



Kayoudur 5" - TPU Collection

 **Kayou Frames**

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Summary

The complete official TPU Collection for the Kayoudur 5" by Kayou Frames.

[Hobby & Makers](#) > [RC & Robotics](#)

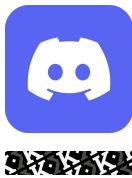
Tags: [kayoudur](#)



This page is a **Wiki** regrouping all the necessary informations about **3D Printable TPU Files for the Kayoudur 5"**. All of the .stl files are available in the "Files" tab.

Join us on Discord !

For any specific request/question, **feel free to contact us directly on Kayou Frames Discord Server**.



Kayou Frames Ecosystem

Welcome to the Kayou Frames ecosystem ! **The Kayoudur 5" (KD)** and **the Kayouflip 5" (KF)** share the exact same deck dimensions, so most of the Prints are **100% inter-compatible** between the 2. Pick the frame that suits you the best ... or both !



Kayoudur

◆ VS ◆



Kayouflip

Bando

Urban environments, concrete, any spot where you'll crash pretty hard

158g

Focused on durability, allows for precise and aggressive flying



Suggested use

Weight

Open Field

Fields, forests, any spot where lightweight is appreciated

121g

Focused on weight saving, allows for locked freestyle and strong ejects



Arms Thickness

Carbon's thickness ensures a significant part of the Frame's toughness and strength !



Deck Thickness



The plates thicknesses and standoffs heights **vary slightly between the 2 frames** making **some or the prints not intercompatible** :

- KD has **6mm arms** and **3mm body plates** for a total **body height of 29mm**,
- KF has **5.5mm arms** and **2.5mm body plates** for a total **body height of 28mm**,

All of the files listed in this collection's "files" tab fits the Kayoudur, but we made it simple with **files prefix** :

- "KD" + _print_name.stl : Print fits the **Kayoudur**,
- "KD-F" + _print_name.stl : Print fits the **Kayoudur and the Kayouflip**.

HD Camera mounts (GoPro etc)

They are all **100% intercompatible** between the **Kayoudur** and the **Kayouflip**.

GoPro Session Mounts

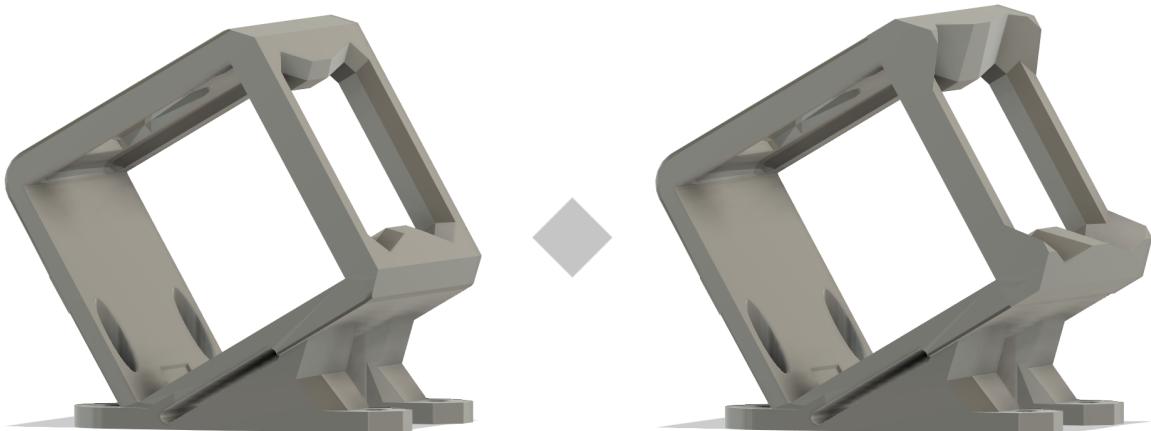
The GoPro Hero Session Mounts have **a folder on their own on the files tab** because it clearly is still **the most used camera for Bando Bashing**.

It's cheap, sturdy and provide good quality footage, **having a well designed extremely durable collection of prints** for it is **a must have for the Kayoudur**.



There's a few variations of them :

- **Bando** : This variation **adds a decent amount of TPU** (and coolness) to the Mount for **additional protection**. There is a slight bit of **TPU in the FOV** in 4:3/Superview.



