## www.kovert.com LAM780 Infra – Red LED Illuminator Instructions

## Infra Red LED Illuminator

The professional range of IR LED Illuminators are designed to offer a flexible answer to meeting your infra red lighting requirements. This unit provides illumination over an 80° angle and can be used up to 10 metres. The LAM780 has 15 IR LEDs and is 12vDC powered.



## Features

- Strong metal case
- 15 IR LEDs
- Automatically switches on under 10 Lux by CDS
- 12vDC powered
- Indoor use only

Models covered in these instructions LAM780

Technical Specifications	LAM780
Туре	Indoor
Luminaire	15 x 850nm LEDs
Angle	<b>80</b> °
Power Output	1.2W
Outdoor Distance	10 Metres (Indoors)
Control	CDS controls switch on under 10 Lux
Power Supply	12vDC
Current Consumption	100mA
Dimensions	58mm x 48mm
Weight	60g
Storage Temperature	<b>-30</b> ~ +60°
<b>Operating Temperature</b>	<b>-10</b> ~ +40°

## **Installation Instructions**

This illuminator is 12vDC powered. We suggest using the POW100 or POW800 12vDC regulated psu. As with any light source the wider the beam the shorter the effective range of the illumination so to cover different installation requirements we have produced a range of different angles, narrow  $25^{\circ}$ , standard  $40^{\circ}$  and  $45^{\circ}$ , and wide  $60^{\circ}$  and  $80^{\circ}$ . Obviously if you are trying to look at a gateway use the narrow beam model but if you are illuminating a wider area at a shorter distance, use the wide beam model. If you need to illuminate both areas then you may need to buy both or several models.

The 850nm LEDs are matched to most CCTV IR cameras so they give good results but they do emit a very faint red glow to the naked eye. If you need a more covert installation then you should look at the TrueBlack range of low-profile lamps.

Remember that infra red light is a polarised light and is similar to a torch beam. The further away the light reaches the weaker the light becomes. If you double the distance you will only get one quarter of the light illumination. This is called the "Inverse Square Rule".

It is important that when you want to use IR lighting with a CCTV camera that you check the camera is sensitive to IR light. CCTV cameras often have an infra red filter placed across the CCD so that any IR light produced in bright sunshine does not incorrectly colour the picture. On better quality cameras this filter is fitted as a mechanical day/night filter and when lux levels reduce at night, the filter is physically moved away from the CCD to allow as much IR light as possible for night vision. The use of these IR illuminators then provides the additional IR light required for night-time images.

As these illuminators will generate some heat, it is advisable not to place the lamps near flammable materials. Also avoid placing the units where the glass front can be touched as this could result in skin burns.

To test this illuminator you will need to cover the CDS that automatically switches the unit on when light is reduced below 10 lux.

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