The Tula Mic
User's Manual







# Possibly the only mic you'll ever need.

The Tula Mic is the first fully portable USB microphone that also doubles as a mobile recorder, featuring a nostalgic yet modern design, cutting-edge onboard noise reduction and high-quality audio.

Whether you're a podcaster, musician, YouTuber, work from home professional or just somebody who loves great audio, the Tula Mic was designed with you in mind.

## <u>Impressive Inside and Out</u>

- Ultra-fast USB-C technology
- Dedicated UNI and OMNI capsules
- Burr Brown op amps for superior audio quality
- Advanced noise reduction from Klevgrand

## <u>Ultra Portable</u>

- 8GB of internal memory
- Up to 14 hours of continuous recording per charge
- 3.5mm headphone jack

## <u>Dimensions</u>

- Length: 98mm

- Width: 63mm

- Height: 25mm

- Weight: 160g

## Premium Design

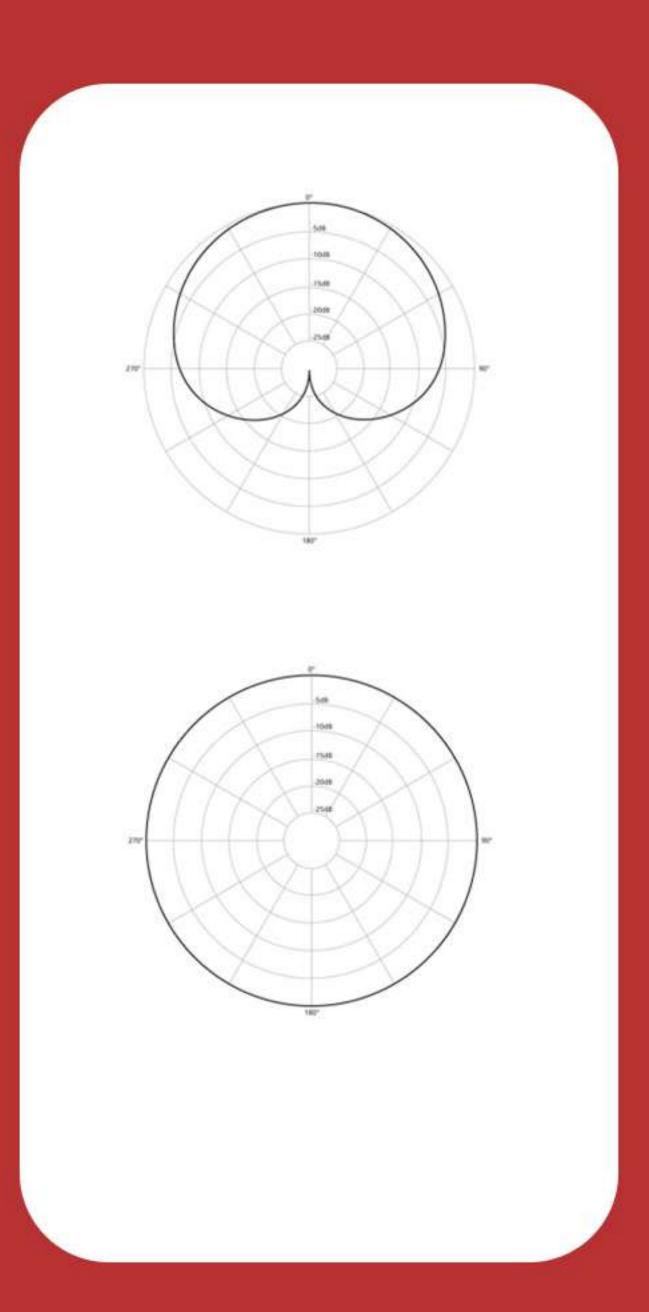
- Modern yet nostalgic design from Red Dot Award-winning design firm
- Available in Cream, Black, Red and Sea Foam
- Entirely snapped and screwed together for easy repair and EOL recycling



## TECH OVERVIEW

The Tula Mic features dedicated cardioid and omnidirectional ECM capsules, Burr Brown op amps, a TI audio codec and a 3.5mm jack that functions as both a headphone output and an input for a lavalier (clip on) microphone.





The Tula Mic features both a cardioid and an omni capsule.

Cardioid (unidirectional) is the most common directional polar pattern, with the highest sensitivity to sound coming in from directly in front of the microphone capsule (0°), practically no sensitivity to sound coming directly from behind (180°), and reduced sensitivity to sound coming in from the sides (90°/270°).

