

# PRODUCT TEST

Optio OPA4ED28V12IRG



## What's in the box?

Camera  
Quick Guide  
Security Torx wrench  
Fixing screws and wall plugs

The OPA4ED28V12IRG camera is an IP67 rated, 4 Megapixel (2560H x 1440V) Eyeball style analogue camera with a varifocal 2.7mm to 12mm lens. It consists of an aluminium body and mount available in a dark grey or white finish. Optio products form a subset of the Vista range.

## Getting started

The camera has a single composite feed that splits off into three cables. One is for power supply at 12v DC  $\pm 30\%$ . The second is a BNC video output connection and the third is for a settings switch for the analogue format. This dual switch has a captive screw-on top to provide environmental protection. The four options available are CVI, AHD, CVBS or TVI format.

The camera globe is held in a wall or ceiling mountable frame with a single Allen screw locking its position in the frame. A removable bung in the side of the frame allows for the cable to be fed out if surface mounted. Alternatively, an optional camera mount OPJB4G can be used; this has two screw capped side and one rear conduit apertures and is supplied with fixing screws and an Allen key.

Information is available through the Norbain Vista website with the camera documentation available for download once the relevant product and bracket options are selected. Alternatively, for

smart devices a QR code on the supplied documentation can be used to download the manuals and datasheets.

## Operation

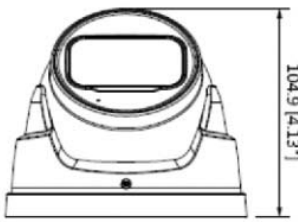
The camera is supplied with the DIP switch set to CVBS output allowing it to be viewed on any basic analogue monitor or system. These switches are actively monitored so can be changed while the camera is operational and after a few seconds the mode changes and confirmation of the new mode is momentarily displayed in the centre of the screen.

No lens control is possible when in CVBS mode as this format does not support coaxial control signalling. The control protocols used are HDCVI 3.0 or HDCCTV 2.0. There is no conventional or legacy wired telemetry control connection. A compatible DVR allows the camera's on-screen menu to be selected and the full range of camera settings to be managed.

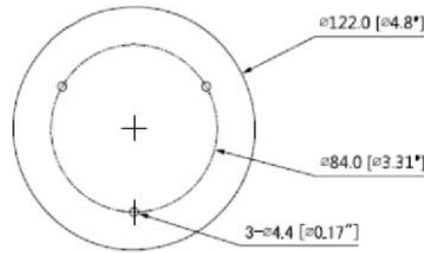
Day to Night switching has a default setting of 6 out of a range of 1 to 19 and Night to Day as 12 out of a range of 2 to 20. The max and min range values will dynamically change to prevent overlap. A waiting time of 2 out of 1 to 15 defines the delay to prevent "hunting". With these default values, the camera was found to switch to monochrome at a scene light level of approximately 8 lux and return to colour mode at just over 15 lux. ➔

*Optio products form a subset of the Vista range*

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Dimension Unit : mm



*This camera allows simple and cost-effective upgrades for legacy analogue systems using coaxial cabling*

### Menu options

The OSD menu options are presented as follows:

**Format:** PAL / NTSC

**Video Mode:** Shows the currently selected video mode

**Backlight Mode:** Off, BLC, WDR or HLC

**Image Adjust:** Off, Mode, Sharpness, Brightness, Contrast, Saturation, Chroma, Gamma and 2DNR

**Exposure:** Auto, Manual settings

**White Balance:** Auto, Auto tracking, Manual, Sodium Lamp, Indoor, Outdoor 1 & 2 and Area Day / Night: Auto, B/W, Colour

**Language:** English, various European and Far-Eastern options

**Advanced:** Call up the advanced options menu

**Default:** Restore default settings

**Exit:** Return to normal operation

*Advanced menu options:*

**Camera Name:** Off, On (Name and location text input if On)

**Mirror:** Off, On for both horizontal and vertical mirroring

**Audio Mode:** Built-in Mic. (Volume Low, Med & High)

**IR:** On, Off

**Smart IR:** Set at 6 of a 0 to 15 range but, can only be changed when IR is on, i.e. B/W mode

**Voltage Prompt:** On, Off (Alarm upload option if On)

**Privacy Mask:** On, Off (Size and Location settings if On)

**Lens:** Reset (pulls the lens to wide angle)

**System Info:** Shows version number of the camera software

**Return:** return to the top-level menu

Default values are shown above as underlined.

The Image Mode has options of Standard, Soft and Flamboyant and these change the various Brightness, Contrast, Saturation etc. settings from their default value of 7. Alternatively, these can all be manually adjusted to suit the scene.

There are 8 privacy zones and they scale reasonably well with lens zoom position.

The resolution for CVI, TVI and AHD can be set to either 4MP or 1080p@25fps; the manual also states a 720p figure for CVI but this was not available on the tested camera.

### Performance

With its default settings the camera provides good colour rendition for both outdoor and indoor scenes and a high level of image detail. Its analogue format means there is no noticeable latency.

Although stated as a varifocal lens the zoom operated without the large focus shift often seen with such lenses. This meant that only a small focus adjustment was necessary to maximise detail. This should ideally be performed at low light in order to open the iris wide for minimal depth of field if neutral density filters are not available. Alternatively, the camera has a range of high shutter speeds that can be used for this operation.

Two infrared LEDs are used for night vision with one above and one below the lens. While the specification states an IR range of 60 metres, reasonable results were observed to at least 30 metres for the differentiation of objects and observation of moving subjects.

### Conclusion

Working with all of the key analogue HD formats and providing up to 4MP resolution this camera is relatively simple to install and set up.

When combined with a compatible recorder, this camera allows simple and cost-effective upgrades for legacy analogue systems using coaxial cabling.



**9.0 out of 10**

*NOTE: This PSI Product Test was carried out by an independent third party, not editorial staff. The manufacturer had no input in the review or the final result*