



CAMFLAG

CAPTURE THE BEST MOMENT

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INTRODUCTION

Modern broadcast productions often face challenges with direct sunlight when using box optics, especially during sunrise or sunset. The flat angle of sunlight can cause unwanted lens flares — visual artifacts resulting from internal reflections within the lens. These effects degrade image quality, causing a loss of contrast, dull colors, and distracting visuals.

THE PROBLEM

Lens Flare in Professional Settings

In productions using box-type camera optics, particularly in outdoor environments, sunlight entering at shallow angles causes a double reflection inside the lens system. This phenomenon, known as lens flare, manifests as visual streaks, halos, or color distortions that reduce contrast and affect overall image sharpness.

Temporary solutions like makeshift cardboard shades have proven ineffective. Fixed shades risk entering the frame when zooming, and do not adapt dynamically to camera movement. A more intelligent, adaptive solution is needed.

Scan the QR code to learn more about lens flare and how CAMFLAG works.





THE CAMFLAG SYSTEM

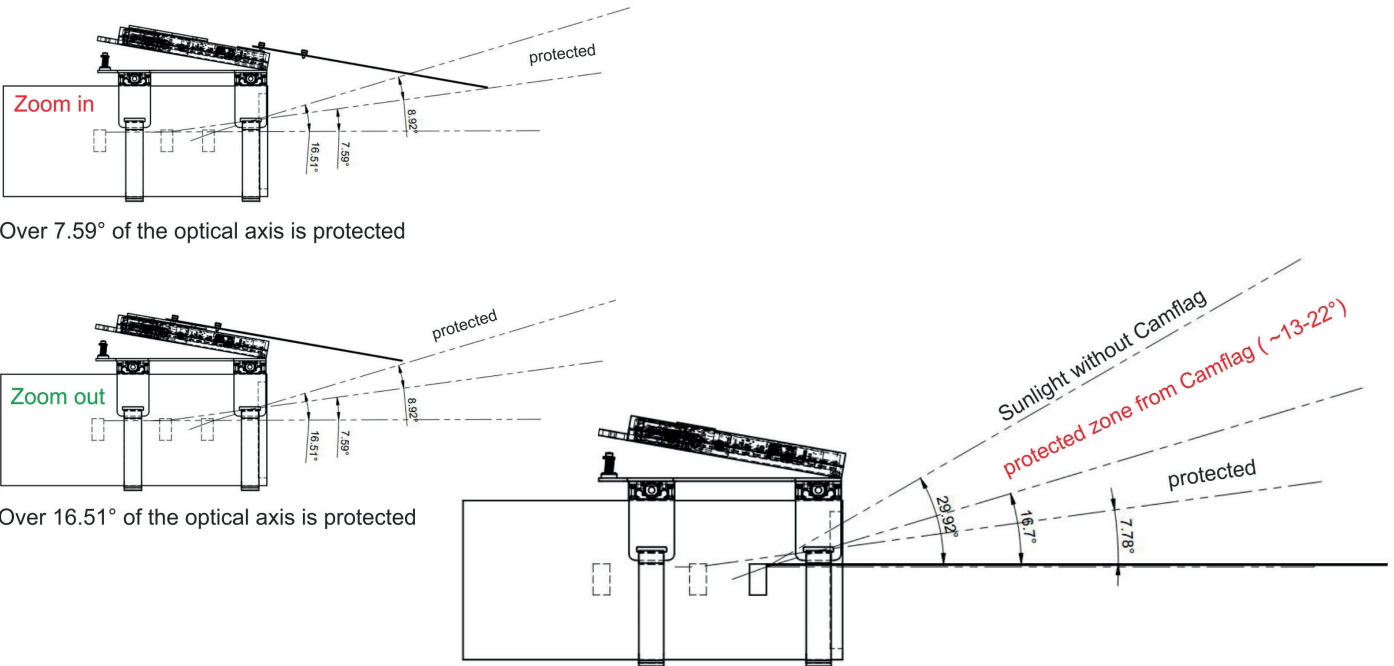
Real-Time Optical Shading

The CAMFLAG system is a precision-engineered, automated shading solution designed for professional broadcast applications. It mounts directly on top of broadcast box lenses and synchronizes in real time with the camera's zoom signal. This allows the shading device — known as the “flag” — to extend or retract according to the zoom level, effectively blocking direct sunlight without entering the frame.

To prevent lens flares caused by low-angle sunlight, it's essential to block light before it enters the lens. While some operators have tried DIY solutions — like attaching cardboard to the optics — these can obstruct the image when zooming. What's really needed is a flexible, motorized shading system that automatically adjusts as the camera zooms.

That's exactly what CAMFLAG offers: a fully integrated shading unit that connects to the camera's zoom signal output and actively shades the lens in real time. After a quick calibration to align the flag position, the system is ready to use within minutes. It's compatible with optics from major brands such as Canon and Fujinon.