Omnidirectional (omni) is a polar pattern which closely approximates a circle, picking up audio equally well from all directions. Imagine a group of people sitting around a table. If the omnidirectional microphone is placed in the middle of the table, the microphone will pick up the sound equally from all directions.

ADVANCED NOISE REDUCTION SOFTWARE BY

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# What should I expect when I use the NC button to enable Klevgrand Brusfri noise reduction?

Noise reduction technology is a tricky business. The only way to get true background noise cancellation without a lot of unpleasant artifacts is to use an advanced AI system that recognizes the target audio and removes the rest. Fitting that onto a processor like the one used in the Tula would be like an elephant trying to ride a skateboard. So we searched far and wide to locate a system that could be optimized to fit on our processor, would provide some useful noise reduction AND wouldn't affect the audio in a negative way. The best solution we found was a program called Brusfri created by the Swedish software company, Klevgrand. Brusfri won't remove your screaming kids or other loud background noises. But it will take a normal sounding room and make it sound like a well-treated recording studio. And that's an extremely useful tool for both content creators and work from home professionals.

# Modern Design with a Hint of Nostalgia

The Tula was designed in conjunction with Red Dot Award-winning industrial designers in Barcelona. It's a thoroughly modern device featuring cutting-edge audio technology, yet its soft curves and solid build quality reference a bygone era.

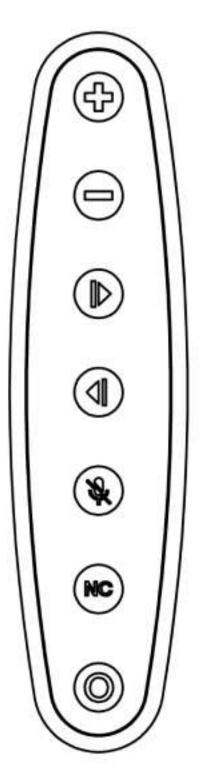
## Sustainability / Longevity

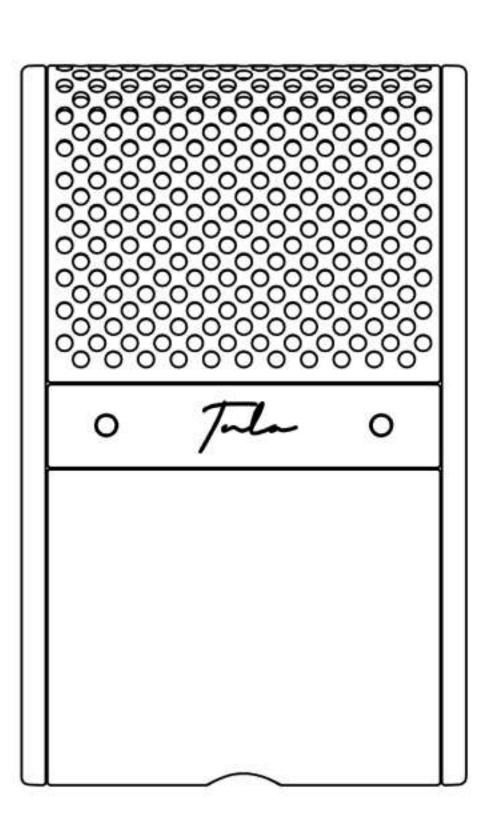
The Tula Mic was designed with longevity and sustainability in mind. Its stamped steel, nickel plated zinc, silicone and plastic parts are entirely snapped and screwed together allowing for easy repair and end-of-life recycling. The Tula Mic's packaging is minimal and made entirely out of cardboard and paper.

