X2D Filament Compatibility Guide

This article lists the filament compatibility of the X2D standard kit and X2D with the filament track switch installed.

To ensure the X2D printer achieves ideal printing results and maintains long-term stable and reliable operation, we have conducted rigorous full-scenario tests for different combinations of filament and nozzles.

This guide covers the filament compatibility requirements for the main nozzle and auxiliary nozzle of the X2D printer, as well as the exclusive filament compatibility specifications after the printer is installed with the filament track switch, so that you can quickly check and verify before printing, and avoid the risks of printing abnormalities and equipment wear in advance.

X2D Filament Compatibility

The following provides reference for the filament usage restrictions of the X2D standard kit.

Main Hotend

The filament compatibility of the main hotend is divided into the following three levels:

Symbol	Level	Description
✅	Available	This filament is recommended for use
⚠️	Not recommended	Usable, but with a relatively high printing failure rate
❌	Unavailable	This filament cannot be printed with the main hotend

The filament compatibility table for the main hotend is as follows:

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
PLA	PLA Basic	✅	✅	✅	✅	✅	✅
	PLA Matte	✅	✅	✅	✅	✅	✅
	PLA Lite	✅	✅	✅	✅	✅	✅
	PLA Basic Gradient	✅	✅	✅	✅	✅	✅

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
	PLA Metal	✅	✅	✅	✅	✅	✅
	PLA Translucent	⚠️	✅	✅	✅	✅	✅
	PLA Tough+	✅	✅	✅	✅	✅	✅
	PLA Marble	❌	✅	✅	✅	✅	✅
	PLA Sparkle	❌	✅	✅	✅	✅	✅
	PLA Wood	❌	✅	✅	✅	✅	✅
	PLA Galaxy	⚠️	✅	✅	✅	✅	✅
	PLA Glow	❌	✅	✅	✅	✅	✅
	PLA Silk+	✅	✅	⚠️	⚠️	✅	⚠️
	PLA Silk Dual Color	✅	✅	⚠️	⚠️	✅	⚠️
	PLA Silk	✅	✅	⚠️	⚠️	✅	⚠️
	PLA-CF	❌	✅	✅	✅	⚠️	✅
	PLA Aero	❌	✅	⚠️	⚠️	✅	⚠️
	PLA Dynamic	✅	✅	✅	✅	✅	✅
	PLA Tough	✅	✅	✅	✅	✅	✅
PETG	PETG HF	✅	✅	✅	✅	✅	✅
	PETG Basic	✅	✅	✅	✅	✅	✅
	PETG Translucent	⚠️	✅	✅	✅	✅	✅

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
	PETG-CF	✗	✓	✓	✓	⚠	✓
ABS/ASA	ABS	✓	✓	✓	✓	✓	✓
	ABS-GF	✗	✓	✓	✓	✓	✓
	ASA	✓	✓	✓	✓	✓	✓
	ASA Aero	✗	✓	⚠	⚠	✓	⚠
	ASA-CF	✗	✓	✓	✓	⚠	✓
PC	PC	✗	✓	✓	✓	✓	✓
	PC FR	✗	✓	✓	✓	✓	✓
TPU	TPU for AMS	✗	✓	✓	✓	✓	✓
	TPU 95A HF	✗	✓	✓	✓	✓	✓
	TPU 85A	✗	✗	✓	✓	✗	⚠
	TPU 90A	✗	✓	✓	✓	⚠	⚠
	TPU 95A	✗	✓	✓	✓	✓	✓
Support Filament	Support for ABS	✗	✓	✓	✓	✓	✓
	Support for PLA/PETG	✓	✓	✓	✓	✓	✓
	Support for PA/PET	✗	✓	✓	✓	✓	✓
	Support for PLA (new)	✓	✓	✓	✓	✓	✓
	PVA	✗	✓	✓	✓	✓	✓

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
Polymer fiber reinforced filaments	PAHT-CF	❌	✅	✅	✅	⚠️	✅
	PA6-GF	❌	✅	✅	✅	⚠️	✅
	PET-CF	❌	✅	✅	✅	⚠️	✅
	PA6-CF	❌	✅	✅	✅	⚠️	✅
	PPA-CF	❌	✅	✅	✅	⚠️	✅
	PPS-CF	❌	❌	❌	❌	❌	❌

Auxiliary Hotend

The filament compatibility of the auxiliary hotend is divided into the following four levels:

Symbol	Level	Description
✅	**Available**	It is recommended to use this filament to print supports
⚠️	**Not Recommended**	Can be used, but the printing failure rate is relatively high
⛔	**Highly Not Recommended**	Strongly discouraged, the printing failure rate is extremely high
❌	**Unavailable**	This filament cannot be printed with the auxiliary hotend

Please note that while some filaments (e.g., PETG) can be printed using the auxiliary hotend, **they are not the primary recommended options**. This is because:

- The X2D auxiliary hotend requires frequent raising and lowering during printing, which may have a certain impact on print stability.
- The auxiliary hotend uses a remote extrusion structure with a longer feed path, resulting in slightly weaker extrusion response and detail control compared to the main hotend.

