

Automatic Activation Device (AAD)



SYSTEM INFORMATION

OVERVIEW

Designed for reliable performance across multiple skydiving disciplines, the AAD is installed in the reserve container, and continuously monitors altitude and automatically deploys the reserve parachute when a jumper is unable to deploy it due to incapacitation, loss of control, altitude misjudgment, or a malfunctioning main parachute.

KEY FEATURES

- **Pre-programmed Microprocessor**
  Calculates altitude and descent speed in real time using pressure and acceleration data. A proprietary algorithm combines pressure and inertial measurements to identify the motion state.
- **Automatic Ground Calibration**
  At power-up, the system repeatedly measures ambient pressure and automatically calibrates the ground reference altitude without user input
- **Operating Modes**
  Flight Mode: Activated above 40 m AGL, switching the internal sensors to high-performance mode.
  Unlock Mode: Activated above 200 m AGL, enabling autonomous parachute deployment.
- **Activation Logic**
  The AAD activates when the altitude is below 200 m AGL and the descent rate exceeds 13 m/s. Activation is inhibited below 40 m AGL, regardless of descent rate.

TECHNICAL SPECIFICATIONS

Main Unit Dimensions	103 mm×54 mm×20 mm
Control Unit Dimensions	71 mm×20 mm×10 mm
Cutter Dimensions	Ø10×83 mm
Weight	283 g
Activation Altitude	200 m (656 ft)
Activation Speed	13 m/s
Operating Altitude Range	-700 m ~ 10,000 m (-2,297 ft ~ 32,808 ft)
Operating Temperature	-40 °C ~ 60°C (-40 °F ~ 176 °F)
Water Resistance	Up to 1 hour at 1 m depth
Service Life	15 years

SKYEAGLE PARACHUTE