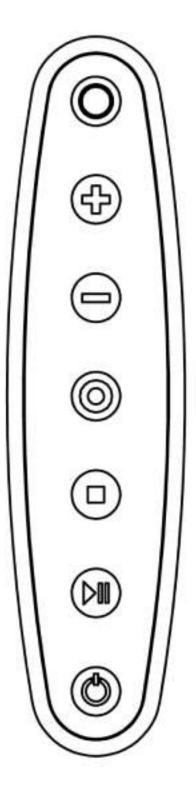


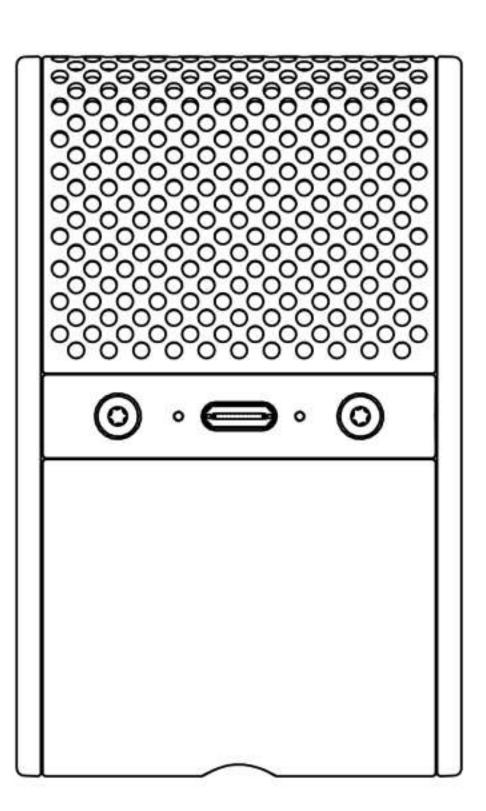
## **HOW TO USE YOUR TULA**

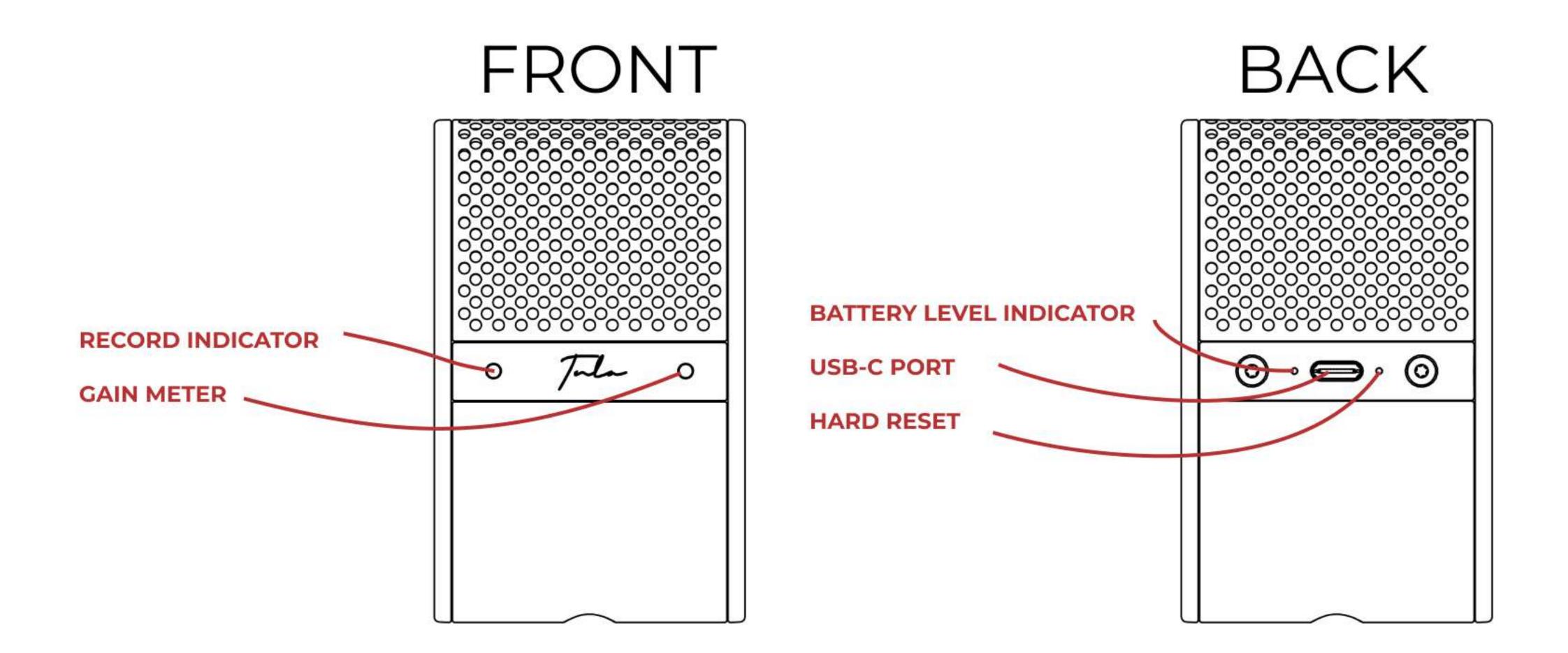
## FAQs

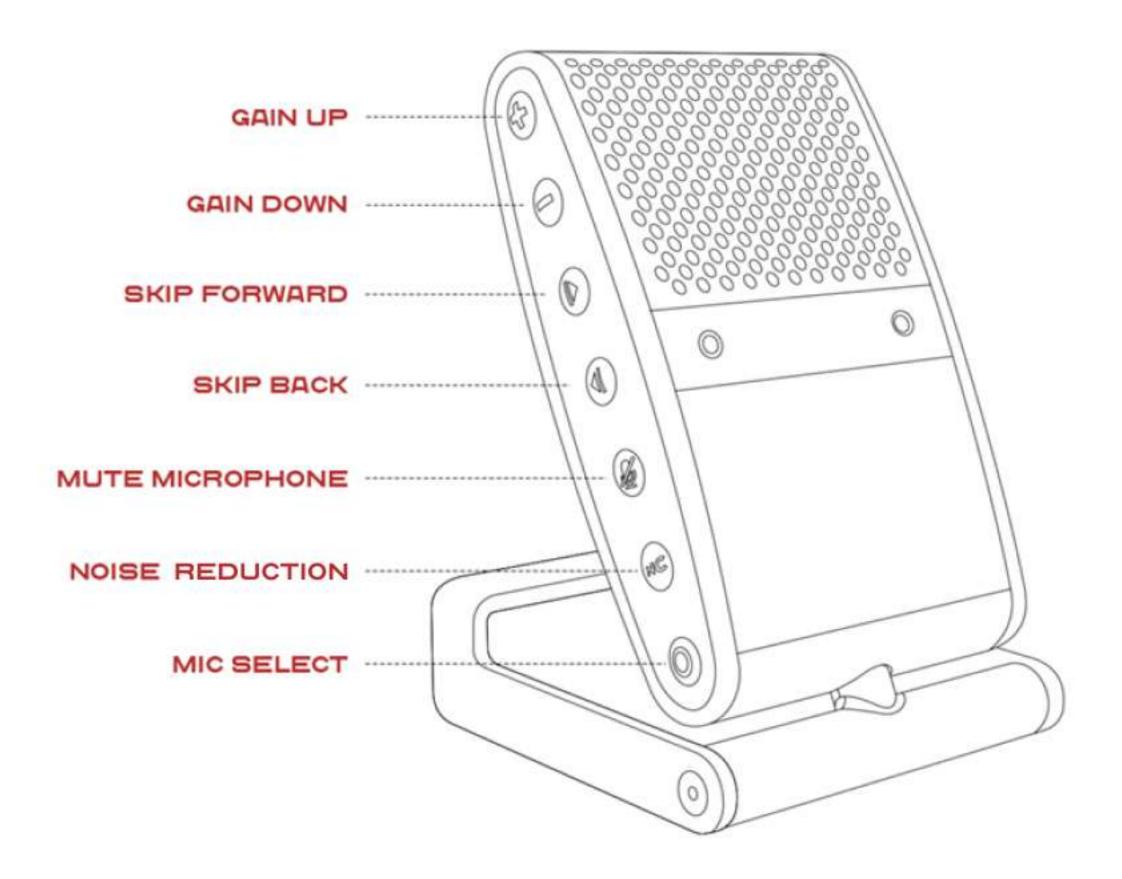












## **FUNCTION BUTTONS (L)**

#### **GAIN UP**

Each click increases the gain in 5dB increments for the microphone that is in use.

#### **GAIN DOWN**

Each click decreases the gain in 5dB increments for the microphone that is in use.

#### SKIP FORWARD

- A short press skips to the next track.
- A long press fast-forwards within the current track.

#### SKIP BACK

- A single click skips to the previous track when listening to tracks recorded on the Tula.
- A long press rewinds within the current track.

#### **MUTE MICROPHONE**

Short press to mute the audio. Short press again to unmute. This will not stop an ongoing recording. NOTE: With the 2.4.5 firmware update, a long press of the MUTE button allows the mic audio to be turned on or off when monitoring with headphones.

## **NOISE REDUCTION (Klevgrand noise reduction)**

- A long press enables noise reduction (LED on) NOTE- Don't speak or make sound during long press so that Brusfri can learn what is background noise.
- A short press turns noise reduction off (LED off). NC can be enabled and disabled at will while using the Tula in USB mode.

NC CANNOT be turned on or off during active mobile recording. NOTE- The Tula saves both a noise reduced file and a raw file when using NC in mobile record mode.

#### MIC SELECT

- When the LED is off, the Tula is in its default UNI mode. This is the best choice when recording sources in front of the Tula. (podcasts, Zoom calls etc)
- A short press will switch the Tula to OMNI mode and illuminate the LED. This is often best for when you want to record an entire room or 360 degree outdoor environment.
- A long press will activate the LAV mic input (via the 3.5mm jack) and cause the LED to flash on and off.

## **FUNCTION BUTTONS (R)**

#### **VOLUME UP**

Each click will increase the output volume from the 3.5mm jack by 5dB

#### **VOLUME DOWN**

Each click will decrease the output volume from the 3.5mm jack by 5dB

### **RECORD** (and pause record)

- Pressing once will will begin a mobile recording (LED on).
- Pressing again will pause the recording (LED flashing).
- Pressing a third time will resume the same recording (LED on).

