

# The Incredible HUD

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# Commercial Product Packaging : Product #1

## Android Ski Goggles by Recon Instruments



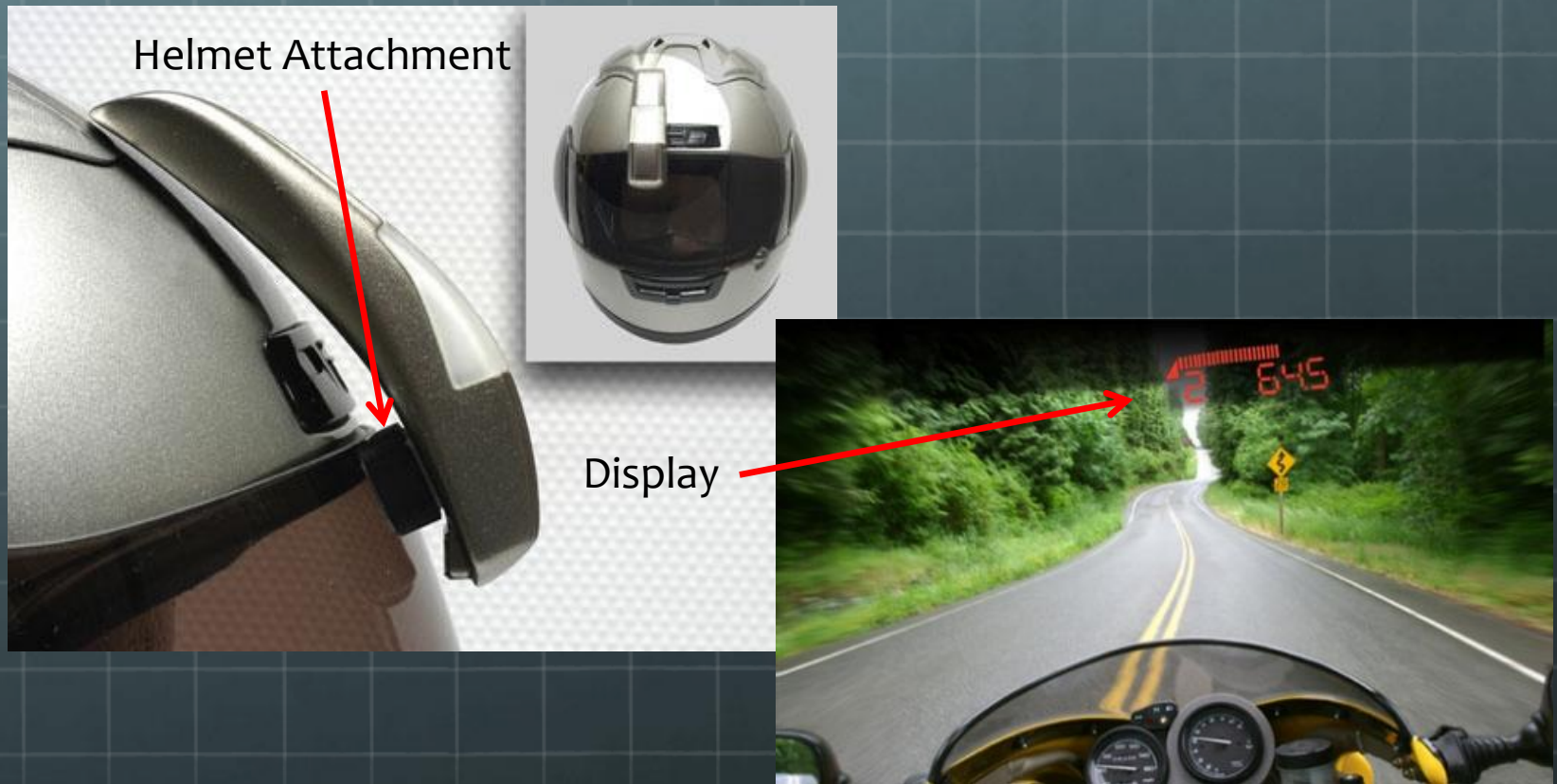
# Commercial Product Packaging : Product #1

