

Dragonfly™ – DEV Kit

A Quick User Guide



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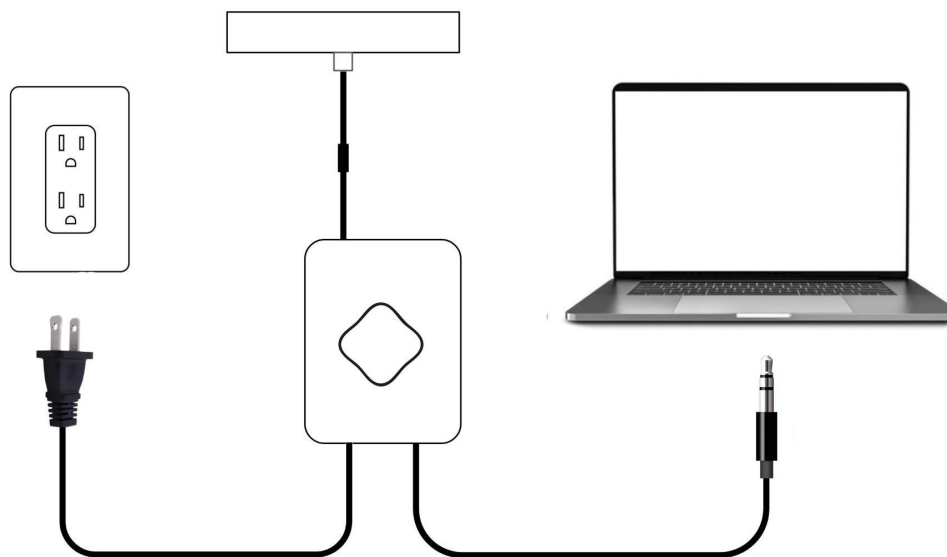
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1. Introduction

Dragonfly™ is the world's first full-range piezo speaker that features a frequency range from 60 to 20 kHz. Designed to deliver exceptional audio performance, the Dragonfly development kit provides a hassle-free and immersive experience right out of the box. The kit includes:

- 1 x Audio class D amplifier with Bluetooth 5.0, pre-connected power, 3.5mm audio input (optional), output cables
- 1 x Dragonfly™ DRA10022-S2
- 1 x Dragonfly™ DRA10022-S4

2. Hardware setup



Setting up the Dragonfly™ DEV kit is a breeze with these simple steps:

- Step 1: Connect the Dragonfly™ to the amplifier. Remove the liner on the double-sided tape of the piezo speaker. Attach the speaker to a panel, such as a piece of cardboard.

Make sure the Dragonfly™ remains parallel to the panel, with the two ends of the speaker not touching it. Multiple Dragonfly™ units can be connected to one AMP in parallel.

- Step 2: Plug the power cable into a 120 VAC electrical outlet. It's important to note that the default DEV kit is not compatible with 220 VAC outlets. To request a 220 VAC version, please reach out to us at contact@flora.tech.
- Step 3: Connect the AMP to your device (laptop, table, or smartphone...) using Bluetooth. A 3.5mm audio jack option is also available upon request. Lower the volume level on your device to 20% or below to avoid any sudden loud sounds.

You're now ready to experience the capabilities of the Dragonfly speaker! Play your audio tracks on the device and adjust the volume level to explore its full potential.

3. General precautions

For your safety and to prevent any potential damage to the equipment, please take note of the following guidelines:

- **Amplifier Repair:** To ensure your safety, please refrain from opening or attempting to repair the amplifier yourself. It contains high voltages that can cause electric shock. If you encounter any issues with the kit, please contact us for assistance.
- **Protection against Moisture:** To prevent electric shock or damage to the amplifier, it is crucial to keep the kit away from moisture. Avoid exposing it to water or any liquids. In the event that the kit comes into contact with moisture, immediately unplug the power cable and ensure the amplifier is completely dry before operating it again.
- **Speaker Electrode:** To avoid the risk of electric shock, refrain from touching the electrode on the speaker while it is in operation. Exercise caution and handle the kit with care.
- **Dragonfly™ attachment/detachment:** To detach the Dragonfly™ speaker from a panel, rotate it one to two turns until the double-sided tape loosens, allowing the speaker to disconnect. Avoid forcefully pulling the speaker, as it may cause excessive bending and potential damage. When reattaching the Dragonfly™ to a different surface, use a fresh piece of double-sided tape; do not reuse the previously failed one.

