cha e f F ab a d e ede a i c e a e c ica i , a , a d ag ee e , he he e ec ic, a , i e , be ee a d F ab . Read he a a f e de a he F ab a a f egi :

S **f** **a . / / - f- /# a a**

E (EN) **f** **a . / / - f- / /**

E (DE) **f** **a . / / / - f- / /**

E (FR) **f** **a . /f / / - f- / /**

2. [illegible]

2.1 [illegible]

The F[illegible] 3B+ [illegible] a c[illegible] e cia[illegible] ec[illegible] i[illegible] i[illegible] e ded f[illegible] e i[illegible] he addi[illegible]e [illegible] a[illegible] fac[illegible] e [illegible] f e d-[illegible] e[illegible] [illegible] ied de[illegible] ig[illegible] f[illegible] h[illegible] e[illegible] i[illegible]. The [illegible] a[illegible] e f[illegible] a[illegible] ce cha[illegible] ac[illegible] e[illegible] i[illegible] [illegible] f c[illegible] ed h[illegible] e[illegible] i[illegible] a[illegible] a[illegible] acc[illegible] di[illegible] g [illegible]

2.2 Technical Specifications

	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	57 × 51 × 69 cm (22.5 × 20 × 27 in)	24 × 20 × 8 cm (9.5 × 8 × 3 in)	35 × 30 × 8 cm (14 × 11.8 × 3.3 in)	18 × 17 × 8 cm (7 × 6.75 × 3 in)
[illegible]	22.7 kg (50 lb)	1.5 kg (3.3 lb)	1.4 kg (3.1 lb)	0.67 kg (1.5 lb)
[illegible]	17.5 kg (38.6 lb)	1.35-1.6 kg (3-3.5 lb)	0.8 kg (1.8 lb)	0.65 kg (1.4 lb)

[illegible]	Low Force Stereolithography (LFS)
[illegible]	Width: 40 cm (15.5 in) Depth: 53 cm (21 in) Height: 78 cm (30.5 in)
[illegible]	17.2 kg (37.9 lb)
[illegible]	Auto-heats to 35 °C (95 °F)
[illegible]	Air heated print chamber
[illegible]	100–240 V 2.5 A 50/60 Hz 220 W
[illegible]	1 Light Processing Unit EN 60825-1:2014 certified Class 1 Laser Product 405 nm violet laser 250 mW laser
[illegible]	85 microns (0.0033 in)
[illegible]	The Form 3B+ is a Class 1 Laser Product. Accessible radiation is within Class 1 limits.
[illegible]	Wi-Fi, Ethernet, and USB
[illegible]	RJ-45 Ethernet (10BASE-T/100BASE-TX/1000BASE-T) LAN Port Connect with an Ethernet cable (not included): minimum Cat 5, or Cat 5e or Cat 6 for 1000BASE-T.
[illegible]	Protocol: IEEE 802.11 b/g/n Frequency: 2.4 GHz, 5 GHz Supported security: WPA/WPA2
[illegible]	Does not exceed 70 dB(A).
[illegible]	Interactive touchscreen
[illegible]	Automated
[illegible]	145 × 145 × 185 mm 5.7 × 5.7 × 7.3 in
[illegible]	Auto-Generated Removable

2.3 E

2.4 a

3. Safety Warnings

Read and understand this manual and its safety instructions before using the Form 3B+. Failure to do so can result in serious injury or death.

Several [illegible] guidelines [illegible] experienced [illegible] reliable and safe operation. The instructions contain important warnings and safety information, [illegible] contained below:

This product has demonstrated EMC compliance under conditions that included the use of compliant peripheral devices and shielded cables between system components. It is important that you use compliant peripheral devices and shielded cables between system components to reduce the possibility of causing interference to radios, televisions, and other electronic devices.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

4. a a a S

4.1 A a a

Ch e a ab e, e e ace i a a d e a e he F 3B+. Ch e a ca i e a a e f a achi e i g ha ge e a e d a ch d e a i g e i e . Re e e he f i g i i di e i f he c e ie acce :

: 40 c (15.5 i) **D** : 53 c (21 i) **H** : 78 c (30.5 i)

A addi i a ace f acce ie ch he F 3B+ Fi h Ki , F Wa h, a d F C e.

