

FREQUENTLY ASKED QUESTIONS ON INFRARED ILLUMINATORS FOR NIGHT VISION

WHY DO I NEED AN INFRARED ILLUMINATOR?

The human eye cannot see infrared light, however most mono-CCTV cameras can. As such the invisible light can be used to illuminate a scene, this allows nighttime surveillance without the need for additional artificial lighting. Infrared also provides many other benefits above conventional lighting; IR beam-shapes can be designed to optimize CCTV camera performance, extended bulb-life, covert surveillance, lower running costs etc. NOTE: It is important to design illumination specifically for the CCTV camera you are using.

HOW FAR CAN MY CAMERA SEE AT NIGHT WITH INFRARED ILLUMINATORS?

The range that your camera will see in the dark will depend on sensitivity and spectral response of the camera and lens combination. CANTRONIC SYSTEMS INC specifies distances based on 'off the shelf' infrared sensitive cameras and lens. Distances can be increased up to 50% when using Cantronic proprietary cameras and lenses.

WHICH ILLUMINATOR DO I NEED?

CANTRONIC SYSTEMS INC produces the following choice of beam patterns: 10° and 30° Spot (precise), and 60° Flood.

CAN INFRARED ILLUMINATORS FACE THE CAMERA HEAD?

No. Although the light emitted from the illuminator is not visible to the human eye, the camera sees the light in much the same way as we see white light. As a result the camera will 'white out' if the lamp is situated within the cameras direct field of view.

CAN INFRARED ILLUMINATORS WORK WITH COLOUR CAMERAS?

Cantronic's infrared illuminators CAN NOT work with colour cameras. Normal artificial light (e.g. sodium light) does not produce accurate colour, causing picture quality problems. They will work with most of the newer day/night cameras as they have a mechanically removable IR Cut filter, which allows the B&W (Night) portion of the camera to be sensitive to infrared light.

CAN INFRARED ILLUMINATORS BE USED FOR COVERT OPERATION?

Yes. Infrared illuminators come in varying wavelengths from approximately 730nm to 950nm. The 730nm wavelengths will give the normal red glow on the lamp - like a traffic light. The 850nm illuminator will greatly reduce the visible glow. The 940nm illuminator is totally black and is ideal for covert use where no indication of nighttime security is a requirement. WARNING: 940nm illuminator will require a highly sensitive nighttime camera.

HOW SAFE IS INFRARED?

With over 20,000 Infrared illuminators installed each year CANTRONIC SYSTEMS INC is unaware of a single safety issue raised about IR used in CCTV. However as a basic rule of thumb, if you can feel the heat don't stare at the lamp.

WHY USE CANTRONIC INFRARED ILLUMINATORS?

CANTRONIC SYSTEMS INC infrared illuminators give several unique benefits, low power consumption, and the farthest viewing distance available in the industry.

HOW DO I SPECIFY THE TYPE OF CANTRONIC ILLUMINATOR?

To order CANTRONIC SYSTEMS INC illuminators you must specify the distance, the angle of degree, either 850nm or 940nm, and the power 110VAC or 24VDC to be supplied to the unit. Brackets for the illuminators are sold separately.

CAN I GET HELP TO DESIGN AND SPECIFY AN INFRARED CAMERA SYSTEM?

CANTRONIC SYSTEMS INC offers global technical support via email, fax and telephone. Tech support infrared engineers are based in Vancouver Canada. We prefer to receive questions by email with as much background information as possible.

Contact: e-mail: info@cantronic.com

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