For printing tasks with high requirements for surface quality and detail performance, it is recommended to prioritize using the main hotend. If you need to use the auxiliary hotend, **it is suggested to use such filaments for printing scenarios with relatively lower surface quality requirements**, such as supports.

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
PLA	PLA Basic	⚠️	✅	✅	✅	✅	✅
	PLA Matte	⚠️	✅	✅	✅	✅	✅
	PLA Lite	⚠️	✅	✅	✅	✅	✅
	PLA Metal	⚠️	✅	✅	✅	✅	✅
	PLA Translucent	⚠️	✅	✅	✅	✅	✅
	PLA Tough+	⚠️	✅	✅	✅	✅	✅
	PLA Marble	❌	✅	✅	✅	✅	✅
	PLA Sparkle	❌	✅	✅	✅	✅	✅
	PLA Wood	❌	✅	✅	✅	✅	✅
	PLA Galaxy	⚠️	✅	✅	✅	✅	✅
	PLA Glow	❌	✅	✅	✅	✅	✅
	PLA Silk	⛔	⛔	⛔	⛔	⛔	⛔
	PLA Silk+	⚠️	✅	⚠️	⚠️	✅	⚠️
	PLA-CF	❌	✅	✅	✅	⚠️	✅
	PLA Aero	❌	❌	❌	❌	❌	❌
	PLA Dynamic	⚠️	✅	✅	✅	✅	✅
	PLA Tough	⚠️	✅	✅	✅	✅	✅
PETG	PETG HF	⚠️	⚠️	⚠️	⚠️	⚠️	⚠️

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
	PETG Basic	⚠	⚠	⚠	⚠	⚠	⚠
	PETG Translucent	⚠	✅	✅	✅	✅	✅
	PETG-CF	❌	⛔	⛔	⛔	⛔	⛔
ABS/ASA	ABS	⚠	⚠	⚠	⚠	⚠	⚠
	ABS-GF	❌	✅	✅	✅	✅	✅
	ASA	⚠	⚠	⚠	⚠	⚠	⚠
	ASA Aero	❌	⚠	⚠	⚠	⚠	⚠
	ASA-CF	❌	⛔	⛔	⛔	⛔	⛔
PC	PC	❌	✅	✅	✅	✅	✅
	PC FR	❌	✅	✅	✅	✅	✅
TPU	TPU for AMS	❌	⛔	⛔	⛔	⛔	⛔
	TPU 95A HF	❌	❌	❌	❌	❌	❌
	TPU 85A	❌	❌	❌	❌	❌	❌
	TPU 90A	❌	❌	❌	❌	❌	❌
	TPU 95A	❌	❌	❌	❌	❌	❌
Support filament	Support for ABS	❌	✅	✅	✅	✅	✅
	Support for PLA/PETG	⚠	✅	✅	✅	✅	✅
	Support for PA/PET	❌	⛔	⛔	⛔	⛔	⛔

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
	Support for PLA (new)	⚠️	✅	✅	✅	✅	✅
	PVA	❌	✅	✅	✅	✅	✅
Polymer fiber reinforced filaments	PAHT-CF	❌	✅	✅	✅	✅	✅
	PA6-GF	❌	✅	✅	✅	✅	✅
	PET-CF	❌	⚠️	⚠️	⚠️	⚠️	⚠️
	PA6-CF	❌	⛔	⛔	⛔	⛔	⛔
	PPA-CF	❌	❌	❌	❌	❌	❌
	PPS-CF	❌	❌	❌	❌	❌	❌

Filament Compatibility for X2D with Filament Track Switch Installed

The filament compatibility of the X2D after installing the filament track switch is divided into the following four levels:

Symbol	Level	Description
✅	**Available**	The filament is recommended for use
⚠️	**Not Recommended**	Can be used, but the failure rate of filament loading and unloading is relatively high when printing with this filament
⛔	**Highly Not Recommended**	Strongly discouraged, as there is a high risk of filament grinding and filament breakage when printing with this filament
❌	**Unavailable**	This filament cannot be used

Please note that while some filaments (e.g., PETG) can be printed using the auxiliary hotend, **they are not the primary recommended options**. This is because:

- The X2D auxiliary hotend requires frequent raising and lowering during printing, which may have a certain impact on print stability.