4.2 F 3B+

D i g b i g, i ec he F 3B+ f a da age i i g ie . I he ca e f da age i i g ie , c ac F a he ce i ed e ice ide .

F 3B+:

1. O e he b f he . If he b ha a ide ga e, f d d he ide f he b .
2. U e he ided ha d e if he i e, i ca ie a , f he b .
3. Re e he i e f he ca ie a a d e he i e i ace.
4. Re e a addi i a a i g a d ac agi g f he ide f he i e.

Remove all packaging material and release the Light Processing Unit (LPU) housing before connecting power.

a L f :

1. O e he i e c e.
2. Read a d e-1.24 -1 ,(B F-1.24 -1 ,(B)T`2K4 Tf0 Tc 0 -1.437 Td(1.)T`/S a Ac a Te EFF0009 a12
2.

is required for warranty service.

4.3 I a F 3B+

4.3.1 C Ca

C ec he e cab e he i e a d he es .
Fi ca be aded ia USB, Wi-Fi, E he e . F USB, c ec he i e a ea b c e . F E he e , c ec he i e a E he e .

4.3.2 L

!
NOTICE

It is important that the printer sits level so resin does not overflow from the tank during printing. All four feet must rest on a solid surface to ensure optimal print accuracy.

The F 3B+ be c e e e e bef e i i g ca begi . If ed, e he e e i g di c ai e e each f f i e .

F 3B+:

1. C ec he i e . If ec a , he ch ee e f he e e i g di c.
   a. The i i ia i e e e e ce i c de he e e i g ced e.
2. F he ee i c i , ad he fee de he i e .
3. I e he d e e i g di c de he de ig a ed c e . P h i he e e i g di c c ic he f .
4. R a e he c c e ai e a d c e -c c e e he heigh f he i e .
   a. The i e hi i h each f f e ac ed. The heigh f he fee ca be ai ed

d i g he i i ia i e e .

5. Ad he fee i he ch ee i dica e he i e e e .

4.3.3 I a a M

!
CAUTION

Spill hazard. Resin may spill over the tank walls if the resin tank tilts more than 5-10°. Hold the resin tank level with two hands. To inspect and clean the underside of the tank, empty the resin tank and/or take care to avoid spilling resin outside the tank.

!
WARNING

Resin may cause skin irritation or an allergic skin reaction. Wear gloves when handling liquid resin or resin-coated surfaces. Wash skin with plenty of soap and water.

a a :

1. O e he i e c e.
2. Re e he id f he a ca e.
3. Re e ac agi g a e ia f he a .
4. Lif he i a i h e ha d each ide.

Avoid contaminating the underside of the resin tank with fingerprints or liquid resin.

5. A ig he i a ide a i h he ef a d igh a ca ie a .
6. P h he ide ha d - Ac a TT 1.24 0 Td(A ig he)Tj(i a ide a i h a d Td(A ig he)T

[illegible]

4.4.1 Connecting via USB

Use the included USB cable for connecting a computer directly to the printer.

1. Plug one end of the USB cable into the back of the Form 3B+.
2. Connect the other end to a computer's USB port.

4.4.2 Connecting via Ethernet

The rear of the printer is equipped with a RJ-45 Ethernet (10BASE-T/100BASE-TX/1000BASE-T) LAN Port. Connect to a LAN with an Ethernet cable (not included): minimum Cat 5, or Cat 5e or Cat 6 for 1000BASE-T.

1. Plug one end of the Ethernet cable into the back of the Form 3B+.
2. Connect the other end to the LAN.

4.4.3 Connecting via Wi-Fi

The Form 3B+'s built-in Wi-Fi (IEEE 802.11 b/g/n) supports WPA/WPA2 security. Use the Form 3B+'s touchscreen to configure a wireless network connection.

