

DRONE AMPLIFIED

D.A. Dropper Mini

Overview

The D.A. Dropper Mini is a high-performance, Low SWaP (Size, Weight, and Power) payload release system designed for maximum versatility. Engineered to integrate seamlessly with everything from agile FPV drones to sUAS platforms like the Astro and Alta X*, the Mini Dropper provides a rugged, reliable solution for precision delivery in the field.

Why Choose the Mini Dropper?

1. Versatile Platform Compatibility

Whether you are operating a custom FPV rig or a commercial sUAS, the D.A. Dropper's compact form factor ensures it won't compromise your flight dynamics while delivering heavy-lift capabilities.

2. Field-Ready Efficiency

Efficiency is critical in the field. Our **over-center latch** and **manual quick-release** system allow operators to load and unload payloads instantly.

- ▶ **Power Free Loading and Unloading:** Secure or swap payloads without powering on the drone or controller, preserving battery life and increasing safety.

3. Scalable "Eco System" Integration

The Mini Dropper is designed to grow with your mission requirements:

- ▶ **Standalone:** Use as a single, high-reliability dropper.
- ▶ **Modular:** Integrate multiple units into the Drone Amplified Eco System for sequential or simultaneous multi-payload drops.

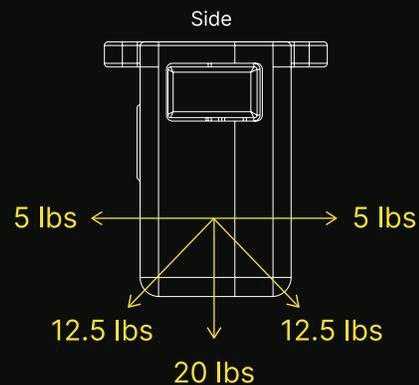
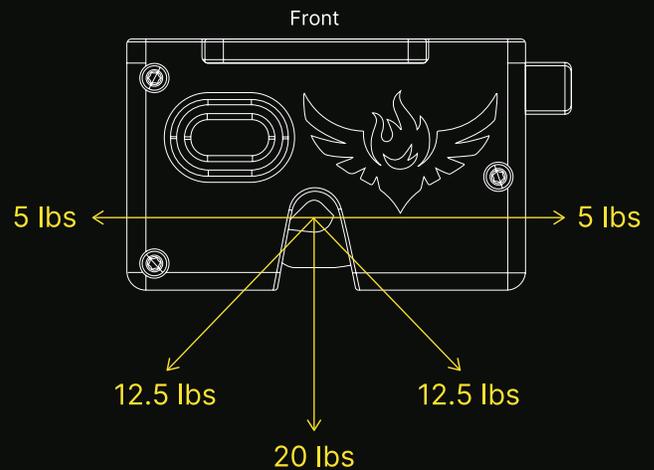
Reliability You Can Trust

Built by the leaders in UAS fire management and aerial ignition, Drone Amplified hardware is tested in the most demanding environments. The Mini Dropper brings that same industrial-grade reliability to your delivery operations.

Key Specifications

Feature	Specification
Operating Voltage	3.5V - 8.4V
Control Signal	Pulse Width Modulation (PWM)
Release Mechanism	Over-center latch
Loading / Unloading	Manual quick-release (no power required)

Max Payload Capacity



*Astro and Alta X requires Drone Amplified Integration



Technical Specification Sheet

High-Capacity Payload Delivery.
Low SWaP Design.

Product Name: D.A. Dropper Mini

Manufacturer: Drone Amplified

Application: Heavy-lift payload release for sUAS / FPV



Mechanical & Performance

Maximum Release Capacity: 20 lbs (9.07 kg)

Mechanical type: Mechanical over-center latch (reduces servo strain under load)

Loading Interface: Manual quick-release toggle

Mounting: Universal 30.5x30.5mm bolt pattern compatible w/ FPV frames & comes w/ picatinny rail mount. 12mm payload rails & Astro Max mounts available.

Electrical & Integration

Input Voltage: 3.5V – 8.4V (supports 1S - 2S HV)

Communication Protocol: Standard PWM (50Hz)

Power Consumption: Ultra-low idle; high-torque draw only during release cycle

System Integration: Compatible with Drone Amplified Eco System for multi-unit synchronized arrays

Environmental & Physical

Form Factor: Low SWaP (Size, Weight, and Power) optimized

Operational Readiness: "Cold-load" capable (load/unload without GCS or aircraft power)

Optional Zip Tie Mount

Part number: M2-00367

The zip tie mount distributes the load on the dropper mechanism resulting in consistent release at an angle.

- ▶ **When to use:** Recommended for missions involving **angled or off-axis loads**. It ensures a reliable release when payload tension isn't mostly vertical.
- ▶ **When to skip:** Not required for standard vertical drops.
- ▶ **How to get it:** Available for purchase separately or as a **free CAD download** for those who prefer to 3D print their own.

