



VLB5/VLB6/VLD5/VLD6M

USER MANUAL

Thank you for purchasing our product. Speco Technologies is constantly developing and improving products. We reserve the right to modify product design and specifications without notice and without incurring any obligation.

Warnings

- If the product does not work properly, please contact the dealer or where the product was purchased. Speco Technologies is not responsible for any problems caused by improper operation or repair.
- Keep away from liquid while in use.
- All installation and operation here should conform to local electrical safety codes.
- Make sure the power supply voltage is correct before using the camera.
- Do not drop the camera or subject it to physical shock.
- Do not use the device beyond specified voltage range.
- Do not place the camera in extremely hot, cold (the operating temperature shall be $(-4^{\circ}F\sim122^{\circ}F)$, dusty or damp locations, and do not expose it to high electromagnetic radiation.
- To avoid heat accumulation, good ventilation is required for operating environment.

Introduction

This camera series is the latest technology and advanced circuit design, which features high definition and sensitivity, low noise and distortion and supports HD video transmission with the common coaxial cable, ensuring the requirement of the HD monitoring in the traditional surveillance system.

High Resolution

Adopt high performance sensor, providing high definition and clear image.

● High Transmission Performance

Real-time transmission with high speed and long distance.

DNR

Reduce noise from brightness and color signal.

OSD

Access the camera settings which can be clearly displayed through the main menu.

● White Balance

Adjust the color temperature according to the environment automatically.

■ ICR Auto Switch

The filter will filter infrared light during the daytime and change to normal at night to ensure a high sensitivity and clear image.

AGC

Adjust the gain of amplifier, enabling the camera to output the standard video signal in different lighting condition.

● Wide Dynamic Range (WDR)

When there are both very bright and very dark areas simultaneously in the field of view, this function will balance the brightness level and provide clear images.

Backlight Compensation (BLC)

When the back of the captured object is too much bright, you can set BLC for the captured object to make it clearer.

Cables



Video Switch: Four video output modes can be optional--AHD, TVI, CVI and CVBS

(a) remove the cover of the video switch cable; (b) hold and press the button in the video switch cable for 5 seconds to switch the current video output.

Installation

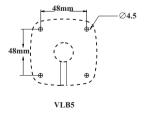
Before you start, please make sure that the wall or ceiling is strong enough to withstand three times the weight of the camera. Please install and use the camera in the dry environment.

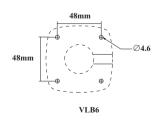
You'd better install back the lens cover or lower dome less than 4 hours after removing it.

The mounting types of cameras are only for reference.

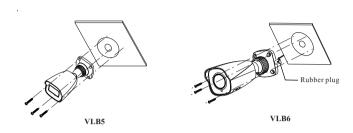
► Mounting for VLB5/VLB6

1. Drill the screw holes and the cable hole on the wall according to the drill template.

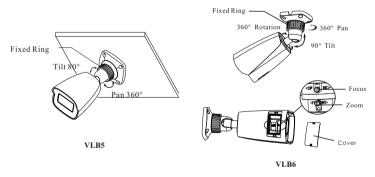




- 2. Route and connect the cables.
- 3. Secure the mounting base with camera to the wall with screws as shown below.



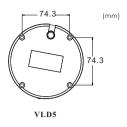
- 4. Bracket adjustment. Before adjustment, preview the image of the camera on a monitor and then loosen the fixed ring to adjust the view angle of the camera. Tighten the fixed ring after the adjustment.
- 5. Focus and zoom adjustment (If the camera you get is fixed lens, please skip this step). Open the cover of the camera then adjust the focus and zoom screws to get a clear image. Finally, install the cover back to the camera.

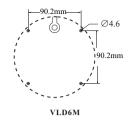


► Mounting for Dome Camera

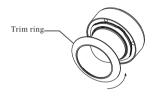
● Mounting for VLD5/VLD6M

1. Attach the drill template to the place where you want to fix the camera and then drill the screw holes and the cable hole on the wall according to the drill template.