When connected to an active Ethernet connection or available Wi-Fi network, the Form 3B+ can be configured with a static IP address.

To connect with Wi-Fi using a manual IP configuration:

1. With an established Ethernet or available Wi-Fi connection, open the printer's Settings menu on the touchscreen.
   a. For Wi-Fi networks, tap Wi-Fi, then the desired wireless network.
   b. For Ethernet connections, open Ethernet from the Settings menu.
2. Toggle the Manual IP settings to ON.
3. Input the appropriate IP Address, Subnet Mask, Default Gateway, and Name Server.

4.5 Packaging the Form 3B+

Refer to the Technical Specifications for product weight and dimensions. Keep the packaging for transportation or shipping. The printer's complete packaging kit consists of:

1 outer carton, cardboard	1 upper insert, foam
1 lift tray, cardboard	1 lower insert, foam
1 bottom insert, foam	

NOTICE

Do not ship with resin inside the printer. Resin left inside the Form 3B+ can damage the printer in transit, which may lead to additional fees or void the warranty.

[illegible] Form 3B+:

1. Always remove the build platform, resin tank, and cartridge before moving or packaging the Form 3B+ printer.
2. Wipe residual resin off of the build platform and store the platform away from sunlight.
3. Store the resin tank in the tank case.
4. Store the cartridge with the vent cap closed and the valve cover installed.

NOTICE

When shipping a printer to Formlabs for service, the build platform, resin tank, power and USB cables, and other accessories should not be shipped and will not be returned after service. The printer's original packaging is required for warranty service. Contact other certified service providers for unique guidance on shipping requirements.

a a F 3B+:

1. If he i e ca db a d ca ha bee c a ed a b ea e bi g a d ec e a i g he b b e i g.
2. T ec e he LPU h i g f hi i g:
   a. Ta he e chic he ch ee e he Se i e . Fi d a ee ec he hi i g i e a e he i e f hi i g.
   b. Di c ec he e cab e.
   c. O e he c e a d ca e he hi i g a ch i g i he ef ide f he LPU h i g. The LPU h i g i he LPU ga age he igh ide f he i e.
   d. A ig he i he a ch i h he e h i he ide f he LPU h i g. The h ide f he a ch h d be ie ed a a f he f f he i e a d i a f he LPU h i g.
   e. L e h ead he h b e h gh he a d i he LPU h i g.
   f. S ide he a ch a d he f f he i e ha i e gage i h he i ide f he i e he . If ece a , ad he i i f he LPU b a a i g he ead e e a he bac f he i e ca i . The hi i g a ch h d a a agai he LPU h i g he i e gage i h he i he i e he .
   g. Tigh e b h h b e e ec e he a ch. The a ch d e he b h h b e a e igh e ed.
3. C e he i e c e.
4.

5. F 3B+

5.1 a a E

The e a i g e e a e f F ab i es 64 82 F (18 28 C). F i a i i g, IPA is flammable. Keep containers closed, and keep out of the reach of children.

4. Post-Cure: Use Form Cure to expose printed parts to light and heat to stabilize the parts for performance.
5. Post-Process: Remove supports, then use sanding, priming, painting, [illegible] create [illegible] printed parts.

In an emergency involving resin, always refer to the Safety Data Sheet (SDS) and/or seek help from a medical professional.

When handling IPA, always consult the Safety Data Sheet (SDS) from the IPA supplier as the [illegible]. Handle IPA [illegible] area. Keep away from heat sources [illegible]

6.

6.2 I a B

6.2.1 I B a

The bi e a es , ca ed he de ide f he i ca idge. Th e ib e ea eg a i di e i g. Re i , , f he e i g i he ce e f he bi e a e he he ca idge di e e a ee he a e e .

Whe i chi g , a d e e i ca idge, i ec he bi e a e f a c ed i da age.

6.2.2 I a I

See **6.5.2 Maintain the Resin Tank.**

6.3 M I a Ma a a

6.3.1 ID C a a Ca

ID (ide i ca i) chi i a a d i ca idge de ec , ac , a d a ch he i e i he a i h he , e i ca idge. The ID chi he de ide f each a f a e a d he b f he ca idge ea he bi e a e.

