Lilygo T-Deck TD1 Case

Alley Cat

VIEW IN BROWSER

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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 meshcore

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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. Especially filament shrinkage.

• **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.

Remember, these are development boards and sometimes have very fragile parts. 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 fits 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.

Lilygo TDeck

Battery I used for the Slim Front with S Back: 5000mAh 706090 If the linked lipo is unavailable just search 706090. 806090 and 906090 should also fit perfectly.

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

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 M2.5x4mm OD 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:

https://www.youtube.com/watch?v=8v1In7KFaKkhttps://www.youtube.com/watch?v=sNMCQYCeJcU

Model files

Front 18 files

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

☐ Uses M3x2.4mm nuts.

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

☐ 4.5mm hole for M3 heat set inserts.

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

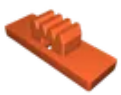
I don't know why, but someone wanted an even fatter back...

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

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

Parts

4 files



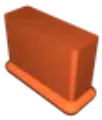
alley-chat-td1-switch.stl

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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