4. Specifications

	Unit	Value
Input voltage	V (AC)	120V, 60Hz
AMP power	W	200
Max output voltage	V	65V
Amplifier class		D
Amplifier IC		IRS2092
Operating temperature	C	-20 to 45C

5. Appendix

Reference circuit diaphragm

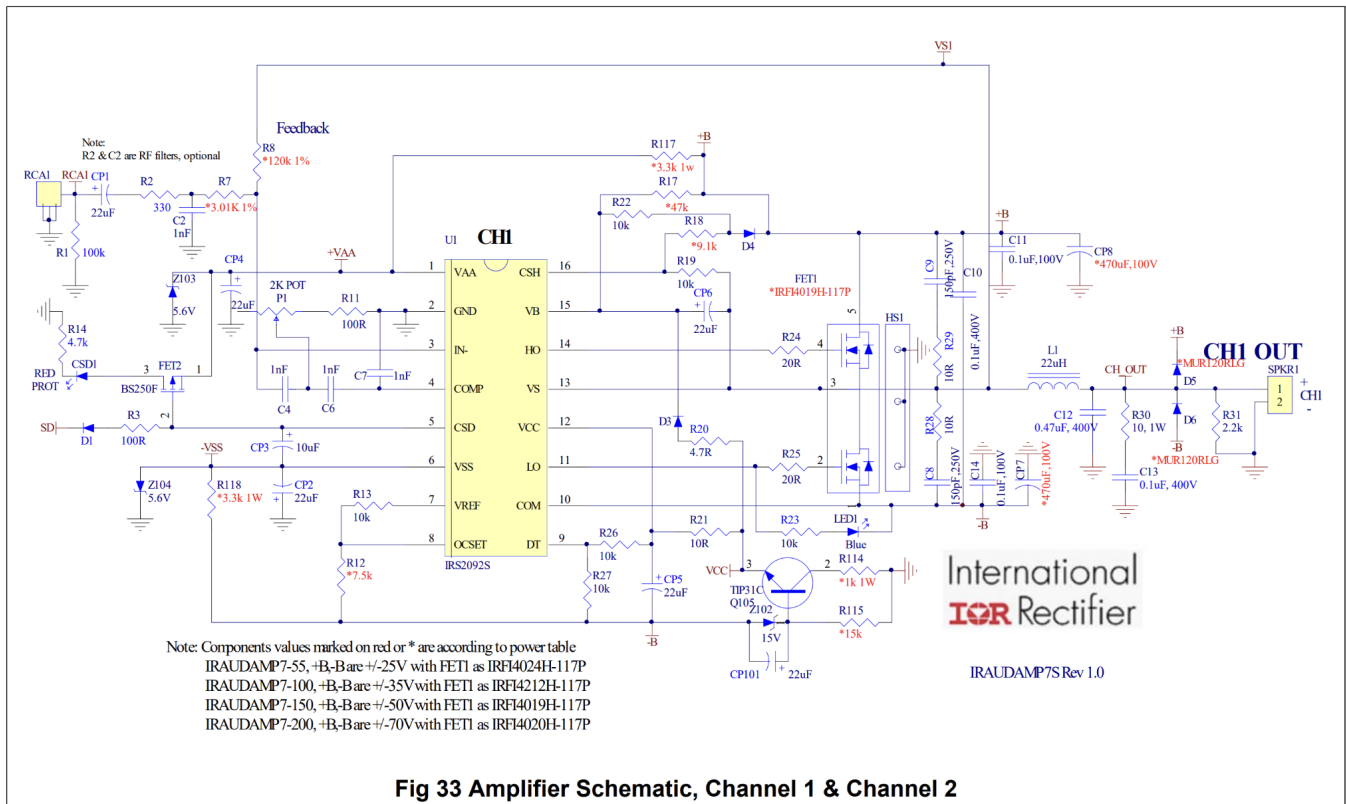


Fig 33 Amplifier Schematic, Channel 1 & Channel 2

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 For more information, please visit <https://flora.tech/dragonfly/>