R ec he ID chi , he a ca ie , he a i g ge , a d he ca idge i g ge f , i c a i a i da age. C ed i c a i a i e e he i e f e ide if i g a ca idge i a d i g i e i e. A id e i g he ca idge ID chi , he i a ID chi , he a ca ie , a d he a i g ge , i id i .

6.3.2 C a ID C S F

6.5 a Ma a

F de ai ed g ida ce a d a a ce ea ch .f a . .

Mai e a ce ha be d e acc di g he f i g a :

U da e he a e	Whe R eF i dica a e a e i, a ai ab e	6.5.1
Re ace he i a	Re ace he ea he begi ec i ai	6.5.2
Re ace he i ca idge	Whe he ca idge e , af e 1 i e f i i g	6.5.4
Fi e he i	Whe ca a ee a ic i he a	6.5.3

6.5.1 a F 3B+ F a

F ab eg e e da ed a e b g a d i e f c i a i . Re ie he R eF a d a e e e e , ea e ab he i e e ha c e i h each i e e e.

6.5.2 Ma a a

Spill hazard. Resin may spill over the tank walls if the resin tank tilts more than 5-10°. Hold resin taspill 0.0

Debs ,. c, a i a i, i he esi :

See **6.5.3 Filter the Resin.**

C ea , debs f ee esi i he s a, id i fai es, hich a da age he a .

Se ed ig e i he esi : Resi ig e ca s e e , , he . T s e e he i es f ci , s ide he a , , agais he , e , es e ed ig e .

T, c ea he des ide , f he :

1. A as a a , , f c ea IPA , a PEC*PAD.
2. Wi e he s face , f he , e , e c, a i a i, , esi .

T, c ea he Resi Ta f a e e e i , :

3. Us e a a e , e , c ea esi i f , he e e i , , f he a f a e.
4. Kee he s ides , f he a c ea a d f ee , f esi .
5. A , id esi i , he des ide , f he , becas e he c, a i a i, a i i fai es a d/, da age , he , e h, de .

a

7. a a

F de ai ed g ida ce a d a a a ce ea ch .f a . .

7.1 C D a L

The F 3B+ ai ai diag ic g ide de ai ed i f a i ab he i e

e. Lif he c gged esi i f he esi a .

   I. If he a ca h d he c gged esi :

      2. A ach he a f he a he b a .

      3. S ee e he c gged esi be ee he e .

f. Re he c gged esi he a e e.

5. Di e f c gged esi . See **8.11 Disposal of resin.**

6. C ea he a a d a ea.

a a :

1. A c ea IPA a c ea a e e.
2. Wi e he face f he a e e i .
3. A he a ai d .

:

1. Re he a i he F Wa h ba e .
2. Se F Wa h c ea f 5 i . I c ea e he i e f e ha f h.
3. A he a ai d af e a hi g.

7.4

I he ca e f a e ab a ac i i h he F 3B+ efe e ce he f i g e , ca e , a d ed , i . C ee he i i ia b h i g e a d ca ef d c e a . C ac F ab a ce i ed e ice ide f addi i a a a ce.

7.4.1 A a F D S -

The bi e a e d di e e i .	The i ic e a e ia ha ea ed i e f. Re i a c e e he bi e a e e i g.	T b h a c ed bi e a e: 1. C e he e ca a d e e he e i ca idge f he i e . 2. T he ca idge ide d i ec he bi e a e. 3. S ee e he a e a fe i e he ea a d e ab e i . 4. If ee i g he a e d e ab e i , ca ef e he i f he ee f he Fi h Ki F Wa h h gh he e i g e ab e i . 5. If he bi e a e ea e ai c ed af e b h i g, c ac F ab S f addi i a he . S b i h f he bi e a e ea i h .
The age Re i ic i a ai ab e i Re eF .	The i e a be ec ed he a e ca e .	C ide he f i g: Chec ee ha d ha e he e i a c f Re eF . Sa e a bef e a i g Re eF . Re-c ec ab ha ec ec i .
Mi i g Re i Ta ; Mi i g Ca idge	The ID chi ( ) di i g.	1. F e e he e i a a d/ ca idge. 2. Chec he ID chi he e i a a d/ ca idge e e he ID chi e a d c ea . 3. C ea he ID chi , if ec e a . **S 6.3.1 C a ID C S F .** 4. Re-i e he e i a a d/ ca idge.