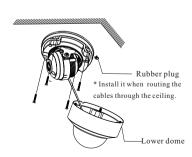




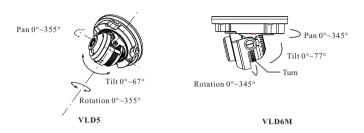
2. Rotate the trim ring anticlockwise to remove it from the camera.



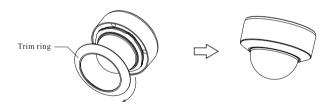
- 3. Loosen the screws to open the lower dome. Then route and connect the cables.
- 4. Secure the camera to the wall with screws provided as shown below.



5. Three-axis adjustment. Before adjustment, preview the image of the camera on a monitor and then adjust the camera according to the figure below to get an optimum angle.



6. Install the lower dome back to the camera and fix it with screws. Then put the trim ring onto the lower dome and then rotate it clockwise until it is locked. Finally, remove the protection film softly.



Specifications

Specifications	Models				
Image Sensor		VLB5	VLB6	VLD5	VLD6M
Resolution	Camera				
Image size	Image Sensor	1/2.9" CMOS		1/2.8" CMOS	
Video Output AHD/TVI/CVI/CVBS (*camera comes defaulted to HD-TVI) Image System PAL/NTSC Electronic Shutter Auto; 1/50s~1/100000s(PAL); 1/60s~1/100000s (NTSC) IR Distance (feet) 65.6~98.4 98.4~164.0 32.8~65.6 65.6~98.4 Frame Rate 30fps(60Hz),25fps(50Hz) 30fps(60Hz),25fps(50Hz) 30fps(60Hz),25fps(50Hz) Min. Illumination Color:0.001lux@F1.2, AGC ON; B/W: 0lux with IR 2.8~12mm (motorized control) Lens 2.8mm 2.8~12mm (motorized control) Lens Mount M12 D14 M12 D14 S/N Ratio ≥ 52dB(AGC OFF) 1P67 1P67&IR10 1P67&IR10 Ingress Protection 1P67 1P67&IR10 1P67&IR10 1P67&IR10 Function Control OSD (UTC control) Day & Night Yes (120dB) 1P67 1P67&IR10 1P67&IR10	Resolution	2MP			
Image System	Image size	1920×1080			
Electronic Shutter	Video Output	AHD/TVI/CVI/CVBS (*camera comes defaulted to HD-TVI)			
IR Distance (feet)	Image System	PAL/NTSC			
Frame Rate 30fps(60Hz),25fps(50Hz) Min. Illumination Color:0.001lux@F1.2, AGC ON; B/W: 0lux with IR Lens 2.8mm 2.8~12mm (varifocal) 2.8mm 2.8~212mm (motorized) Lens Mount M12 D14 M12 D14 S/N Ratio ≥ 52dB(AGC OFF) 1P67 1P67&IK10 1P67&IK10 Ingress Protection 1P67 1P67&IK10 1P67&IK10 Function Control OSD (UTC control) OSD (UTC control) Day &Night ICR Yes (Digital WDR) Yes (120dB) Digital NR Yes Yes AGC Yes Yes Auto White Balance Yes Front Light Compensation Yes Defog No HLC No No Yes Sharpness No Mirror Yes Smart IR Yes	Electronic Shutter	Auto; 1/50s~1/100000s(PAL);1/60s~1/100000s (NTSC)			
Min. Illumination Color:0.001lux@F1.2, AGC ON; B/W: 0lux with IR Lens 2.8mm 2.8~12mm (varifocal) 2.8mm 2.8~12mm (motorized) Lens Mount M12 D14 M12 D14 S/N Ratio ≥ 52dB(AGC OFF) 1P67 1P67&IK10 1P67&IK1 Ingress Protection IP67 IP67 IP67&IK10 1P67&IK1 Function Control OSD (UTC control) OSD (UTC control) Posy & (120dB) Day &Night ICR Yes (120dB) Poigital NR AGC Yes AGC Auto White Balance Yes Front Light Compensation Yes Yes Front Light Compensation Yes Yes Sharpness No No Yes Yes Sharpness No Mirror Yes Smart IR Yes Yes Yes	IR Distance (feet)	65.6~98.4 98.4~164.0 32.8~65.6 65.6~98.4			