#### STOP

- Pressing while mobile recording will end the recording.
- Pressing during playback will stop the playback and return to the beginning of the current track.
- Pressing stop AGAIN will take you to the beginning of the last recorded track.

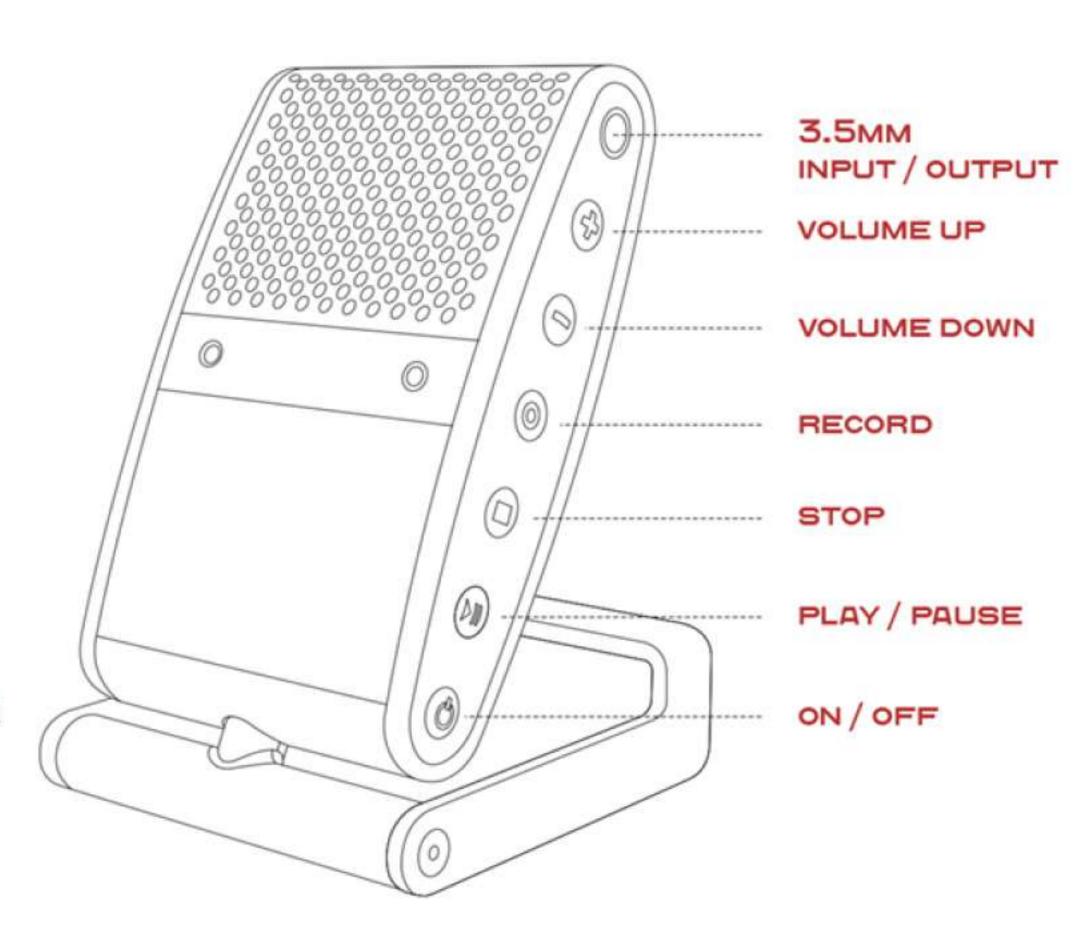
#### PLAY/PAUSE

- Pressing once will play the last track recorded (LED on).
- Pressing during playback will pause playback (LED flashing).
- Pressing while paused will cause the LED to be solid again and will resume playback from the same place.

NOTE - You must be listening to a track in order to use the SKIP buttons to locate other tracks.

## ON/OFF

Short press to turn the Tula on and off.



## **USB MODE**

### How do I use my Tula as a USB microphone?

To use your Tula as a USB microphone follow these simple steps:

- 1) Connect the Tula to your computer using the provided USB-C to USB-A cable. If your computer only has USB-C inputs, you'll need to use a USB C to USB C cable (not included). Your Tula will automatically turn on when plugged into your computer.
- 2) Open your computer`s settings and select the Tula as your audio input.
- 3) Select your desired mic source. UNI (used in most cases) is the Tula's default mic source.