- The auxiliary hotend uses a remote extrusion structure with a longer feed path, resulting in slightly weaker extrusion response and detail control compared to the main hotend.

For printing tasks with high requirements for surface quality and detail performance, it is recommended to prioritize using the main hotend. If you need to use the auxiliary hotend, **it is suggested to use such filaments for printing scenarios with relatively lower surface quality requirements**, such as supports.

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
PLA	PLA Basic	✅	✅	✅	✅	✅	✅
	PLA Matte	✅	✅	✅	✅	✅	✅
	PLA Lite	✅	✅	✅	✅	✅	✅
	PLA Basic Gradient	✅	✅	✅	✅	✅	✅
	PLA Metal	✅	✅	✅	✅	✅	✅
	PLA Translucent	✅	✅	✅	✅	✅	✅
	PLA Tough+	✅	✅	✅	✅	✅	✅
	PLA Marble	❌	✅	✅	✅	✅	✅
	PLA Sparkle	❌	✅	✅	✅	✅	✅
	PLA Wood	❌	✅	✅	✅	✅	✅
	PLA Galaxy	❌	✅	✅	✅	✅	✅
	PLA Glow	❌	⚠️	⚠️	⚠️	⚠️	⚠️
	PLA Silk+	⚠️	⚠️	⚠️	⚠️	⚠️	⚠️
	PLA Silk	⚠️	⚠️	⚠️	⚠️	⚠️	⚠️
	PLA-CF	❌	⚠️	⚠️	⚠️	⚠️	⚠️
	PLA Aero	❌	⛔	⛔	⛔	⛔	⛔

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
PETG	PETG Basic	✅	✅	✅	✅	✅	✅
	PETG HF	✅	✅	✅	✅	✅	✅
	PETG Translucent	✅	✅	✅	✅	✅	✅
	PETG-CF	❌	✅	✅	✅	✅	✅
ABS/ASA	ABS	✅	✅	✅	✅	✅	✅
	ABS-GF	❌	⛔	⛔	⛔	⛔	⛔
	ASA	✅	✅	✅	✅	✅	✅
	ASA Aero	❌	⛔	⛔	⛔	⛔	⛔
	ASA-CF	❌	⛔	⛔	⛔	⛔	⛔
PC	PC	❌	⛔	⛔	⛔	⛔	⛔
	PC FR	❌	✅	✅	✅	✅	✅
TPU	TPU for AMS	❌	⛔	⛔	⛔	⛔	⛔
	TPU 95A HF	❌	❌	❌	❌	❌	❌
	TPU 85A	❌	❌	❌	❌	❌	❌
	TPU 90A	❌	❌	❌	❌	❌	❌
	TPU 95A	❌	❌	❌	❌	❌	❌
Support filament	Support for ABS	❌	⚠️	⚠️	⚠️	⚠️	⚠️
	Support for PLA/PETG	✅	✅	✅	✅	✅	✅

Filament Category	Filament Type	Standard Nozzle				Hign-Flo	
		0.2mm	0.4mm	0.6mm	0.8mm	HF 0.4	HF
	Support for PA/PET	✗	✓	✓	✓	✓	✓
	Support for PLA	✓	✓	✓	✓	✓	✓
	PVA	✗	✓	✓	✓	✓	✓
Polymer fiber reinforced filaments	PAHT-CF	✗	✓	✓	✓	✓	✓
	PA6-GF	✗	✓	✓	✓	✓	✓
	PET-CF	✗	✗	✗	✗	✗	✗
	PA6-CF	✗	✗	✗	✗	✗	✗
	PPA-CF	✗	✗	✗	✗	✗	✗
	PPS-CF	✗	✗	✗	✗	✗	✗

Possible Issues

1. After installing the **filament track switch**, some filaments (such as PLA Aero and ASA-CF) are extremely prone to filament grinding, filament feeding blockage or filament breakage inside the PTFE tube, so **use is strongly discouraged**.
2. Some filaments (such as PLA-CF and PLA Glow) are greatly affected by feeding resistance due to their filament properties, which may lead to filament loading and unloading failure. Therefore, **try to avoid using such filaments after connecting them to the filament track switch.** If an abnormality has occurred and you still need to continue printing, you can try the following:

- Manually adjust the AMS slot where the abnormal filament is located;
- Use the officially recommended PTFE tube length;
- Refer to the officially recommended AMS placement method for placement;

If printing still fails after adjustment, please **disable the filament track switch for this print job**.

End Notes

We hope this guide has provided clear and practical support.

If the issue remains unresolved, please submit a support ticket and include your recent printer logs and additional pictures or other details. Our technical team will review your request and provide detailed assistance.

You can also visit Bambu AI , which can instantly answer common questions and provide you with operational guidance.