H[illegible] Li[illegible] M[illegible] have [illegible] [illegible] [illegible]	Obstructions in the vertical path [illegible] the [illegible] [illegible] in a specific [illegible] of the [illegible].	Consider the following: Check the underside of the [illegible] [illegible] .908 -42.32 30

8. Disposal

8.1 General [illegible] and Disposal

CAUTION

Refer to the Safety Data Sheet (SDS) and local authorities for guidance on disposing of IPA.

8.1.1 Disposal of resin

Liquid resin (whether pure liquid, dissolved in alcohol, or partially cured) may be considered a hazardous waste and should be disposed of with care.

Disposing of empty resin cartridges:

In the United States, empty resin containers are considered RCRA empty by EPA standards and can be thrown in the garbage as regular waste.

Optional: Triple rinse the cartridge with fresh IPA to empty the resin cartridge of traces of excess resin. Add the resulting dirty IPA to your solvent waste stream in accordance with governmental regulations.

To dispose of a resin tank:

1. Remove the resin tank.
2. Transfer or dispose of the remaining resin.
3. Pour the resin from the old tank to the new tank or another container. If there's debris or cured parts in the resin, [illegible] the resin before transferring it to a new tank.
   a. Pouring resin back into the original cartridge [illegible] contaminating the cartridge with cured resin pieces or debris, which can cause print failures.
4. Use a paper towel to wipe all remaining resin [illegible] the old tank.
5. Place the old tank in sunlight (a window sill is fine) or UV light to cure excess resin, and dispose of properly once cured.

Disposing of [illegible]:

To dispose of pure resin (resin that has not been cured or dissolved in alcohol), add this waste to your chemical disposal stream.

If [illegible]:

1. Pour [illegible] amounts of resin into a labeled, resin-compatible container.
2. Leave the container outside, exposed to sunlight to cure for 1-10 days. Expose resin to 405 nm light and heat for the most effective curing. The liquid resin cures to solid material when exposed to light and heat.
3. Dispose of the fully-cured resin and container in the trash.

Disposing of [illegible]:

Discard cleaned parts and cured (hardened) resin with household items as trash. Cleaned parts and cured resin cannot be recycled.

8.1.2 Disposal of IPA and [illegible]

Safe and appropriate disposal methods of used IPA vary by location.

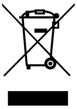
Safe options for [illegible] IPA:

1. Consult the safety data sheet (SDS) for the IPA supplier as the primary source of information.
2. Research your local government-approved methods of disposal. This will most likely involve hiring a waste disposal service or, for smaller amounts, checking with your city's disposal service to see if they have any suggestions for removal.

3. I f e di a e ice ha b e c ai IPA i h a a f e hac a ed e a d ig e (e i ed ic i) a d ace a f h i i ia . Ha e a c f he i SDS ha d i c e he a e da eed e i f a i .

F age f IPA, c ide ig a e ec c i g e , hich e a c - ec i e a d e e i e a i be a e a i e a i g f e di a e ice . S e ec ci g e e e di i a i a d f ac i a i c e e e f e , a i g i ibe e- e he IPA h a . The ec c ed IPA a i ha e a a f e i i . Rec c i g IPA ed ce e di a c , e i i ha a e e ied d ce e , a d he c f ch a i g IPA.

