

WANT TO  
TEXT FRIENDS  
AND NEIGHBORS  
**FOR FREE**  
ON AN ENCRYPTED  
NETWORK WE MAKE  
**TOGETHER?**



WE BUILD IT TOGETHER  
WE OWN IT TOGETHER

# MESH TASTIC



TEXT FRIENDS  
ON A NETWORK  
WE BUILD TOGETHER

*Marie LeBlanc Flanagan*

## WHAT IS A MESH TASTIC MESH?

- RUN BY US** AN OPEN-SOURCE MESH NETWORK
- BELONGS TO US!**
- TEXT ONLY** FOR SENDING ENCRYPTED TEXT MESSAGES
- PRIVATE ISH**
- RADIO IS ETERNAL** USING LOW-POWER LONG-RANGE RADIO WAVES
- CAN USE SOLAR**
- 100+ MILES**
- EVERYONE NEEDS A POCKET-SIZED DEVICE** TO SEND, RECEIVE & PASS ON MESSAGES
- THAT CAN BE USED WITH OR WITHOUT A PHONE**

## GET A DEVICE AKA 'NODE'

- LILYGO T-DECK PLUS**  
BUILT-IN SCREEN & KEYBOARD  
NO PHONE NEEDED!  
\$71 USD
- SEED T1000-E**  
\$40 USD
- ELECROW THINKNODE M1**  
BUILT-IN SCREEN  
\$54 USD
- RAK WISMESH TAG**  
\$39 USD

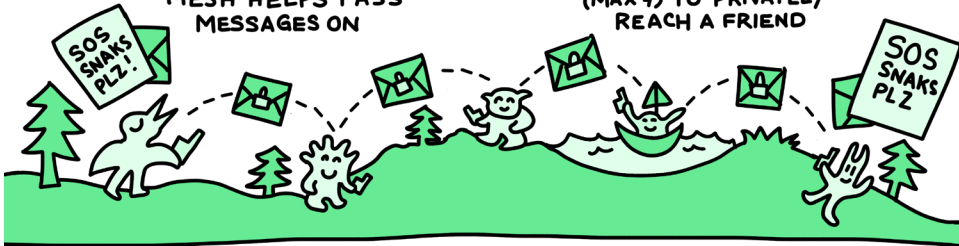
YOU CAN ALSO 3D PRINT A CASE, GET A BATTERY, AND USE A LILYGO T-BEAM OR HELTEC LORA 32 V3 (\$25)

- 2.60" + CASE
- 3.94" + CASE

## MESSAGES 'HOP' TO GO FAR

EVERYONE ON THE MESH HELPS PASS MESSAGES ON

MESSAGES CAN 'HOP' 3X (MAX 7) TO PRIVATELY REACH A FRIEND



## HOW FAR IS A HOP?

IT DEPENDS! RADIO WAVES CAN BE BLOCKED BY HILLS, BUILDINGS & TREES

**TINY HOP**  
  
URBAN  
3-1.5 MILES  
DENSE CITY

**WEE HOP**  
  
SUBURBAN  
1-3 MILES  
HOUSES+TREES

**BIG HOP**  
  
RURAL/OPEN  
3-10 MILES  
FIELDS+TREES

**HOOOOOP**  
  
ELEVATION  
200+ MILES  
MOUNTAIN TOPS

## WHAT'S INSIDE

- BRAIN:** A TINY COMPUTER OR MICROCONTROLLER (ESP32 OR NRF52) RUNS EVERYTHING
- ANTENNA:** MAKES RADIO WAVES GO THE DISTANCE
- RADIO:** SPECIAL LONG RANGE RADIO SENDS THE MESSAGES THROUGH THE AIR
- POWER:** A SMALL BATTERY KEEPS IT GOING FOR DAYS OR WEEKS (USB OR SOLAR-POWERED)

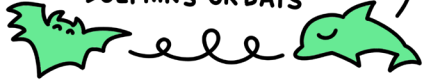
## CATCH?

- LONELY:** NOT MANY PEOPLE ARE USING MESH TASTIC YET. YOU WILL HELP CHANGE THIS!
- PRIVACY:** LOCATION IS ON BY DEFAULT, ADJUST THE CHANNEL SETTINGS
- BUGGY:** IT'S NEW TECH (2020) SO THERE ARE SOME BUGS.