To select OMNI, short press the MIC SELECT button so that the LED is solidly illuminated.

To use the Tula with a LAV mic (sold separately), long press the MIC SELECT button for 3 seconds so that the LED is flashing.

4) Adjust the gain using the + and – buttons on the upper left side of the Tula so that the GAIN METER LED is flashing mostly green and never red. For more details see the **GAIN** section below.

To use the Tula with an iOS or Android device, refer to the section below entitled CONNECTING TO iOS and ANDROID DEVICES.



## MOBILE RECORD MODE

#### How do I use my Tula as a mobile recorder?

To use your Tula as a mobile recorder follow these simple steps:

- 1) Turn on your Tula by pressing the ON/OFF button (lower right) so that the LED is illuminated.
- 2) Select your desired mic source UNI (used in most cases), is the Tula`s default mic source. To select OMNI, short press the MIC SELECT button, so that the LED is solidly illuminated. To use the Tula with a LAV mic, long press the MIC SELECT button for 3 seconds so that the LED is flashing.
- 3) Press the RECORD button so that the LED is solidly illuminated.
- 4) Adjust the gain using the + and buttons on the upper left side of the Tula so that the GAIN METER LED is flashing mostly green and never red. For more details see the GAIN section below.
- 5) To PAUSE a recording, press the RECORD button again. The LED will be flashing while the recording is paused. To continue recording, simply press the RECORD button again.
- 6) To end a recording, press the STOP button.
- 7) To listen to your recording using headphones, use the function keys as described in the FUNCTION KEYS section. NOTE-The Tula does not have an on-board speaker.

To navigate between tracks on the Tula refer to the SKIPPING BETWEEN TRACKS IN PLAYBACK section.

To listen to your recordings on your computer, open the Tula as a drive and you will see them listed in order.



## <u>MEMORY</u>

### How much recording time will I get with Tula's internal memory?

The Tula can record up to 12 hours in high-quality wav format using its internal memory.

To free up memory, simply delete recordings (as you would with any other external drive) once they've been transferred to your computer.

## **GAIN LEVEL**

#### How do I know if I'm too loud or not loud enough?

The Tula uses the right front LED as a GAIN METER. A good level should be flashing GREEN along with the audio source. Flickers of YELLOW signify that the gain should be turned down. Flashing RED indicates that the gain is too high and the sound is distorted. In that case, simply lower the gain by clicking the GAIN DOWN button until the LED is flashing GREEN when there is sound.

If there is almost NO LIGHT at all showing on the GAIN METER LED, this indicates that the gain is too low. To correct this, click the GAIN UP button a few times until there is a good amount of GREEN light flashing when there is audio present.

## **BATTERY**

The Tula Mic features a 3.7V 700 mAh lithium ion battery. The Tula provides up to 12 hours of continuous recording per charge.

#### How can I check the battery level of my Tula?

The BATTERY LEVEL INDICATOR LED on the rear of the Tula lights up for 5 seconds upon turning it on and stays lit while charging. A GREEN light indicates full charge. A YELLOW light indicates low charge and a RED light indicates that the battery is empty and the Tula must be charged.

#### How do I charge my Tula?

Charge your Tula using the included USB C cable to either connect to a computer or to any standard wall socket adapter for your region.

#### How do I know when the battery runs out?

When the battery is completely empty, the GAIN METER LED will begin flashing GREEN in a rapid and regular pattern. This indicates that the Tula must be charged immediately. The Tula will save your current recording before powering off. If you attempt to turn the Tula on when the battery is depleted, the GAIN METER LED will flash green for a few seconds and the Tula will power off again.

## How long will the battery last?

This varies according to many factors, but, in general, your Tula should last for about 10 hours of continuous use while using noise reduction and up to 12 hours of normal recording without noise reduction.

## **CONNECTING TO COMPUTERS**

#### How do I connect my Tula to a computer?

Simply plug the USB-C end of the included cable into the Tula and the USB- A end into your computer. The Tula will connect automatically.

NOTE - computers that only have USB-C ports will require a USB-C to USB-C cable (not included).

Open preferences on your computer and choose the Tula as your audio input (and your audio output if you want to monitor via the Tula's headphone jack).

## CONNECTING TO IOS AND ANDROID DEVICES

## Can I use the Tula with my iPhone, iPad or Android phone or tablet?

Yes!

With an iOS device, use an Apple-approved adapter with an MFI chip such as Apple's Camera Adapter. iOS devices with a USB-C ports such as the iPad Pro don't require a camera connector.

With an Android device, use any cable or adapter that will connect to a USB-C.

The Tula will automatically be chosen as your default audio input AND output so monitoring will have to be done via the 3.5mm headphone jack.