8.1.3 D a f



The b he d c , he acce ie , ac agi g i dica e ha hi de ice ha be ea ed a di ed f i h h eh d a e. Whe decide di e f hi d c , d i acc da ce i h ca e i e a a a d g ide i e . Di e f he de ice ia a c ec i i f he ec c i g f e ec ica a d e ec ice i e . B di i g f he de ice i he e a e , he a id ibe ha a d f he e i e a d b ic hea h ha c d he e be ca ed b i ea e f a e e i e . The ec c i g f a e ia c ib e he c e a i f a a a c . The ef e d , di e f de ec ica a d e ec ice i e i h he ed ici a e.

8.1.4 D a f a a a

Sa e he F 3B+ ac agi g f a i g i e . Q igi a ac agi g e ied f a e ice a d de ig ed be e a d e ed f a ai hi i g.

The ac agi g ade f ca db a d a d ic-ba ed a e ia . Di e f ac agi g h gh ca e a d ec c i g faci i ie . B di i g f he ac agi g a e i he e a e , he a id ibe ha a d f he e i e a d b ic hea h.

G ss a

[illegible]	The Form 3B+ utilizes a 100–240 V power supply. The internal power supply converts line power to +24V DC.
[illegible]	The resin tank is the container for holding resin after it is dispensed from the cartridge. Resin is cured onto the build platform from the [illegible] resin through the tank bottom. Only use approved materials and processes to clean the resin tank.
[illegible]	The resin tank's ID chip is an Electrically Erasable Programmable Read-Only Memory (EEPROM). The printer's sensing [illegible] read the chip to detect the unique tank ID and current resin type.
[illegible]	Segmented rollers ([illegible]) act as bearings for smooth movement of the LPU housing across the [illegible] in the resin tank. The rollers support and hold the optical window. Clean rollers [illegible] and prevent print failure.
[illegible]	Five [illegible] sensors enable tracking to detect the [illegible] in each component: (1) Rear sensor: automatic tracking from the back of the resin tank. (2) Side sensors: tank tracking from the left and right sides. (1) Top sensor: automatic tracking to detect the [illegible] during the resin tank [illegible] under the cover. (1) Front sensor: the glass disc that is attached to a static plate, which [illegible] the front of the resin tank below the cover.
[illegible]	The tank carrier holds the resin tank and positions the tank. The tank carrier is covered by the [illegible] and houses the [illegible], Level Sense, resin sensing, tank catch, and [illegible] sensors.
[illegible]	The resin tank slides and connects to rails on each side of the tank carrier. While printing, the [illegible] the [illegible] and the [illegible] position.
[illegible]	Each resin tank includes a lidded container for storing the resin tank when not in use.
[illegible]	Plastic handles on each side of the resin tank allow for easy insertion, removal, and carrying of the tank. Avoid touching the bottom of the resin tank, as fingerprints can leave smudges that block the optical path.
[illegible]	This spout at the back of the resin tank sits underneath the cartridge dispense hole and receives resin from the cartridge.
[illegible]	These electrical contacts, at the back of the resin tank carrier, read the resin tank's EEPROM ID chip, sense the tank's presence and communicate the resin type to PreForm.
[illegible]	Inspecting and cleaning the interior of the resin tank requires special [illegible]. This is the [illegible] to clean the [illegible] surface.
[illegible]	The LCD capacitive touchscreen interface displays print information, settings, and error messages.
[illegible]	The Form 3B+ can connect to a computer via USB. The [illegible] port is connected to the [illegible] on the board and can be accessed from the back of the machine.
[illegible]	The lid at the top of the cartridge allows for air exchange, enabling smooth resin dispensing. Push the vent cap open prior to printing.
[illegible]	The Wi-Fi antenna enables the Form 3B+ wireless connectivity. The antenna is routed through a hole from the [illegible] to the board.

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F 3B+ f a a a af a a :

Electrical

UL 60950-1, 2nd Edition, 2014-10-14
CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10
IEC 60950-1: 2005 + A1: 2009 + A2:2013
EN 60950-1:2006 + A11:2009 + A12:2011 + A1:2010 + A2:2013

Laser

IEC 60825-1:2014
EN 60825-1:2014

FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 56, dated May 8, 2019

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