# Examples of Military & Rescue Applications

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The term "**Military & Rescue**" is a broad headline that encompasses **Law enforcement** (public safety), **non-military rescue** (e.g., fire brigades, mountain rescue), and more.

Below, we outline selected examples specifically **for military & rescue equipment providers**. These go beyond the **publicly listed civilian applications** on https://investors.inoptec.com, as we intentionally separate "dual use" applications to maintain clear brand identity and recognition.

This additional list focuses on key military and rescue team use cases, **identified through extensive interviews with practical end-users** (e.g., soldiers, pilots, drivers) to address their most **urgent needs**.

*Note: This list highlights **only the most critical examples** and is not exhaustive.*

## 1) Rapid Adaptation and Hands-Free Operation (e.g., transitioning from bright sunlight into a dark house)

### Problem:

Soldiers operating in **sunny** desert environments often wear **dark sunglasses or protective goggles**. When entering a **dark**, **unlit building**, they **must remove these glasses**:

- Sunglasses require at least one hand to remove.
- Ski-style goggles require both hands to adjust, typically by shifting them to the top of the helmet.

This leaves soldiers **unable to properly hold their weapons**, defend themselves, or operate effectively during the critical moment of entry.

### Solution:

Our smart glasses offer ***hands-free rapid adaptation***, becoming instantly clear and transparent (within 1 millisecond) upon entering a dark space. This ensures uninterrupted visibility, allowing soldiers or rescue teams to **operate effectively without removing their eyewear**.

**Additionally:** The glasses' ultra-fast shutter technology outpaces the effects of flash grenades. Soldiers can **enter a building simultaneously with a flash grenade**, as the glasses block out the intense flash while maintaining clear visibility of the surrounding room. This is possible because **the glasses distinguish and separate wanted and unwanted light**, ensuring only relevant illumination is visible while disruptive flashes are filtered out.

This unique capability also supports **advanced scenarios**, such as **X-ray-like vision through a wall of fire** (see next example).

## 2) X-Ray Vision: See Through Fire — Beyond the Capabilities of IR Cameras

For military & rescue or SWAT teams, this groundbreaking feature offers **unparalleled visibility**. **Infrared (IR)** rescue cameras will **not work** because they get blinded by fire!
This is why we control the **visible (VIS) light** spectrum. Generally, **unwanted light** can be suppressed in any case/scenario — therefore, also the unwanted light of a bright wall of fire (look through effect).

Please visit the application section on our website and mentally replace "Fireman" with "Soldier" or similar, to explore its unique potential:

https://investors.inoptec.com

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## 3) Multi-Channel Vision: Headlamps Without Glare Among Team Members

Perfect for soldiers, SWAT teams, or law enforcement, this feature ensures team members' **headlamps do not cause glare for others**. Visit the application section on our website and mentally replace "Fireman" with "Soldier" or other relevant terms to learn more:

https://investors.inoptec.com

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## 4) Invisible Colour Designation: Enabling Silent Communication

Soldiers often use **white torch-style lamps** mounted on their rifles.

These lamps can be synchronized with INOPTEC glasses to enable individual colour designations, such as a ***red*** dot to mark a target — or a ***green*** dot to indicate a friendly asset. Crucially, **only members** of the group using the system **can see these colours**—bystanders or adversaries see only **white** light!

This feature, termed “invisible colour designation,” provides a **silent and discreet communication method**, reducing the need for verbal cues during operations — and enabling much **faster and more effective** execution.

For a more in-depth discussion about this and other advanced features tailored to your specific needs, we encourage a direct dialogue.

## 5) Checkpoint Scenario: Unknown Car Approaching at Night

### Problem:

Soldiers stationed at checkpoints at night often face **uncertainty and potential danger** when confronted with oncoming vehicles using **high-beam headlights**.

The intense glare **prevents them from reading licence plates or identifying passengers inside**, creating significant risk.

**Inexperienced soldiers may overreact**, potentially opening fire out of fear, even if the approaching vehicle contains innocent civilians or allies.

**Conventional IR cameras fail** to resolve this issue due to glare & heat interference, leaving no viable alternative in the **VISIBLE spectrum**—except for INOPTEC's unique Vision Enhancement System.

### Solution:

With INOPTEC's system, soldiers can **suppress the high-beam headlights** of an approaching car by up to 90%, making them almost invisible.

**Simultaneously**, they can **illuminate the car's licence plate and passengers** using a white LED torch mounted on their rifle or a more powerful flood-style LED light nearby.

This allows soldiers to safely and clearly identify vehicles and occupants from a distance, **ensuring the safety of both the soldiers and the passengers.**

**If the vehicle continues to approach** despite the white light, soldiers can use an optional, **harmless yet intimidating green LASER dazzler** to temporarily impair the driver's vision, prompting them to slow down.

Crucially, the INOPTEC system ensures that **soldiers remain fully protected from this green LASER light**—it cannot enter their eyes, even if reflected back by the car's windscreen or mirrors.

This **safety** is achieved through **INOPTEC's two-channel system**: the white LED light and the green LASER operate on **separate** time channels. These channels are precisely 180 degrees out of phase, meaning the white light is active when the glasses are open, and the LASER is off—and vice versa.

This **anti-cyclic operation** ensures seamless functionality and **maximum safety** for soldiers in high-risk situations.

## 6) Car/Truck/Tank Driver Vision: Anti-Glare and 3D Enhancer Systems

This document is intended only as a brief teaser and cannot cover all potential applications. As a final example, **most military and civilian vehicles** can be equipped with our patented **3D enhancement systems**, which **make vehicles and obstacles ahead stand out more clearly**, **enabling drivers to judge distance, position and speed more safely**.

**In heavy rain, snowfall, dust or brownout conditions**, our technology **suppresses near-field backscatter from illuminated particles** when high beams or searchlights are used, **allowing drivers to see farther and deeper into the terrain**. (See Patents 7 and 8.)

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For further details, please explore our **eight** patents (protected in approximately **ten** countries):

https://patents.google.com/patent/WO2015181340A1/en

https://patents.google.com/patent/US20170199396A1/en

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The **examples** above provide **only a glimpse of what is possible**. We would be pleased to discuss your specific requirements and applications in a brief conversation.

Please **reach out to me directly** (details below) or schedule a call: https://calendly.com/ralf-knoll/

**Let's explore how we can bring this groundbreaking opportunity to life for you!**

**Let's discuss your needs, as these were just examples!**

Yours sincerely,

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