Standard

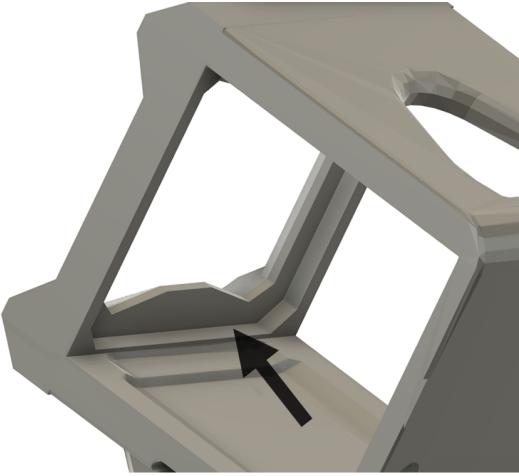
Bando

Improved lens protection



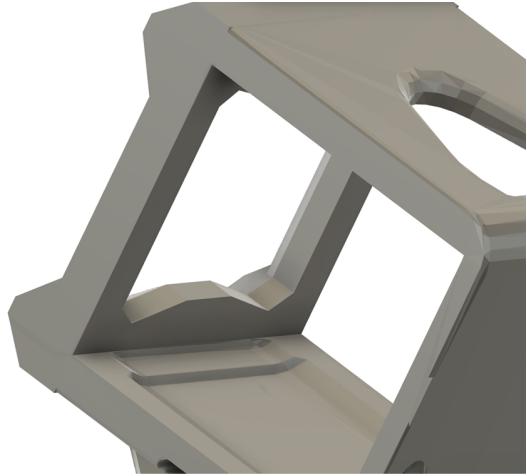
That's how much TPU you'll have in the FOV using the Bando version in 16:9 Superview (full frame). Very acceptable sacrifice considering the tremendous gap in durability this thing offers if you ask me.

- “**_TBS_ND**” : Includes a slot to fit a **TBS ND Filter**. They're thick pieces of glass, but they're still glass so **they do break**. If you're **not** gonna be flying with them the standard versions **don't have that slot** and **will provide more protection**.



"_TBS_ND"

TBS ND Filter slot



Standard

Slot filled with TPU, maximized protection

Arm Bumper

Protect your motors ! We do know how much you care about those bells, and **how many we bend in Bandos**. The **wide carbon arm ends of the Kayoudur** is already **an excellent way to protect them**, but the **TPUs also plays a lot in it**.

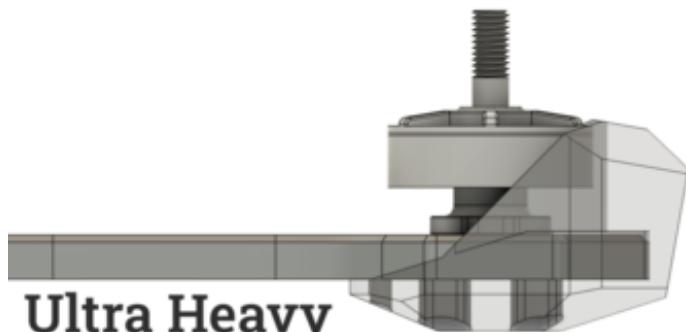
Over the time (and abuse, a lot of abuse) we came up with **a collection of Arm Bumpers giving you the choice over how much weight you're willing to sacrifice** depending on how hard you fly (or on how much you're willing to spend on spare motors !).

The choice is yours :



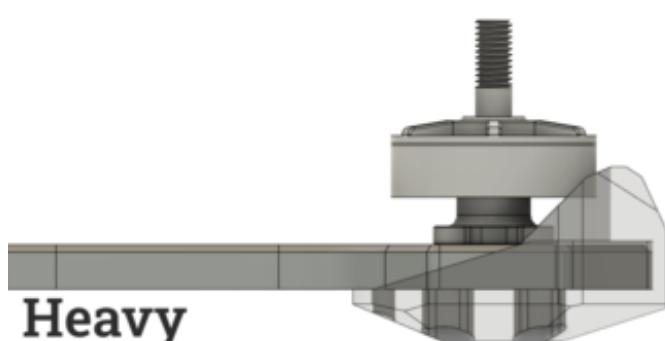
Weight estimations are calculated for TPU at 100% Infill.

Data may vary depending on your settings and exact filament,
but it's a good approximation !



