

# CÁMARA DE RED

Manual del usuario

QND-6012R/6022R/6032R/6072R/6082R

QNV-6012R/6022R/6032R/6072R/6082R

QNO-6012R/6022R/6032R/6072R/6082R

# Cámara de Red

## Manual del usuario

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❖ El diseño y las especificaciones están sujetos a cambio sin aviso.

❖ El ID inicial del administrador es “admin” y la contraseña debe establecerse al iniciar sesión por primera vez. Por favor, cambie su contraseña cada tres meses para proteger de forma segura la información personal y evitar daños por el robo de información.  
Por favor, tenga en cuenta que es responsabilidad del usuario la seguridad y otros problemas causados por el mal manejo de una contraseña.

## INSTRUCCIONES DE SEGURIDAD IMPORTANTES

1. Lea estas instrucciones.
2. Consérvelas.
3. Atente para todas las advertencias.
4. Siga todas las instrucciones.
5. No utilice este aparato cerca del agua.
6. Limpie el área contaminada en la superficie del producto con un paño seco y suave o un paño húmedo. (No utilice detergente o productos cosméticos que contengan alcohol, disolventes o tensioactivos o constituyentes de aceites, ya que pueden deformar o dañar el producto).
7. No obstruya ninguna apertura de ventilación. Instale el aparato siguiendo las instrucciones del fabricante.
8. No lo instale cerca de ninguna fuente de calor como radiadores, focos de calor o cualquier otro aparato (incluidos los amplificadores) que emita calor.
9. No olvide que la finalidad de los enchufes polarizados o de toma a tierra es proporcionarle seguridad. Un enchufe polarizado tiene dos clavijas, una más ancha que la otra. Un enchufe con toma a tierra tiene dos clavijas y una tercera de toma a tierra. Tanto la clavija más ancha, en el caso del enchufe polarizado, como la clavija adicional, en el caso del enchufe con toma a tierra, tienen como objetivo aportarle seguridad. Si el enchufe del aparato no encaja en su toma de corriente, póngase en contacto con un electricista para cambiar la toma de corriente obsoleta.
10. Evite pisar o doblar el cable de alimentación. Ponga especial cuidado para no hacerlo en enchufes, tomas de corriente y en los puntos en los que salen desde el aparato.
11. Utilice únicamente los dispositivos y accesorios especificados por el fabricante.
12. Utilice sólo las mesitas con ruedas, soportes, trípodes o mesas recomendadas por el fabricante o vendidas con el aparato. Cuando se utilice una mesita con ruedas, tenga cuidado al mover la mesita con ruedas junto con el aparato para evitar daños por vuelco.
13. Desenchufe este aparato durante tormentas eléctricas o cuando no se utilice durante largos períodos de tiempo.
14. Remita todas las reparaciones a personal de mantenimiento cualificado. Es necesario enviar el aparato para su reparación cuando ha sufrido cualquier tipo de daño, como, por ejemplo, que el cable o el enchufe de la alimentación está dañado, se han derramado líquidos sobre el aparato o algún objeto ha caído sobre él, el aparato ha sido expuesto a la lluvia o a humedad, no funciona correctamente o se ha caído al suelo.
15. Este producto se ha diseñado para recibir alimentación de unidades de suministro eléctrico marcadas como "clase 2" o "LPS" y con valores nominales de 12 V CC, 0,55 A o PoE (48 V), 0,16 A. (QND-6072R/6082R, QNV-6072R/6082R)
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18. Este producto se ha diseñado para recibir alimentación de unidades de suministro eléctrico marcadas como "clase 2" o "LPS" y con valores nominales de 12 V CC, 0,51 A o PoE (48 V), 0,15 A. (QNO-6012R/6022R/6032R)
19. Este producto se ha diseñado para recibir alimentación con aislamiento.
20. Si utiliza una fuerza excesiva al instalar el producto, es posible que la cámara pueda sufrir daños y funcione de forma incorrecta.  
Si instala el producto de forma forzada utilizando herramientas no compatibles, es posible que el producto pueda sufrir daños.
21. No instale el producto en un lugar donde exista o pueda generarse sustancias químicas o niebla de aceite. Los aceites comestibles como el aceite de soja pueden dañar o deformar el producto, por lo que no debe instalar el producto en la cocina o cerca de la mesa de la cocina.  
Esto podría causar daños al producto.
22. Al instalar el producto, tenga cuidado y no permita que la superficie del producto se manche con sustancias químicas. Algunos disolventes químicos como limpiadores o adhesivos pueden causar daños graves a la superficie del producto.



23. Si instala o desmonta el producto de una manera que no se ha recomendado, es posible que las funciones/ rendimiento de producción no estén garantizados.  
Instale el producto consultando "Instalación y conexión" en el manual del usuario.
24. La instalación o uso del producto en el agua puede causar daños graves al producto.
25. Aunque es posible que un cambio rápido en la temperatura genere escarcha dentro del domo, no habrá ningún problema con el video.

