

# Innovative Smart Product

by  
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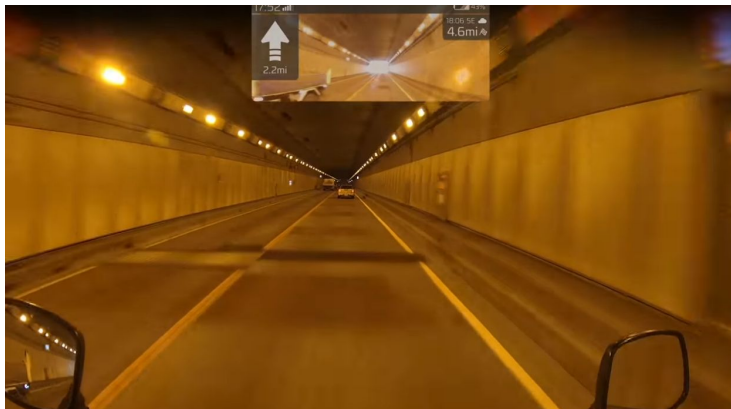
# Smart Helmet

- Goal is to redesign the Smart Helmet
- Introduce and improve a seamless driving experience for motorcyclists
- Improve safety standards

# Current Products

- Two companies have some sort of Smart-Helmet
- Cross Helmet
  - Cameras, touch gestures, sound control, lights
  - <https://www.crosshelmet.com/>
- Sena
  - Bluetooth phone connection, intercoms
  - <https://www.sena.com/motorcycles-powersports/smart-helmet>

# Cross Helmet



# Sena (Momentum Inc Pro)



ULTIMATE BLUETOOTH®  
CONNECTIVITY



# Current Motorcycle View



# Current Motorcycle View

- The gauge cluster is near the bottom of the user's Point of View.
- Other than that, there are no other distractions.
- There are side mirrors, but when going at a high
- speed, the driver should not turn their head around to risk unbalancing.

# My Design Layout

The helmet will connect to the bike through wireless connection, and will not allow music to be played, but if there are more helmets paired together, voice chat will be available.

Commands are mainly voice-activated but there are physical buttons to use, although it is not recommended.

Using touch gestures is taken out since it will unbalance the user, and as always, the cameras are always recording.

Camera view for the back  
(always on)

If GPS  
navigation  
is on, will  
highlight the  
road ahead

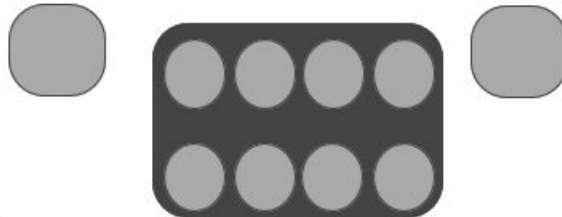
Less important information can be displayed with transparent pop-up windows. The information displayed will also be read out.

Voice commands that the physical buttons also do:

- GPS navigation
- Adjust temperature
- Hide / show camera view / angles
- Windshield wipers
- Adjust headlamps brightness
- Adjust volume
- Gear shifts
- Shade percentage
- Call emergency services
- View commanded information (e.g. "What is the temperature outside?")
- Highlight potential accidents

Physical buttons along central dashboard.  
Flight recorder also stored inside the dashboard.

Side buttons to activate camera left and right view



Important information permanently displayed,  
like fuel / battery %, speedometer, etc



# My Design

- Incorporates augmented reality to highlight a new GPS navigation system
- Voice-activation to reduce distractions
- Inherent safety controls of not having audio above a certain volume and no music