

PSI Professional Test



Professional Security Installer



Sanyo – VCC-HD4000P

An exclusive first look at the future for CCTV

THE FUTURE OF CCTV, DELIVERED TODAY!

If you are lucky enough to have been castaway on some desert island for the past few years, then you can be excused for not knowing what the future of CCTV is! However, if you have not had the pleasure of sand, sun and surf for the last decade, you'll know the future is IP-enabled megapixel cameras! A few manufacturers have nodded their heads towards HD, but that has been about it. Here at PSI, we are great fans of HD, and regular readers will remember our efforts to push major manufacturers down that route, so we were understandably excited when we saw a pre-release version of Sanyo's VCC-HD4000P.



Before we even consider this product, a point needs to be made about HD video. It could be the technology that pushes CCTV onto the next level, and here is why. It's an easy sell for installers, and it's wanted by end users! Consider the following scenario.

Imagine an end user has an existing CCTV solution, but he wants to upgrade it. You suggest that he might want to think about looking at IP connectivity because it can deliver higher resolutions than the PAL standard, which his system is already using to its full potential. He wants to know how much better the resolution is.

If you offer him megapixel cameras, he instantly recognises the terminology and asks the inevitable question: how many megapixels? Now, presuming his pockets aren't exceedingly deep, and bearing in mind that the hike in performance still needs to be usable, you suggest 1.3 megapixels. He probably has a 5 megapixel camera in his phone, so it sounds less impressive that it really is. It also seems expensive for a CCTV camera significantly worse than his mobile!

However, tell him that you can deliver HD images, and he instantly knows the score. He appreciates that it will be better quality, and he knows it is going to cost more. Sky has taught him that! The additional benefits – such as being able to use cost-effective 16:9 displays – won't come into it. To the user, HD is desirable, and at around two megapixels, it's still manageable!

It might seem a small point, but customer acceptance is more than half the battle when upgrading to new technologies. Like it or not, in the consumer world, HD television and video is what the general public covet the most.

It is also important to make a comment about the camera we tested. We received an impromptu demo of

the camera after coming across a pre-production model quite by chance. It seemed rude not to ask whether we could have a unit to test, and were somewhat surprised when we were allowed to have a pre-production model. A few days after it had arrived, we were informed a hardware change had been made and were sent another updated camera!

The unit is due for its official launch at Essen in the second week of October, and given that several Sanyo offices around the world seem to be carrying out final testing and adjustments to the product, it means that production specification isn't 100 per cent finalised. However, the models we received certainly give a very good understanding of the performance on offer from the VCC-HD4000P.

Because we are working with pre-production models, and because the final tweaks are still on-going at the time of writing, we will not include final specifications. They will, however, be available after the launch via www.psimagazine.co.uk for anyone who wants to download them. The base specification and performance will remain the same as reported here.

Product design

The VCC-HD4000P is actually a whole lot more than a HD CCTV camera. For a start, it can



Even if you find video technology to be a boring workaday subject, you cannot help but be impressed by Sanyo's VCC-HD40000P; either that, or you simply have no soul!



deliver video over and above full HD resolution. The actual camera delivers a top resolution of 2288 x 1712, although it has more functionality at full HD (1920 x 1080), and the data is more manageable!

The camera has four modes, each with a set of resolutions. These are HD (H.264 and JPEG) or H.264 only, both with resolutions of 1920 x 1080, 1280 x 720, 1024 x 576, 960 x 540, 640 x 360 and 320 x 180. Both modes are obviously 16:9 aspect ratio. The other two modes are 4:3 aspect ratio, Standard (H.264 and JPEG) and JPEG only. These have resolutions of 2288 x 1712, 1600 x 1200, 1280 x 960, 1080 x 864, 1024 x 768, 800 x 600, 720 x 576, 640 x 480, 360 x 288 and 320 x 240. There should be something there for every installation!

Other features include x10 optical zoom, day/night operation, BLC, AGC, privacy masking – the camera has all the usual features plus some more, and includes an SD card slot and USB output for additional archiving devices. However, let's be honest; this is the first competitively priced HD CCTV camera from a major player in the CCTV industry, and it's the quality we're interested in. Suffice to say you won't be disappointed by the feature set on offer, and the software supplied is enough to view, record and manage the footage.

Performance

This camera will be, for many installers, their first play with HD video, and the impression that they will be left with will be one of video quality with a serious wow factor. Image definition is stunning, and colours are crisp and accurate. Even on a VGA output, which we all know softens up images, the final picture knocks a composite high resolution camera viewed on a CRT well and truly off its perch! The difference is hard to describe. It's vast.

Imagine a soft VGA resolution camera viewed on a cheap LCD monitor, next to a state-of-the-art high resolution camera viewed on an expensive CRT, and then you only start to appreciate the difference. It is significant, and needs to be seen to be appreciated.

It is easy to crank the camera up to its full four megapixel performance and be amazed at the quality, but stick to HD and you soon discover that this Sanyo camera is built with the real world in mind. At HD resolution, it is simply outrageous how clean and sharp the image is. That the camera has its own integral 4 megapixel lens means you won't strangle the resolution with inappropriate optics. It also means that you don't have to buy a lens, which makes the unit even more cost-effective. We'll cover price in a minute, and trust us, it's worth the wait.

The camera is a day/night unit, so what's the low light performance like? IP-based cameras do often struggle as ambient light levels fall, but Sanyo does well to keep the standard up. It's not stunning, but it's more than acceptable compared to other IP-based cameras.

Compare the VCC-HD4000P to composite cameras, and the HD camera wins. Compare it to IP-based megapixel cameras, and the HD camera wins. Sanyo's intended pricing is the same as a composite high res camera by the time you factor in the cost of a lens, and that's staggering!

In summary

Even if you find video technology to be a boring subject, you cannot help but be impressed by Sanyo's VCC-HD4000P; either that, or you simply have no soul! This is the future of CCTV; enjoy it!

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Get a closer look with SANYO's HD camera



SANYO's VCC-HD4000P is the world's first True 4 Megapixel HD CCTV Camera with built in 4 Megapixel Lens.

Our new HD camera together with superior lens uses groundbreaking technology to deliver unrivalled image quality.

- Full HD (1920 x 1080/25ips) H.264 / M-JPEG and Composite Video Output / HDMI Output
- 4 million pixel progressive scan CMOS image sensor for ultimate surveillance
- Simultaneous stream of JPEG and H.264 data for HD real-time image streaming
- 16x digital zoom for further image enlargement without losing vital detail

HD
NETWORK
CAMERA