The effectiveness of the shading depends on the angle of incoming light. CAMFLAG is especially useful at critical angles — typically between 13° and 22° — where lens flares are most likely to occur.



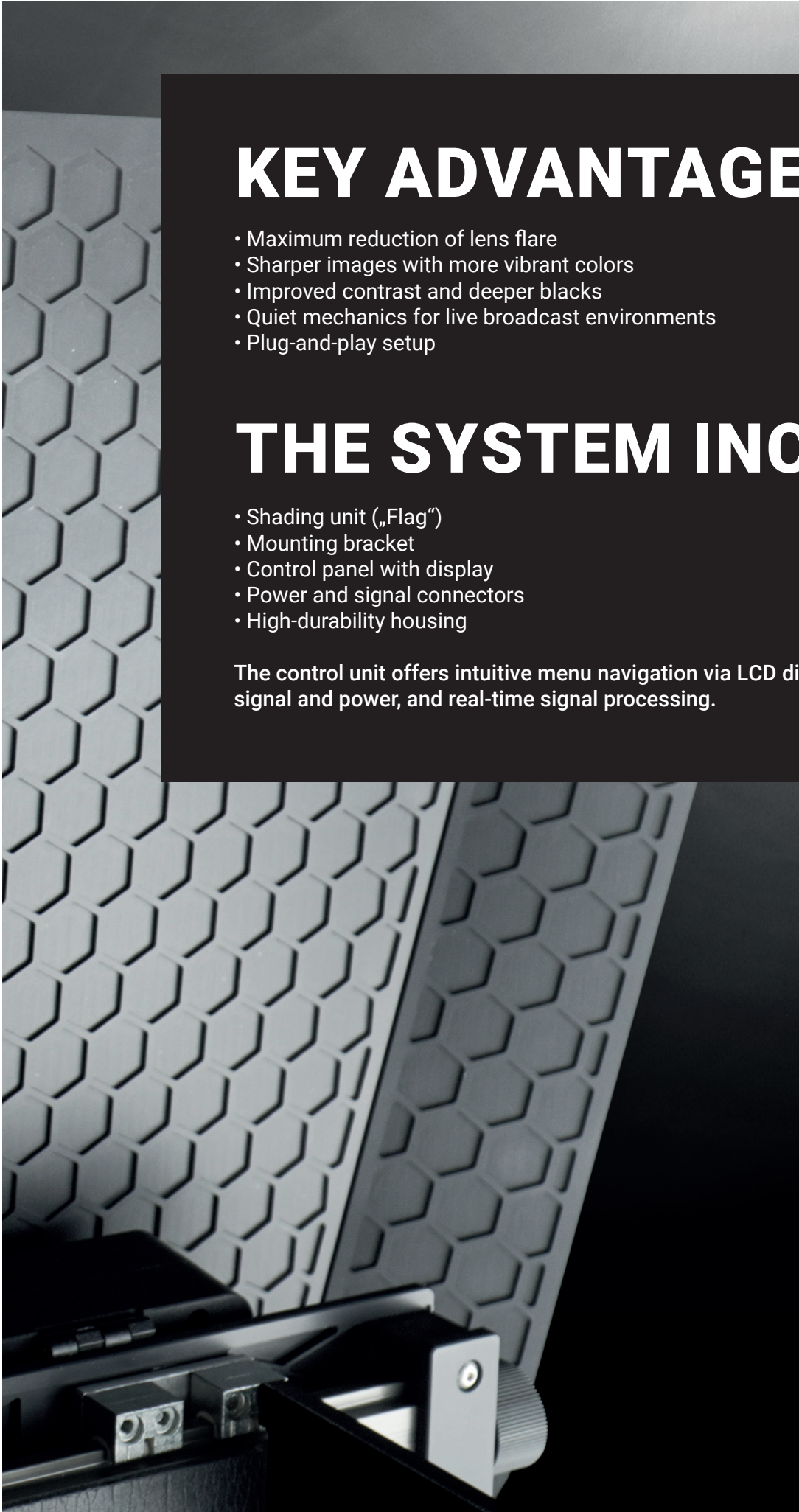
KEY ADVANTAGES

- Maximum reduction of lens flare
- Sharper images with more vibrant colors
- Improved contrast and deeper blacks
- Quiet mechanics for live broadcast environments
- Plug-and-play setup

THE SYSTEM INCLUDES

- Shading unit („Flag“)
- Mounting bracket
- Control panel with display
- Power and signal connectors
- High-durability housing

The control unit offers intuitive menu navigation via LCD display, status LEDs for signal and power, and real-time signal processing.



