

In addition to its video surveillance functions, the QTN8022D is able to accept input from other devices and either pass their signals back to an NVR, or utilize them to trigger recording or alert actions when it is being used in a stand-alone role. The camera can accept a micro SD card up to 64GB, allowing it to record still images without the need for an NVR.

By using the audio input and output to connect both a microphone and speaker - and with similar audio equipment on the user's end, two-way communication can take place. Two alarm sensors can be connected to the alarm block with a single output to an audible alarm, an external alarm input or to a NVR. When used with an NVR or on a network, the alarm signal can trigger recording and its signal can be transmitted via the Cat 5e cable to an NVR.



#	Item	Function
1	Inside camera: Storage Focus, Reset	Up to 64GB memory Adjust camera's zoom and focus Reset camera if user is locked out
2	Alarm	2 Alarm inputs 1 Output
3	PT Controls	Connection point for analog pan-tilt platform.
4	Power	For use without POE
5	RJ45 (Ethernet) Port	For network connectivity, video output and power input (via POE)
6	HP (Headphones)	Audio out - connect to speaker
7	Mic	Input for optional microphone, using included adapter (7a)

MOUNTING THE CAMERA

The QTN8022D camera is designed to be mounted on the ceiling. The baseplate is removable to allow for easy installation.

Use the included hexagonal wrench to unscrew the retaining bolt half-way. This bolt is located on the front of the camera, above the Q-See logo.

Use the self-adhesive template to locate the holes for the mounting screws rather than the baseplate itself to prevent damage. The large circle on the template marks the ideal position to drill a hole for the cables if you will be running them inside the ceiling. The knock-out on the back of the base can be removed if you intend to run the cables along the wall, etc.

Once you have drilled the necessary holes, use the included screws and anchors - or other mounting hardware as needed - to secure the base to the surface.

Connect the cables and ensure that they will not be pinched when the camera is attached.

Attach the camera body to the base and tighten the retaining bolt.

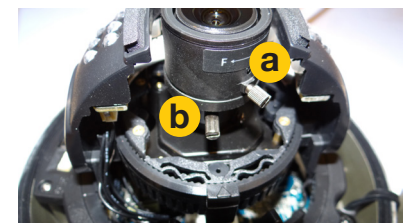


ADJUSTING THE LENS

The QTN8022D has a lens that can be manually adjusted between 2.8mm and 12mm. The 2.8mm setting provides a 109° field of view. The 12mm setting enlarges subjects by approximately three times compared to the 2.8mm configuration, with the field of view narrowing to 22°.

The camera is shipped in the 2.8mm position. To adjust the lens, you will have to first remove the camera's dome by loosening the four screws holding the cover in place. The screws should not be removed from the cover.

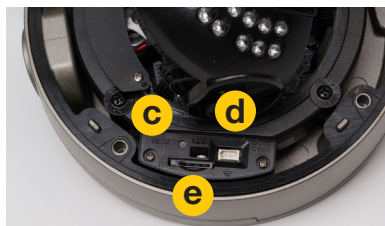
Once the cover has been removed, you can adjust the Focus (a) and zoom (b) using the two knobs located on the lens body behind the LED circuit board. You may need to loosen them by twisting the knob counter-clockwise before making the adjustments. Do not apply excessive force to the knobs as they can snap off, leaving your camera unable to be adjusted.



Instructions continued on other side

When adjusting the zoom and focus, you should be able to monitor the camera's view to ensure that the image is properly in focus and includes the entire area that you wish to monitor. This can be done by connecting it to an NVR where you can remotely monitor it using a phone or tablet.

Another method is to use the temporary power/video cable (right). The white end is plugged into the **DC IN/CVBS** port (**d**). A camera tester is connected to the yellow and red ends to show the camera's field of view.



SPECIFICATIONS

Camera Type	Dome
Camera Technology	IP
Image Sensor size	1/3"
Image Sensor Type	CMOS Sony Exmor
Image Resolution	1920 x 1080, 1280 x 720, 640 x 480, 320 x 240
Megapixels (digital)	2
Effective Pixels	1920 x 1080
Lens Size	2.8 to 12mm
Angle of View	22 to 109°
IR Cut Filter	Yes
Night Vision	
IR LEDs	30
Infrared Wavelength	850nm
Min Lux Illumination	0 Lux (LEDs on)
Night Vision Range	Up to 100 ft
Additional Image Features	
Electronic Shutter	1/30s-1/100,000s
Gain Control	Auto/Manual
Wide Dynamic Range	Digital
Noise Reduction	3D DNR

SD CARD

The QTN8022D also has a slot for a Micro SD card (**e**) which allows the camera to record still images when it is operating on its own network (ie; not directly connected to the NVR with the Ethernet cable). Please see **Section 3.5** of the **Remote Monitoring Guide** for instructions on recording with an SD card.

RESET BUTTON

The **Reset** button (**c**) is also located inside the camera. This is only for use if the camera becomes inoperable.

Audio	
Audio	External input
Audio Microphone	Audio input G711A compression
Audio Range	Depends on microphone used
Connectivity	
Connector Types	RJ45 POE, Audio input, Audio output, RS485
Other Connections	2.1mm power, MicroSD (64GB), Alarm in, Alarm out,
IP Protocol	ONVIF 2.3
Remote Monitoring	
Use as Standalone	Yes
Compatible Mobile Devices	iPhone, iPad, Android, Windows Phone 7.5/8
Compatible Systems	NVRs
Power	
Power Supply	12V 1A or POE
Power Consumption	2.76W to 6.48W (LEDs ON)
Physical	
Weatherproof IP Rating	IP66
Body Construction	Metal
Weight	31 oz
Dimensions (WxHxD)	4.5 in x 6 in
Operating Temperature	-40° to 122°F, 10% to 90% Humidity