



## Lilygo T-Deck TD1 Case by Alley Cat



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### Summary

I made an enclosure for the Lilygo T-Deck. Videos in description. **READ ALL OF THE DESCRIPTION!**

[Hobby & Makers](#) > [Electronics](#)

Tags: [case](#) [lora](#) [lilygo](#) [cyberdeck](#) [meshtastic](#) [tdeck](#)  
[alleychat](#)

# ALLEY CAT TD1 LILYGO T-DECK CASES BY ALLEY CAT



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## Suggested Print Settings:

Material: **PLA+** or **PETG**  
Nozzle: **0.4mm**  
Extrusion Width **0.4mm**  
Layer Height: **0.2mm**  
Perimeters: **3**  
Infill: **20%**

Top/Bottom Layers: **5**  
Support Material: **None**

### **3D Printing Disclaimer:**

Thank you for downloading my CAD design! I want to assure you that extensive testing and iteration went into creating this design. However, please keep in mind that 3D printing involves a wide range of variables, including different types of filament, printer settings, and calibration levels. These factors can significantly impact the final print.

Before concluding that the design is flawed, I encourage you to:

- **Check your printer calibration:** Ensure your printer is properly calibrated.
- **Adjust print settings:** Try changing the print settings to achieve better results.
- **Resize the model:** Scaling the model up or down slightly may resolve fit issues.

If you encounter any issues or need assistance, please feel free to reach out to me. I am here to help and can provide guidance to achieve the best results. Claiming a design is bad without considering these variables does a disservice to the community and may discourage others from trying a design that could work perfectly with minor adjustments.

Thank you for your understanding and cooperation. Happy printing!

### **Description:**

Custom case for the Lilygo T-Deck. Very close tolerances, so you should clean up all the edges really well, **and don't force it, if it's too tight, print it slightly larger so you don't break your T-Deck and then try to blame me!** Only requires 2 M3x8 bolts and nuts. Maximum battery size with the standard front and back is 126090, but you can design different back covers to fit something bigger with the STEP file I have included in the Back folder. To use a thinner battery it would be a good idea to secure it so it doesn't wobble around.

Battery I used for the Slim Front with S Back: **5000mAh 706090**

Battery I used for the Standard Front with S Back: **8000mAh 126090**

## What are all these options?

### FRONT

**Standard Front:** Fits the stock speaker and a battery up to 12mm thick using the S back or 23mm thick with the X back.

**Slim Front:** Doesn't have a space for the stock speaker but you can get a 10mm x 3mm speaker that can fit in a slot at the top. Accepts a battery up to 7mm thick with the S back or 18mm with the X back.

**Nuts:** Uses M3x2.4mm nuts and M3x8mm screws to hold the back on.

**Inserts:** Uses [M3x5mm heat set inserts](#) and M3x8mm screws to hold the back on. Alternative insert options: [this](#) or [this](#).

**TBall:** Has a cover over the center section between the keyboard and screen with an opening for the track ball.

**GPS:** Has a space for an [optional switch](#) to disconnect power to the GPS if desired.

**Grove:** Exposes the grove connector so you can access it externally.

### BACK

**S:** This is the default back cover that works best with the lipo batteries I linked above.

**X:** This is a bigger back cover to fit thicker lipos or cell packs.

**Plus 3:** This back is even bigger and should be able to fit 18650 and possibly 21700 battery holders.

**Inside Cat:** Has the cat logo only on the inside if you want a more discrete look or you don't like cats.

**Outside Cat:** The cat is on the outside so you can show off my really cool logo.

**Custom:** This is the STEP file for the S back cover so you can make any custom back you want, if you share it, please remember to follow the CC license.