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TECHNICAL SPECIFICATIONS

Specification Details

Weight	3.5 kg
Dimensions	410 x 400 x 240 mm
Power Supply	12–14 V DC via 4-pin XLR
Signal Input	Hirose or circular, 0–8 V DC
Signal Output	Matches input
IP Rating	IP 54 (splash resistant)



Pin Assignments

20-Pin Connector:	18-Pin Connector:
• Pin 10: Zoom Signal	• Pin J: Zoom Signal
• Pin 20: GND	• Pin U: GND



USE CASES

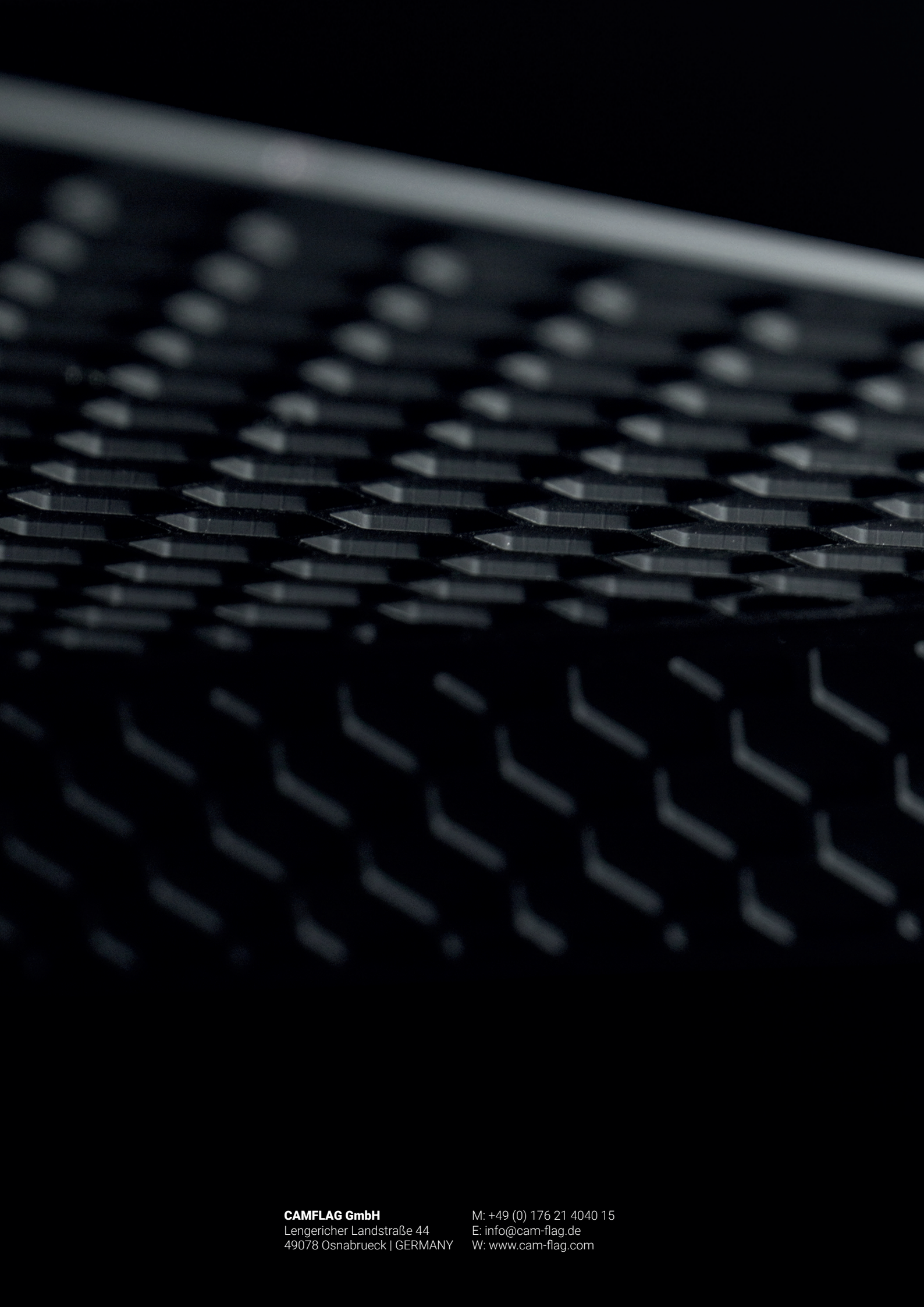
- TV and sports broadcasting
- Concert and event productions
- Outdoor studio setups
- Weather-sensitive or mobile camera units



CONCLUSION

CAMFLAG delivers a precise, flexible, and reliable solution for eliminating lens flares in professional broadcasting. With its responsive automation, rugged design, and ease of use, CAMFLAG enhances image quality and ensures that every moment is captured clearly – even in challenging lighting conditions.





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