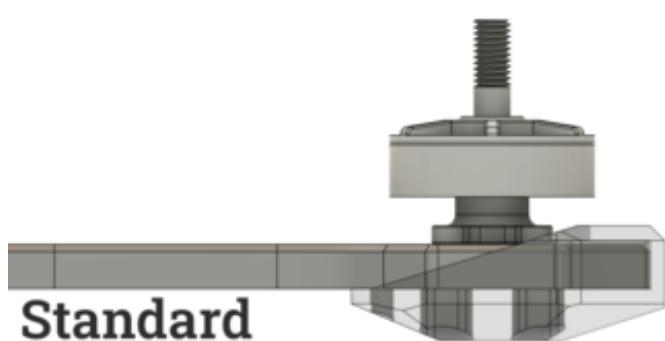
Ultra Heavy

1pc : 10g
4 pcs : 40g



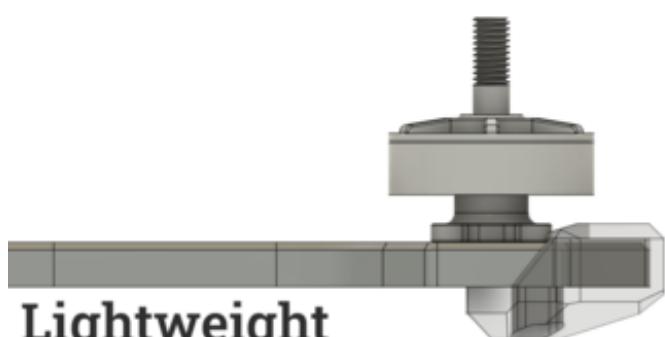
Heavy

1pc : 7,1g
4pcs : 28,4g



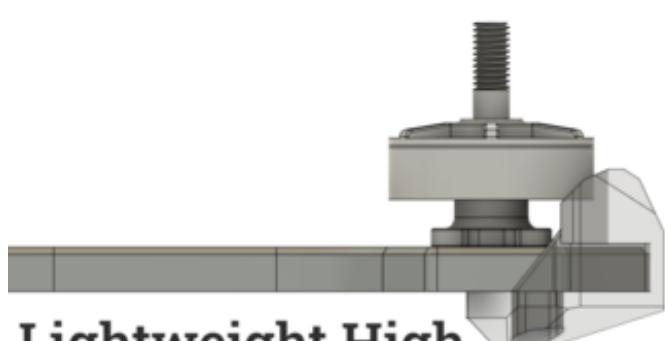
Standard

1pc : 6g
4pcs : 24g



Lightweight

1pc : 3,5g
4pcs : 14g



Lightweight High

1pc : 4,6g
4pcs : 18,4g

Front Bumper-FPV Camera Mount

1 screw per side, 2 screws per side, locked tilt solutions, you'll find everything you'll need.

Backpack

Backpacks are available with multiple options from SMA pigtail to GPS mount.

The cult of the Linear Antenna :

For this specific frame (and overall Bando Bashing) **we highly encourage the use of Linear/Whip antennas for maximum durability.**



You'll find in the files tab **Backpacks specifically designed for this type of antenna. Try it yourself !**

They are nothing more than a coaxial cable with its shield trimmed off to the 5.8Ghz wavelength. **With the right mount it's literally indestructible** and the video signal is, as surprising as it seems, pretty good !

You can get a bag of them on Aliexpress for a few euros, or **literally make yours** out of old antennas.

Low Profile TPU Kit

What does "Low Profile" means ?

If your gear allows it (on an Analog build for example), you can **lower the deck height** by reducing the standoff's length by 5mm going from 20 to 15mm.

This mod slightly **lowers the center of gravity** and **increases the rigidity** of the standoffs. It's also a great way to **flex on HD pilots** carrying a VTX bigger than their stack.



Shopping list :

For convenience reasons, Low Profile hardware **is not available for direct sale through our website**. We have, however, made a **shopping list** so that you can buy **all the required hardware** by yourself :

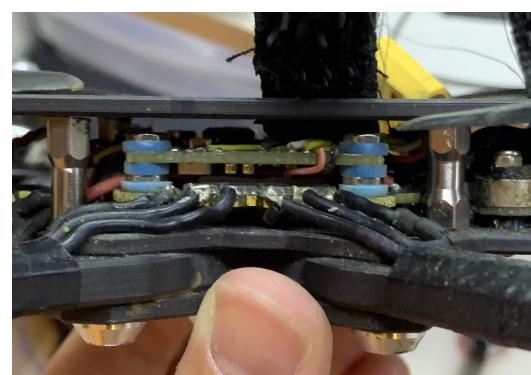
- **M3x16mm Countersunk Heads Stack screws** (original ones are 20mm and will be too long)
- **4x 15mm M3 Standoffs (rear)**, size is standard, you'll find some easily
- **4x 24mm M3 Standoffs (back)**, size isn't standard, if you don't own a CNC you might have to get 25mm ones and grind them yourself.
- **M3 Aluminum nuts** to adjust your stack height, you'll have to slam it to fit in the 15mm rear height
- **M3 Gummies** also to adjust your stack height

Slamming the stack :

Most consumer stacks are meant to fit in a 20mm-high deck (the standard Kayoudur height).

