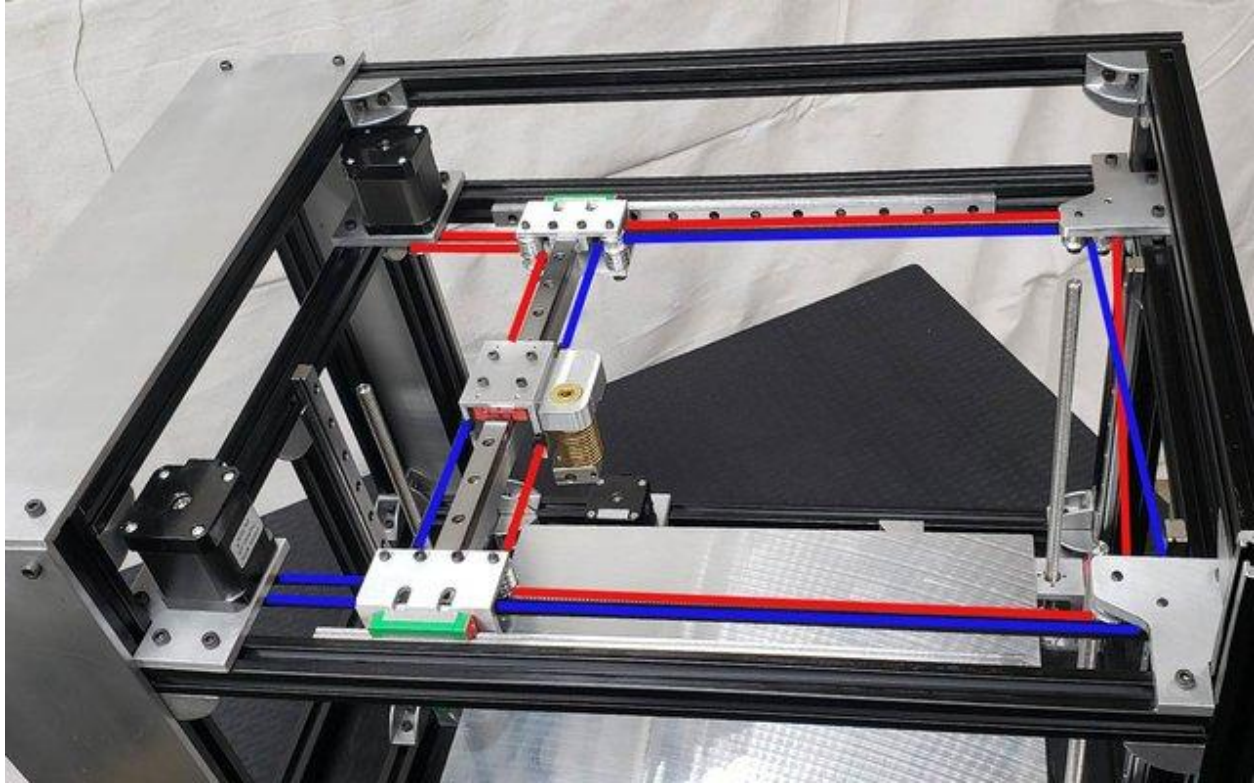


CoreXY Diagram



Belt Path

SolidCore Belt Path

One of the most important parts for corexy movement is belt routing. Here's a guide to the mechanics of corexy belt routing pulley layout in order to get accuracy and constant belt tension.

Belt System Layout-Crossed Belt Path

There are two ways to implement the corexy belt path. The belt system layout can use either a stacked pulley arrangement or a crossed belt also known as a belt twist. The crossed belts design allows for each belt to take different paths, creating an x-shape configuration. The stacked belt path simplifies alignment and belt tensioning. There is an increased complexity in this routing due to having two different height motor shafts, but it also eliminates belt tensioning issues. 3D printer resolution may be affected when the toothed belt runs on a smooth idler as it results in a curtain effect pattern also known as ripple.

Belt Tension

Belt Tension-SolidCore CoreXY

The belt path must be parallel to the linear guides as the carriage moves along an axis. This means that there is a x-shape configuration with two points of contact at both ends. The length of the belt may vary in tension. Belt tension may increase or decrease as it moves along the axis. The length of the twisted segment must maintain constant tension, otherwise the twist will cause the belt tension to vary.

What is proper belt tension?

The proper belt tension should be tightly stretched, but not too tight or loose so that the belt doesn't slip when printing. Belt tension frequency should be 45-70Hz depending on the length of the belt system and print speed.

Also Read

[CoreXY Belt Routing](#)

[CoreXY belt system](#)

[CoreXY belt tension](#)

[CoreXY belt crossing](#)

[CoreXY belt twist](#)

[Corexy belt parallel](#)

[CoreXY belt stretch](#)

[CoreXY belt tensioner](#)

[CoreXY Belt Pattern](#)

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