Lens 2.8mm 2.8-12mm (varifocal) 2.8mm 2.8-12mm (motorized) Lens Mount M12 D14 M12 D14 S/N Ratio ≥ 52dB(AGC OFF) 1P67 1P67&IK10 1P67&IK1 Function Control OSD (UTC control) Day &Night ICR Ves (Digital WDR) Yes (120dB) Digital NR Yes AGC Yes Auto White Balance Yes Front Light Compensation Yes Front Light Compensation Yes Yes Sharpness No No Yes Yes Sharpness No Mirror Yes Smart IR Yes Yes Yes	Frame Rate	30fps(60Hz),25fps(50Hz)			
Lens 2.8mm (varifocal) 2.8mm (motorized Lens Mount M12 D14 M12 D14 S/N Ratio ≥ 52dB(AGC OFF) Ingress Protection IP67 IP67 IP67&IK10 IP67&IK10 Function Control OSD (UTC control) Day &Night ICR WDR Yes (Digital WDR) Yes (120dB) Digital NR Yes AGC AGC Auto White Balance Yes Front Light Compensation Yes Yes Defog No HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes Yes	Min. Illumination	Color:0.001lux@F1.2, AGC ON; B/W: 0lux with IR			
S/N Ratio ≥52dB(AGC OFF) Ingress Protection IP67 IP67 IP67&IK10 IP67&IK10 Functions Function Control OSD (UTC control) Day & Night ICR WDR Yes (Digital WDR) Yes (120dB) Digital NR Yes AGC Yes Auto White Balance Yes Front Light Compensation Yes Defog No HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes	Lens	2.8mm		2.8mm	2.8~12mm (motorized)
Ingress Protection	Lens Mount	M12	D14	M12	D14
Functions Function Control OSD (UTC control)	S/N Ratio	≥52dB(AGC OFF)			
Function Control OSD (UTC control)	Ingress Protection	IP67	IP67	IP67&IK10	IP67&IK10
Day & Night ICR	Functions				
WDR	Function Control	OSD (UTC control)			
Digital NR	Day &Night	ICR			
AGC Yes Auto White Balance Yes Front Light Compensation Yes Defog No HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes	WDR	Yes (Digital WDR) Yes (120dB)			dB)
Auto White Balance Yes Front Light Compensation Yes Defog No HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes	Digital NR	Yes			
Front Light Compensation Yes Defog No HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes	AGC	Yes			
Defog No HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes	Auto White Balance	Yes			
HLC No No Yes Yes Sharpness No Mirror Yes Smart IR Yes	Front Light Compensation	Yes			
Sharpness No Mirror Yes Smart IR Yes	Defog	No			
Mirror Yes Smart IR Yes	HLC	No	No	Yes	Yes
Smart IR Yes	Sharpness	No			
165	Mirror	Yes			
	Smart IR	Yes			
Image Setting Yes	Image Setting	Yes			
Defect Correction Auto	Defect Correction	Auto			
Others	Others				
Power Supply DC12V (± 10%) DC12V (± 15%)	Power Supply	DC12V (± 10%)		DC12V (± 15%)	
Power Consumption IR OFF: < 1.5W; IR ON: < 4.5W	Power Consumption	IR OFF: < 1.5W; IR ON: < 4.5W			
Working Environment -4 °F ~ 122 °F, 10 % ~ 90 %(relative humidity)	Working Environment	-4 °F ~ 122 °F, 10 % ~ 90 %(relative humidity)			
Dimensions (inch) $6.6 \times 2.9 \times 2.9$ $8.6 \times 3.2 \times 3.2$ $\Phi 4.7 \times 3.5$ $\Phi 5.6 \times 3.9$	Dimensions (inch)	6.6×2.9×2.9	8.6×3.2×3.2	Φ4.7 × 3.5	Φ5.6 × 3.9

Model: VLB5/VLB6/VLD5/VLD6M

Federal Communications Commission (FCC) Statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Responsible Party:

Speco Technologies 200 New Highway Amityville, NY 11701 www.specotech.com