## LATENCY FREE MONITORING IN DAW

#### Can I use my Tula to do overdubs in my DAW?

Yes! Your Tula can be used as both an input and output in your DAW and you can have latency free monitoring by using headphones that are plugged into the Tula's 3.5mm headphone jack. We recommend that you mute the track you are using to record so that you won't hear two different sources of the audio at once. NOTE- Please install the latest firmware for best results (available on our website)

#### How do I transfer files from my Tula to my computer?

When you connect your Tula to your computer, it will show up as a drive. When you open the drive, you'll see a list of wav files. You can simply copy them onto your computer the same way you would from any external drive.

#### How are the files named?

Each file that you record will be given the name TULA and number, e.g. TULA0001.WAV

If you have recorded a track using Klevgrand's Brusfri noise reduction (NC button), then two separate files will be saved, one in the format shown above and another which has the same number but is followed by the word BRUSFRI, e.g.

TULA0001-BRUSFRI.WAV

This way, you will have both the raw track and the track with noise reduction in case you decide after recording that you prefer the raw version over the NC version.

## Can I rename my recordings?

Yes. Once you have transferred your recordings to your PC, you can rename them.

NOTE: If you rename your files while they are still on your Tula, you won't be able to listen back to them using the Tula.

## LAVALIER MICROPHONE

#### How can I use a lavalier microphone with my Tula?

You can use any TRRS lavalier microphone with the Tula. Simply plug it into the 3.5mm jack and select LAV mode by long pressing the MIC SELECT button (bottom left) until the LED begins flashing. Adjust the gain in the same way as always, using the + and – buttons on the upper left side of the Tula so that the GAIN METER LED is flashing green, and not yellow or red.

To return the Tula to its default UNI mode, short press the MIC SELECT button so that the LED is off.

## THE STAND

## How can I attach and detach my Tula flip stand?

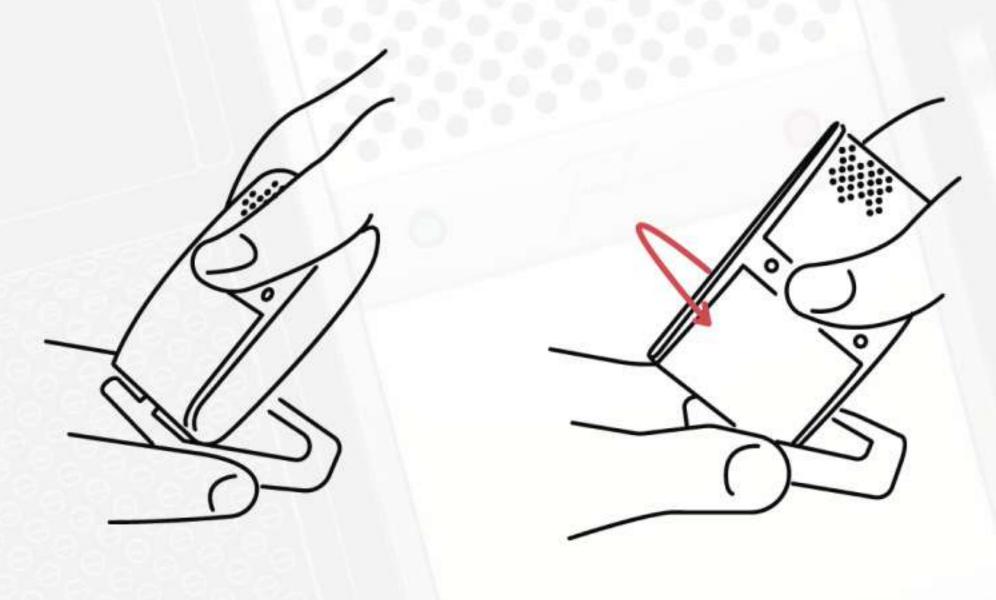
The Tula features a proprietary ¼ turn mechanism for its flip stand. Please note that the shape of the stand pin and the intake socket on the bottom of the Tula mic are not symmetrical.

This is to prevent the Tula from being attached in the wrong position. The post can only be inserted in one orientation. Once it is inserted, simply turn the Tula one ¼ turn clockwise to attach it to the stand. Likewise, to detach it, simply turn the Tula ¼ turn counter- clockwise and gently pull the stand away. The Tula can only be attached and detached when the flip stand is in its fully open position. When open, the stand is designed to sit at the perfect angle for use on a desk or table (117 degrees)

## THE ADAPTER

#### How can I use my Tula with other mic stands and arms?

The Tula comes with a custom adapter that fits all standard US mic stands. For European mic stands, use with a standard EU to US threaded insert (not included). NOTE- Always attach the adapter to the mic stand first and the Tula to the adapter second to avoid damaging the Tula Mic.