The trickiest part of the Low Profile mod is to **slam your stack to fit in a 15mm deck height**.

You'll need to **rework the way you stack** the Fc and the Escs with **nuts** and **gummies**, eventually **removing**



your esc shield, rotating the pcbs : some are easier than others but **every stack can be slammed**.

DJI O3

The DJI O3 had us to **rethink of solutions to fit a gigantic cam and a gigantic VTX** in a **super tight bando bashing frame** designed for Standard gear - but we did it !

Camera mount installation :

DJI O3 Camera is too large to fit between the front standoff and **Installation does require some additional hardware** :

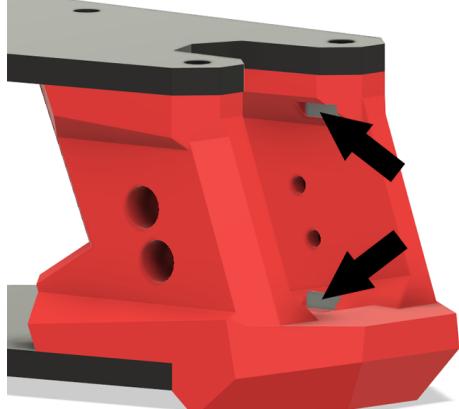


- **4xM3 Square nuts**

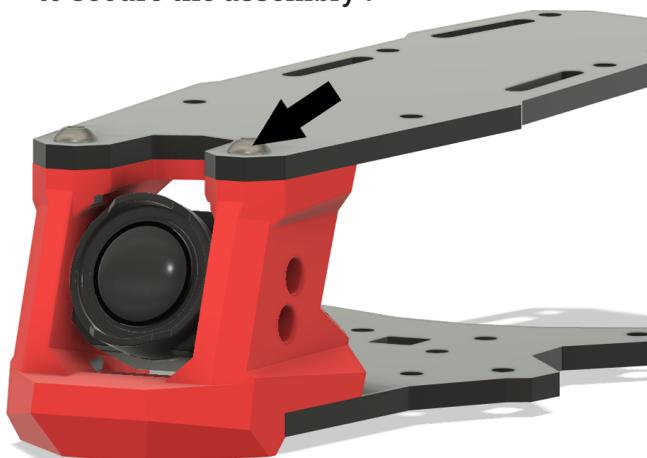
The print allows you to get rid of the standoffs and to secure the assembly with standard M3x8 Screws.

Print at 100% infill for maximum rigidity, you'll end up with **great camera protection** and **clear FOV**.

1 - Insert the 4xM3 Square nuts into their slots in the Print



2 - Add 4x standard M3x8 Screws to secure the assembly !



Model files



HD Camera mounts (GoPro etc)

8 files

kd-f_universal_mount.stl

Universal GoPro style Mount, not recommended for Freestyle flying but it's here if needed

kd-f_dji_osmo_action_3-4_30deg.stl

DJI Osmo Action 3/4 Mount, 30deg Tilt

kd-f_dji_osmo_action_2_30deg.stl

DJI Action 2 Mount, TBS ND Filter slot, 30deg Tilt

kd-f_hero_11_mini_25deg.stl

GoPro Hero 11 Mini Mount, 25deg Tilt

kd-f_hero_9-10-11-12_25deg.stl

GoPro Hero 9/10/11/12 Mount, TBS ND Filter Slot, 25deg Tilt

kd-f_hero_8_25deg.stl

GoPro Hero 8 Mount, TBS ND Filter Slot, 25deg Tilt

kd-f_hero_5-6-7_30deg.stl

GoPro Hero 5/6/7 Mount, 30deg Tilt

kd-f_lipo-guard.stl**GoPro Session Mounts**

5 files



kd-f_session_nd_tbs_30deg.stl

GoPro Hero Session 4/5 Mount, TBS ND Filter Slot, 30deg Tilt



kd-f_session_30deg.stl

GoPro Hero Session 4/5 Mount, 30deg Tilt



kd-f_session_bando_nd_tbs_30deg.stl

Bando Edition (Slight TPU in corners, but extreme protection) TBS ND Filter Slot, 30deg Tilt



kd-f_session_bando_30deg.stl

Bando Edition (Slight bit of TPU in the corners, but extreme protection), 30deg Tilt



kd-f_session_bando_30deg_no_strap.stl

Bando Edition (Slight bit of TPU in the corners, but extreme protection), 30deg Tilt, No strap