**BOTTOM LINE** MESH TASTIC IS FOR LOCAL TEXTING, HIKING, INTERNET SHUTDOWNS, DISASTERS & EVADING TECH GIANTS. IT'S NOT FOR CROSS COUNTRY CHATS

# WHY RADIO?

MESHTASTIC USES LORA (LONG RANGE RADIO) BECAUSE IT GOES FAR ON VERY LITTLE POWER, USING CHIRPS LIKE DOLPHINS OR BATS



LORA USES LICENSE-FREE SUB-GHZ RADIO, MAKING THIS DO-IT-TOGETHER & PUNK COMMUNICATION POSSIBLE!



## MESHTASTIC REGIONS

- ➔ EUROPE: 868 MHZ
- ➔ AMERICAS/TURTLE ISLAND: 915 MHZ
- ➔ ASIA-PACIFIC: 921-923 MHZ

# WHAT IS MESHTASTIC?

MESHTASTIC IS A WAY TO TEXT LOCAL FRIENDS & NEIGHBORS

NO WIFI OR CELL SIGNAL NEEDED!



# WHAT'S A MESH NETWORK?

THERE ARE MANY KINDS OF MESHES!

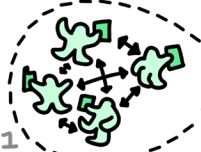
A MESH IS A WAY TO SEND DATA



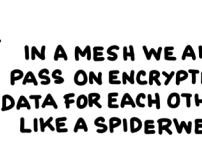
USING PHONES OR COMPUTERS



RATHER THAN SENDING DATA THROUGH A CENTRALIZED PATH



GIMME YOUR DATA



IN A MESH WE ALL PASS ON ENCRYPTED DATA FOR EACH OTHER, LIKE A SPIDERWEB



THE MESH ISN'T JUST FOR PEOPLE SCIENTISTS USE IT TO NETWORK PLANTS AND ANIMALS TOO

IN THE FUTURE WHAT COULD WE MESH?



FRIENDS, NEIGHBORS, HIKERS, TINKERS:  
**WELCOME TO THE MESH!**

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# HOW TO GET ON THE MESH

- 1 BUY OR BUILD A LORA DEVICE
- 2 ADD THE FIRMWARE: DOWNLOAD AT [FLASHER.MESHTASTIC.ORG](http://FLASHER.MESHTASTIC.ORG)
- 3 GET THE APP: ANDROID, IPHONE, OR WEB AT [MESHTASTIC.ORG](http://MESHTASTIC.ORG)
- 4 CONNECT: TURN ON BLUETOOTH; TAP+ IN THE APP; SET YOUR REGION; AND NAME YOUR DEVICE
- 5 START MESSAGING: FIND YOUR FRIENDS (OR WRITE NEW FRIENDS)

WANT TO BE A MESH HERO? INSTALL EXTRA RELAY DEVICES UP HIGH TO HELP EVERYONE'S MESSAGES GO FARTHER

# WHY MESH?

- 💰 IT'S FREE TO TEXT: NO FEES OR SUBSCRIPTION COSTS.
- 🏔️ WORKS ON HIKES AND OUTDOOR ADVENTURES!
- 👁️ PRIVATE & ENCRYPTED, NO TECH GIANTS CREEPING ON YOU
- 🔄 OPEN-SOURCE, EVERYONE CAN PLAY WITH IT
- 👾 WORKS IN STORMS, OUTAGES DISASTERS & SHUTDOWNS
- 📶 NO CELL SERVICE OR WIFI NEEDED AT ALL!
- 👋 DIRECT MESSAGES, PUBLIC CHATS & PRIVATE GROUPS
- 📱 IT'S FUN! FEELS LIKE EARLY INTERNET MESSAGE BOARDS



# WHAT'S THE



KEEP IT SHORT: 200 CHARACTERS MAX. BUT SEND AS MANY MSGS AS YOU WANT, IT'S FREE. LINKS & EMOJI WORK TOO!



KEEP IT LOCAL: RADIO WAVES CAN GET BLOCKED BY BUILDINGS, TREES & BARRIERS. RANGE MATTERS.



DECENTRALIZED & ENCRYPTED MEANS ANYONE CAN SEND ANY MSGS THROUGH YOU, EVEN ONES YOU DON'T LIKE.

# A DEVICE (NODE)?

CONNECT USING THE APP ON YOUR PHONE

OR GET A DEVICE WITH A SCREEN & KEYBOARD, THEN NO PHONE NEEDED!

