

Imagine a cabin trim material that can transmit infrared light.

We did.

3M™ Sensor Camouflage Film







# Brilliance in what you see. And what you don't.

Infrared (IR) optical sensors and light emitters are becoming increasingly integral to vehicle design for:

- Driver monitoring
- Proximity sensing
- Gesture control
- Occupant sensing
- Motion sensing
- IR Cabin flood lighting

3M™ Sensor Camouflage Film is designed to solve the challenge of delivering peak IR transmission while concealing sensors.

### **IR Applications**

- Time of flight (ToF) sensors
- Proximity sensors
- 3D imaging
- LED concealment
- Motion sensors

## Inspiration enabled. Vision matched. Design at will.

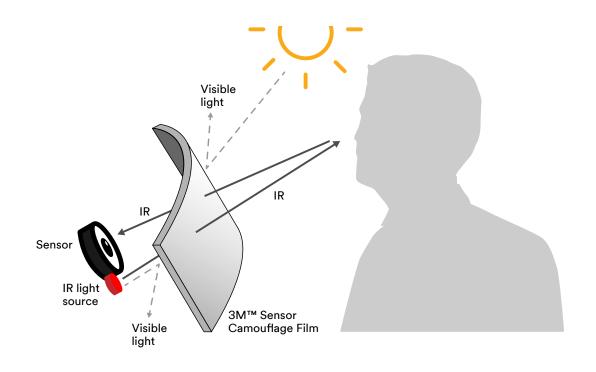
Flexible 3M<sup>™</sup> Sensor Camouflage Film conforms well to many complex shapes and sculpted interiors. Like a fine-engineered automobile, it can handle the curves.

# Enabling a smarter, safer driving experience.

Advanced safety features such as eye tracking monitor driver distraction, sounding an alert when a driver loses focus. Ideal placement of driver monitoring sensors is near eye level. When sensors are visible in the cabin, they can introduce a measure of anxiety and interfere with driver concentration.

### Hide sensors in plain sight so drivers can focus on the road.

Enhance sensor performance while maximizing signal to noise and masking ambient sunlight. 3M™ Sensor Camouflage Film is tuned to provide high specular IR transmission without compromising your interior design.



Sense without being seen.



# Camouflage is the new black. Hide red glow and outlines.

We can help remove constraints, so you're free to design the vehicles you dream of.

3M™ Sensor Camouflage Film in black helps conceal red glow and masks sensors, while blending seamlessly with surrounding trim.



Instrument panel with exposed sensors

### **Product description**

- Black film achieves greater optical density than black ink
- Compatible with ink printing for colors and patterns
- High degree of reliability in automotive interior environments (heat, humidity, thermal cycle, and UV exposure)
- Available in a wide variety of formats to meet your needs
- Enables clean design to integrate IR sensors
- Conformable to curved and irregularly shaped surfaces
- Available with optically clear adhesives for lamination

### Sample film

3M™ Sensor Camouflage Film Black



3M™ Sensor Camouflage Film waits for you at the intersection of design and technology.

Imagine the future.

# Black is just the beginning.

We manufacture a full line of engineered films for automotive interiors — from "touchable" textures to sleek gloss finishes. We offer wood grains, authentic metallics, textured patterns and a rainbow of hues, all with excellent elongating properties.

Comfortable fabrics and textured surfaces are an essential part of cabin interior design. But textured film can affect IR transmission. Applications such as eye tracking need a more precise target/sensor feedback loop, requiring 3M camouflage film in a gloss finish. IR floodlights can more easily pass through matte surfaces.

# Specular transmission

### 3M<sup>™</sup> Sensor Camouflage Film

Texture examples\*

Sample film

Sample film

Sample film

lighting

\*Examples are for demonstrational purposes only.

Occupant sensing

Gesture control

Eye tracking

Proximity sensing

Motion sensing

IR Cabin flood

Inspiration comes from everywhere. Materials solutions come from 3M.

So many possibilities.



Solid colors



Woodgrains



Metals



**Patterns** 

# Find out how we can help you realize your visionary designs for the future — today.

Contact your 3M representative with questions about 3M™ Sensor Camouflage Film.

3M.com/DriverMonitoring

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