Arm Bumper

5 files



kd_arm_ultraheavy.stl

1pc : 10g, 4pcs : 40g



kd_arm_heavy.stl

1pc : 7,1g, 4pcs : 28,4g



kd_arm_standard.stl

1pc : 6g, 4pcs : 24g



kd_arm_lightweight.stl

1pc : 3,5g, 4pcs : 14g



kd_arm_lightweight_high.stl

1pc : 4,6g, 4pcs : 18,4g



Front Bumper-FPV Camera Mount

9 files



kd_bumper_standard.stl

The standard KD Camera Bumper. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_bumper_14mm.stl

Fits 14mm FPV Cameras (Nebula Pro Nano, Caddx Ant etc)



kd_bumper_locked25.stl

KD Camera Bumper with locked tilt. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_bumper_locked30.stl

KD Camera Bumper with locked tilt. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_bumper_locked45.stl

KD Camera Bumper with locked tilt. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_dji_cam_bumper_locked15.stl

KD Camera Bumper with locked tilt for the original DJI Air Unit v1 Camera (2 screws per side)



kd_dji_cam_bumper_locked20.stl

KD Camera Bumper with locked tilt for the original DJI Air Unit v1 Camera (2 screws per side)



kd_dji_cam_bumper_locked25.stl

KD Camera Bumper with locked tilt for the original DJI Air Unit v1 Camera (2 screws per side)



kd_dji_cam_bumper_locked30.stl

KD Camera Bumper with locked tilt for the original DJI Air Unit v1 Camera (2 screws per side)



Capacitor Mount

2 files



kd_cap_mount.stl

Standard 1000uF Capacitor Mount (sits behind the fpv cam)



kd_double_cap_mount.stl

One cap should be enough, but it's here.



Receiver Mount

1 file



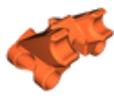
2020-rx-mount.stl

Universal 20x20 Receiver mount, fits ELRS EP1, Crossfire Nano RC etc.



Backpack

5 files



kd-f_backpack_standard.stl

The OG Kayoudur Backpack, for CRSF Immortal T Antenna and SMA Pigtail



kd_backpack_lineaire.stl

Fits a Linear (Whip) VTX Antenna and an ELRS T-Style Antenna



kd_backpack_lineaire_long.stl

Fits a long Linear (Whip) VTX Antenna and an ELRS T-Style Antenna



kd-f_backpack_gps.stl

Don't put a GPS on a KD please. But still it's there for some reason.



kd-f_rear_wingstl.stl

Should this be considered as a Backpack ?



Low Profile TPU Kit

7 files



kd_lp_bumper_19mm.stl

Low Profile Standard front Bumper/FPV Camera Mount



kd_lp_bumper_locked25.stl

LP Camera Bumper with locked tilt. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_lp_bumper_locked30.stl

LP Camera Bumper with locked tilt. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_lp_bumper_locked45.stl

LP Camera Bumper with locked tilt. Fits 19mm FPV Cameras (Caddx Ratel, Nebula Pro, etc)



kd_lp_backpack.stl

Low Profile Backpack, fits a Linear (Whip) VTX Antenna and an ELRS T-Style Antenna



kd_lp_backpack_lineaire_long.stl

Low Profile Backpack, fits a Long Linear (Whip) VTX Antenna and an ELRS T-Style Antenna



kd-f_lp_capa.stl

Low Profile Capacitor Mount. Had to mount it horizontally otherwise it wouldn't fit.



DJI O3

6 files



kd_o3_15deg.stl

DJI O3 Camera Mount. Needs 4xM3 Square nuts, check Description for instructions.



kd_o3_20deg.stl

DJI O3 Camera Mount. Needs 4xM3 Square nuts, check Description for instructions.



kd_o3_25deg.stl

DJI O3 Camera Mount. Needs 4xM3 Square nuts, check Description for instructions.



kd_o3_30deg.stl

DJI O3 Camera Mount. Needs 4xM3 Square nuts, check Description for instructions.

**kd-f_o3_base.stl** DJI O3 Air Unit Mount**kd-f_o3_antenna.stl** DJI O3 Air Unit stock Antenna Mount**Walksnail Avatar Pro Dual (v3)**

3 files

**kd-f_walksnail_v3_mount.stl****kd-f_walksnail_v3_backpack_crsf.stl** stock Antenna + Immortal T Mount**kd-f_walksnail_v3_backpack_elrs.stl** stock Antenna + ELRS T Antenna Mount**Walksnail Avatar HD VTX V2**

4 files

**kd-f_ws_v2_bracket_1.stl****kd-f_ws_v2_bracket_2.stl**



kd-f_ws_v2_backpack_crsf.stl

stock Antenna + Immortal T Mount



kd-f_ws_v2_backpack_elrs.stl

stock Antenna + ELRS T Antenna Mount

Other files

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