### PARTS

**Switch:** This is the power switch, it should press in snugly and not fall out but still be able to slide smoothly.

**Antenna Plug:** Optional to cover the antenna hole if you use an internal antenna.

**Reset Button:** Optional if you need to access the reset button regularly, most likely only developers need this.

## HOLSTER

**Nuts:** Designed to use a [Baofeng UV5R clip](#) or [generic equivalent](#) and M2.5x5mm screws with M2.5 nuts.

**Inserts:** Designed to use a [Baofeng UV5R clip](#) or [generic equivalent](#) and M2.5x5mm screws with [M2.5 heat set inserts](#).

**Cover:** If you don't want a belt clip, just a cover to protect the display and keyboard, this is what you want.

## Recommended GPS Modules

[M10 Mini Amazon](#)

[M10 Mini Aliexpress](#)

[Mini M100 Amazon](#)

[Mini M100 Aliexpress](#)

## Videos:

## Model files

 **Front** 18 files

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 **alley-chat-td1-slim-front-nuts.stl**  
 Uses M3x2.4mm nuts.

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 **alley-chat-td1-slim-front-inserts.stl**  
 4.5mm hole for M3 heat set inserts.

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**alley-chat-td1-slim-front-tball-nuts.stl**



**alley-chat-td1-slim-front-tball-inserts.stl**



**alley-chat-td1-standard-front-nuts.stl**

Uses M3x2.4mm nuts.



**alley-chat-td1-standard-front-inserts.stl**

4.5mm hole for M3 heat set inserts.



**alley-chat-td1-standard-front-tball-nuts.stl**



**alley-chat-td1-standard-front-tball-inserts.stl**



**alley-chat-td1-standard-front-gps-nuts.stl**

Moved the GPS switch to allow the grove to stay.



**alley-chat-td1-standard-front-gps-inserts.stl**

Moved the GPS switch to allow the grove to stay.



**alley-chat-td1-standard-front-tball-gps-nuts.stl**



**alley-chat-td1-standard-front-tball-gps-inserts.stl**



### **alley-chat-td1-standard-front-grove-nuts.stl**

Opened the grove connector.



### **alley-chat-td1-standard-front-grove-inserts.stl**

Opened the grove connector.



### **alley-chat-td1-standard-front-gps-grove-nuts.stl**

Moved the GPS switch and opened the grove connector.



### **alley-chat-td1-standard-front-gps-grove-inserts.stl**

Moved the GPS switch and opened the grove connector.



### **alley-chat-td1-standard-front-tball-gps-grove-nuts.stl**



### **alley-chat-td1-standard-front-tball-gps-grove-inser... .stl**



**Back**

7 files



### **alley-chat-td1-s-inside-cat-edition.stl**



### **alley-chat-td1-s-outside-cat-edition.stl**



**alley-chat-td1-x-back-inside-cat-edition.stl**



**alley-chat-td1-x-back-outside-cat-edition.stl**



**alley-chat-td1-x-back-plus-3-inside-cat-edition.stl**

I don't know why, but someone wanted an even fatter back...



**alley-chat-td1-x-back-plus-3-outside-cat-edition.stl**

I don't know why, but someone wanted an even fatter back...

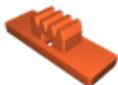
**alley-cat-tdeck-back-cover-custom.step**

Use this to make a custom back. Attribution is still required!



**Parts**

4 files



**alley-chat-td1-switch.stl**



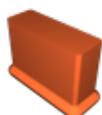
**alley-chat-td1-s-antenna-plug.stl**

To use internal antenna with the S case.



**alley-chat-td1-x-antenna-plug.stl**

To use internal antenna with the X case.



**alley-chat-td1-reset-button.stl**

Super tiny and hard to print, if you aren't a dev you don't need it.



Holster

6 files



**alley-chat-td-slim-cover.stl**



**alley-chat-td-slim-holster-nuts.stl**



**alley-chat-td-slim-holster-inserts.stl**



**alley-chat-td-standard-cover.stl**



**alley-chat-td-standard-holster-nuts.stl**



**alley-chat-td-standard-holster-inserts.stl**

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