

Test the Best!

Seetec and GIT SECURITY test video cameras in the test lab of the Hardware Competence Center at SeeTec under standardized conditions. The results provide a solid basis for the planning of IP video projects and help to avoid embarrassing surprises. For the test procedure video sequences are created under various different fixed lighting conditions and subsequently evaluated. Movement in the picture as well as night and backlight conditions are also included.

Performance

Assessment of performance at 1,000 Lu

The JVC VN-H57U(A) delivered an image under good lighting conditions with a slight red shift. A manual white balance was not carried out as the test takes place under factory settings. All objects were reproduced sharp and with good contrast; smearing and image noise were hardly perceptible.

Assessment of performance below 1,000 Lux

The camera continued to provide almost constant good picture quality under reducing light conditions, impressing in particular with its high level of detail. Under weak lighting (under 2 Lux) no red shift is apparent anymore. Even at 0.5 Lux, the camera continues to deliver color images. An automatic switch to B/W mode does not happen yet, thanks to the 'Super LoLux' technology. Although the picture noise increases under these conditions, the contrast and clarity remain almost unaffected.

Assessment of performance in backlight situations

The performance of the camera under backlight conditions is consistently good, impressing above all by its extremely short readjustment time of just under one second. The backlight source did not significantly over-modulate and details in the background remain easily recognizable.

Assessment of performance in use: bandwidth measurement

The bandwidth usage of the camera stayed very linear at a low 4.3 MB/s. The bandwidth dropped after switching to b/w mode, using just over 1 MB/s.

Conclusion

The new camera generation from JVC delivers images that, even under extremely weak lighting, allow objects and their movements to be clearly seen, thanks to its 'Super LoLux' technology. When well lit, a scene appears sharp although slight quality loss is apparent in color reproduction.



In Focus: JVC VN-H57U(A)

JVC's VN-H57U(A) series feature true Day/Night performance and Super LoLux HD technology for superior color reproduction, even in low light. The embedded Clear Logic Video Intelligence image processing promises to provide superior wide dynamic performance, back light compensation, edge enhancement and anti-fog capabilities. The VN-H57U(A) includes a 1/3-inch CMOS imager that delivers Full HD 2.2MP at up to 30fps – and can produce rich color images in light as low as 0.15 lux. The VN-H57U(A) offers remote and auto back focus. Other features include ON-VIF compatibility, an DS card slot, audio features, camera-based analysis tools such as motion detection and also privacy masking.

CAMERA TEST



Technical data for the camera test

Manufacturer	JVC
Model	VN-H57U
Firmware version	5.00.019
Distance to test chart	0.7 m
Lens used	Tamron MP 2.8–8mm IR1:1.2 1/3 CCTV CS
* Focal length set	6 mm
*Compression method	H.264
*Resolution	1920x1080
*Compression	–
I-Frame-interval	1 second
Max. stream bandwidth	4096 Kbit/s
Measured frame rate	30 fps
Average bandwidth	4,28 Mbit/s

*The camera was integrated into the test system with the "default" settings. The settings were modified according to the test criteria listed above.

Assessment with differing illumination conditions

Criteria Lux values	1000 Lux	100 Lux	10 Lux	0,5 Lux	0 Lux + *BL1
Colours	2,5	2,5	2,5	2	s/w
Contrast	2	2	2	3	2,5
Focus	1,5	1,5	2	2,5	2,5
Motion sharpness	2	2	2,5	2,5	2
Image noise	2	2	2,5	3	2
Recovery from backlight	–	–	–	–	1,5
Performance against backlight	–	–	–	–	1,5

Assessment was performed according to the rating system of 1 (very good) to 6 (unsatisfactory).
BL= Backlight *in the beam of a white light LED