

# **Inspired by the Dual-use Tech devices?**

Why stop there? Take it to the next level—reinvent military inventions for consumer market, patent it, and turn it into a thriving business! Below, you'll find innovative improvements to make it even better. Plus, a full business plan to guide you on your exciting entrepreneurial journey.

## **Potential Patentable Ideas**

Here are some exemplary improvements in dual-use tech device's functionality and user experience. This should help you to structure your thoughts.

#### 1. Thermal Vision for Car Safety

Adapt military-grade infrared night vision into affordable dash cams to reduce night-time driving accidents.

#### 2. Portable Water Purifiers

Originally used by soldiers in the field—now reimagined as ultra-compact, solar-powered purifiers for hikers, campers, and disaster zones.

## Now it's your turn.

**Step 1 - Brainstorm to come up with unique ideas.** 

Step 2 - Claim your free patent strategy call with Patent Yogi Team. Book via this link

https://calendly.com/patentyogi

# **Business Plan: ThermalVision Dash – Safer Nights, Smarter Driving**

Turning battlefield tech into everyday tools

#### 1. Executive Summary

**ThermalVision Dash** is a consumer tech startup introducing **affordable thermal imaging dash cams** to enhance night-time driving safety. Inspired by military-grade infrared vision, our product helps drivers detect pedestrians, animals, and obstacles in darkness, fog, and low-visibility conditions—beyond what headlights can reveal.

We're solving a real, dangerous problem: 3 in 4 pedestrian deaths occur at night.

Our goal: **reduce night-time road accidents** and become the go-to safety upgrade for cars and trucks across America.

#### 2. Company Overview

• Name: ThermalVision Dash, Inc.

• Location: Austin, Texas

• **Structure**: Delaware C-Corporation

• **Founded**: 2025

Mission: Democratize military-grade driving safety through consumer-friendly innovation.

• Vision: Make thermal vision as standard as seatbelts and airbags.

#### 3. Market Analysis

#### • Target Market:

- o Commuters and rideshare drivers
- o Trucking and delivery fleets
- o Car modification and safety enthusiasts
- Elderly drivers or drivers in rural/dimly lit areas

#### US Dash Cam Market:

\$1.5B in 2024, expected to reach \$2.5B by 2028

CAGR: ~12%

Strong consumer shift toward AI-based and safety-enhancing models

• **Problem**: Traditional dash cams rely on visible light and fail in low-visibility conditions. There is a gap in affordable, reliable **night-vision solutions**.

#### 4. Market Trends

- Growth in Driver Assistance Tech (ADAS)
- **Insurance incentives** for dash cams
- Fleet automation and safety tracking
- Military-to-civilian tech transfer popularity (e.g., drones, GPS, radar)

#### 5. Product Description

#### **ThermalVision Dash Cam** – Features:

- Infrared thermal camera detects heat signatures
- AI-powered pedestrian/animal detection
- Dual video (thermal + normal) with picture-in-picture mode
- Real-time mobile alerts
- Optional cloud storage + GPS overlay
- Easy 5-min windshield installation

**USP**: First thermal dash cam in the U.S. market under \$300 with object detection.

#### 6. Marketing & Sales Strategy

- Launch Strategy:
  - o Viral TikTok/YouTube campaigns: "What your headlights miss..."
  - o Influencer seeding in auto safety and tech niches
  - o Partner with rideshare & delivery driver communities
- Channels:
  - o DTC via Shopify & Amazon
  - Automotive accessory retailers
  - o B2B fleet partnerships
- Pricing:
  - o Base: \$249
  - o Premium: \$349 (includes GPS + cloud)
  - o Subscription: \$5/month for cloud and AI alert service
- Customer Retention:
  - Loyalty discounts for upgrades
  - o Referral program
  - o Real-time app feedback for feature improvement



#### 7. Management and Organization

- Founder & CEO: [Your Name], Ex-defense tech engineer & patent agent
- **CTO**: Imaging systems expert, ex-Raytheon
- **COO**: Supply chain veteran from automotive accessories firm
- CMO: Ex-DTC brand strategist with successful Kickstarter launches

Advisory board includes ex-DoD commercialization consultant and a car safety researcher.

#### 8. Financial Plan (3-Year Projections)

#### **Year Revenue Cost of Goods Operating Costs Net Profit**

Y1	\$1M	\$500K	\$400K	\$100K
Y2	\$4M	\$1.6M	\$1.2M	\$1.2M
<b>Y</b> 3	\$10M	\$4M	\$3M	\$3M

• **Break-even**: 16–18 months

• **Margins**: 50% gross, 25–30% net by Year 3

### 9. Funding Requirements

• **Seed Round**: \$500,000

Final prototype + certifications: \$100K
Initial inventory (3,000 units): \$150K

Marketing & launch: \$150KTeam & ops runway: \$100K

• Use of Funds: Go-to-market, influencer campaigns, manufacturing scale-up

#### 10. Revenue Streams

- Hardware sales (main)
- Monthly cloud/AI subscription
- Fleet dashboard SaaS (B2B in Year 2)
- Data licensing (aggregate heat-sensing data to insurance or city planners)

#### 11. Intellectual Property

- Provisional patent filed for thermal-AI object detection combo in consumer dash cams
- Future filings:
  - o Thermal video compression tech
  - o AI real-time event detection
  - Vehicle-specific mounting mechanisms
- Trademark pending: "ThermalVision Dash<sup>TM</sup>"

#### 12. Milestones (Year 1)

Quarter	Milestone
Q1	Finalize working prototype and thermal-AI software integration
Q2	File patent, complete industrial design and begin manufacturing
Q3	Soft launch via website + early influencer reviews
Q4	Full-scale launch on Amazon and expand to 3 retail chains

## Interested in taking your idea further?

Book a free consultation with our experts