## Android Ski Goggles by Recon Instruments

- 🌐 **What we plan to mimic (positives) :**
  - 🌐 **Big, user-friendly control buttons on side of device**
  - 🌐 **Rechargeable power source**
  - 🌐 **Portable design concept (device & data)**
- 🌐 **Why Incredible HUD is unique (negatives) :**
  - 🌐 **Projection display technology**

# Commercial Product Packaging : Product #2

SportVue by Motion Research Corporation



# Commercial Product Packaging : Product #2

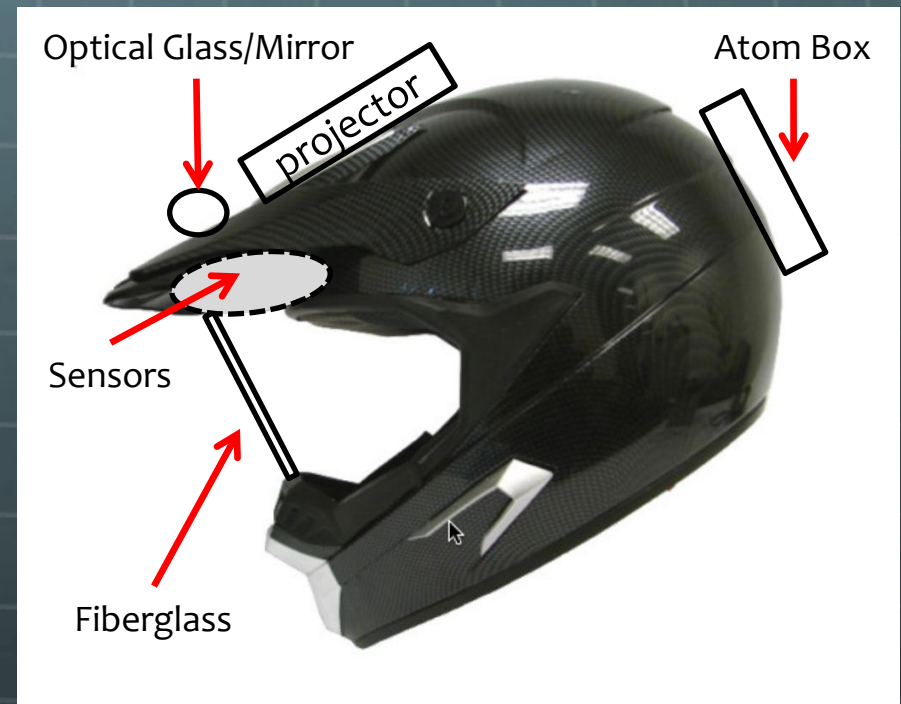
SportVue by Motion Research Corporation

- 🌐 What we plan to mimic (positives) :
  - 🌐 Transparent display, in direct sight
  - 🌐 External design concept
- 🌐 Why Incredible HUD is unique (negatives) :
  - 🌐 Rugged design
  - 🌐 More complex information display

# Project Packaging Specifications

- Contain hardware on the helmet itself to allow for “portability”
- Implement cooling system (vents) to dissipate heat for projector, Atom processor, and GPS module
- Package for reasonable weather and impact resistance
- Battery may be relocated off-helmet if unwieldy in size (integrated into a backpack)

Component Placement Mock-up



# Project Packaging Specifications

- 🌐 **Materials list : helmet, fiberglass, tint, adhesives, plastic liner, screws, washers, aluminum mount/cover**
- 🌐 **Tooling requirements : razor blade, drill, metal cutters**
- 🌐 **Estimated weight : 4 lbs**
- 🌐 **Estimated Cost : \$100**

# Printed Circuit Board

- 🌐 Components going on PCB : Microcontroller, GPS, power converter, accelerometer (breakout), thermometer
- 🌐 We need to split it up into three parts -
  - 🌐 Thermometer placed on outside of helmet
  - 🌐 Two pieces to easily fit inside beak of helmet