## SKIPPING BETWEEN TRACKS IN PLAYBACK

### How can I listen to different tracks that I've recorded on my Tula?

To listen to the track you have just recorded, press PLAY on the right side. To skip between tracks, short press the BACK and FORWARD buttons on the left side. You can only skip between tracks while a track is being played. To repeat a track from the beginning, press STOP once, then press PLAY. To return to the beginning of the last recorded track, press STOP twice while any track is being played.

## THE CLOCK

## How can I reset my Tula's internal clock?

Each Tula leaves the factory set to Greenwich Mean Time (GMT). To set it to your local time, do the following:

- Connect the Tula to your computer.
- Create a new folder on your PC and name it tulatime.
- Immediately drag the folder into the Tula drive.
- Disconnect the Tula from your computer.
- Your Tula's internal clock will now be set to the time at which the tulatime folder was created on your PC.

## FIRMWARE UPDATES

#### How do I update my Tula when there is a firmware update?

When we release new versions of the firmware, we will send an email to all registered Tula Mic owners with a copy of the firmware attached. Alternately, you'll be able to find the latest firmware on our website

To update the firmware, simply connect your Tula to your computer. When it appears as a drive, drag the new firmware file into it and unplug the Tula (not eject, physically unplug it). That's it! If the update was successful the .bin file will have transformed into a .bak file

NOTE: DO NOT attempt to expand the firmware file (.bin) It looks like a zip file but it's not. Trying to expand it will give you an error message.

## RESET

## How do I reset my Tula if it freezes?

Simply insert a pin or paper clip into the small hole to the right of the USB-C port on the rear of the Tula. You'll feel a click and your Tula will automatically reset.

## <u>LEDs</u>

#### What does the front left LED do?

The RECORD INDICATOR LED turns solid red when the Tula is in use, either as a USB mic or a mobile recorder. When it is flashing red, that indicates that the Tula's internal memory is full.

#### What does the front, right LED do?

The GAIN METER LED shows the level of the audio being captured by the Tula. GREEN signifies a good level. YELLOW indicates that the gain is too high and RED indicates that the audio is distorted. In both latter cases, the gain should be turned down using the – gain button on the left side of the Tula.

When the LED FLASHES GREEN it indicates that the battery is low and that the Tula needs to be charged.

#### What do the LEDs on the left side signify?

When the MIC SELECT button LED is off the Tula is in UNI (cardioid) mode. When it is illuminated the Tula is in OMNI mode. When it is flashing the Tula is in lavalier mode.

When the NOISE REDUCTION (NC) button's LED is illuminated Brusfri noise reduction is active.

When the MUTE button is illuminated the mic is muted.

## What do the LEDs on the right side signify?

When the ON/OFF button's LED is illuminated the Tula is on. When the ON/OFF LED is off the Tula is off.
When the PLAY/PAUSE button's LED is illuminated the Tula is playing back audio via the headphone jack.

When the PLAY/PAUSE LED is flashing the playback has been paused.

When the RECORD button's LED the Tula is recording to its internal memory. When the LED is flashing the recording is paused.

## What is the tiny LED on the rear bezel to the left of the USB-C port?

The tiny LED on the rear of the Tula is the BATTERY LEVEL INDICATOR.

When the Tula is plugged in to a power source, the BATTERY LEVEL INDICATOR LED is illuminated, indicating that the Tula is being charged.

When the Tula is not plugged in to a power source, the BATTERY LEVEL INDICATOR will illuminate for 5 seconds upon turning the Tula on.

When the battery is depleted, the LED will be RED, when the battery is low it will be YELLOW and when it is fully charged it will be GREEN.



## RECORD INDICATOR LED

- In use (USB/Mobile Recorder)
- Memory Full **or** Mic Muted

## **GAIN METER LED**

- Good level
- A Bit High
- Turn the Gain Down!
  - Needs To Be Charged

## **LEFT SIDE LEDs**

- Mute
- Long Press Noise Reduction ON
- O Default UNI Mode
- Short Press OMNI Mode
- O Cong Press -Lavalier Mode



## RIGHT SIDE LEDS

- 1st Short Press Recording
- 2nd Short Press Rec. Pause
- Stop
- 1st Short Press Playing Back
- 2nd Short Press Playback Pause
- Short Press Tula ON (LED on)
- O Short Press Tula OFF (LED off)
- 5 SECOND PRESS RESETS TULA (Soft Reset)





tulamics.com