## ADVERTENCIA

PARA REDUCIR EL RIESGO DE INCENDIO O DESCARGA ELÉCTRICA, MANTENGA ESTE DISPOSITIVO LEJOS DE LLUVIA Y/O LA HUMEDAD. NO INSERTE NINGÚN OBJETO METÁLICO EN LAS REJILLAS DE VENTILACIÓN NI EN NINGUNA ABERTURA DEL EQUIPO.

No debe exponer el aparato a gotas ni salpicaduras de agua ni a objetos con líquido, como jarrones, evitando colocarlos sobre el aparato.

Para evitar daños, este aparato debe instalarse de forma adecuada en el techo o la pared de acuerdo con las instrucciones de instalación.

## PRECAUCIÓN

	<b>PRECAUCIÓN</b> NO ABRIR RIESGO DE SUFRIR UNA DESCARGA ELÉCTRICA	
<b>PRECAUCIÓN : PARA REDUCIR EL RIESGO DE SUFRIR UNA DESCARGA ELÉCTRICA, NO RETIRE LA CUBIERTA (NI LA PARTE POSTERIOR). DENTRO NO HAY PIEZAS QUE PUEDAN SER REPARADAS POR EL USUARIO. REMITA EL APARATO A PERSONAL DE MANTENIMIENTO CUALIFICADO.</b>		

## EXPLICACIÓN DE LOS SÍMBOLOS GRÁFICOS



Un triángulo con un rayo y una punta de flecha es un símbolo de advertencia para avisar al usuario de la presencia de "voltajes peligrosos" dentro de la carcasa del producto que pueden ser lo suficientemente intensas como para constituir un peligro de descarga eléctrica.



Un triángulo con un signo de exclamación es un símbolo de advertencia para avisar al usuario de que hay instrucciones importantes de funcionamiento y mantenimiento (reparaciones) en la documentación que acompaña al aparato.

Construcción de clase I

Un aparato con construcción de CLASE I se conectará a una toma de corriente con la conexión de protección de tierra.

Batería

No debe exponer las baterías (paquete de batería o pilas instalados) a calor excesivo, a la luz directa del sol ni al fuego, etc.

No es posible sustituir la batería.

Desconexión del dispositivo

Desconecte el enchufe de corriente del aparato si está defectuoso. Y llame a un servicio de reparaciones.

Cuando lo utilice fuera de EE.UU., se puede utilizar el código HAR con acoplamientos de una agencia aprobada.

PRECAUCIÓN

Existe un riesgo de explosión si la batería se sustituye por otra que no sea adecuada. Tire las baterías usadas como se indica en las instrucciones.

Estas instrucciones de servicio están destinadas únicamente a personal de servicio técnico cualificado.

Para reducir el riesgo de descarga eléctrica no realice ninguna operación de servicio que no sean las indicadas en las instrucciones de funcionamiento a menos que esté cualificado para hacerlo.

Utilice la alimentación de entrada con sólo una cámara y sin que estén conectados otros dispositivos.

El ITE solo se debe conectar a redes PoE sin enviarlo a la red externa.

Lea detenidamente las precauciones de seguridad recomendadas que se incluyen a continuación.

- No coloque este aparato sobre una superficie desigual.
- No lo instale en una superficie expuesta a la luz directa del sol, cerca de equipos de calefacción ni cerca de áreas frías.
- No coloque este aparato cerca de material conductivo.
- No intente reparar este aparato por sí solo.
- No coloque jarrones sobre el producto.
- No lo instale cerca de fuentes magnéticas.
- No bloquee las aberturas de ventilación.
- No coloque objetos pesados sobre el producto.
- Use guantes protectores cuando instale/desinstale la cámara.  
La alta temperatura de la superficie del producto puede causar quemaduras.

El Manual del usuario es una guía sobre cómo utilizar los productos.

El significado de los signos que se utilizan en el manual es el siguiente.

- Referencia : en caso de que se facilite información de ayuda sobre el uso del producto
- Aviso : si existe alguna posibilidad de que se produzcan daños en bienes o lesiones en personas causadas por no seguir las instrucciones
- ✖ Lea este manual por razones de seguridad antes de utilizar los productos y guárdelo en un lugar seguro.

En determinados entornos de instalación, pueden producirse interferencias en las comunicaciones de radio.

Cuando se producen interferencias de ondas electromagnéticas entre el producto y el dispositivo de radiocomunicación, se recomienda mantener cierta distancia entre ambos o cambiar la dirección de la antena receptora.

ADVERTENCIA

Para evitar los daños que pueda causar el LED IR, no mire fijamente a la luz de funcionamiento.

Solo para los siguientes modelos.

QND-6012R/6022R/6032R/6072R/6082R  
QNV-6012R/6022R/6032R/6072R/6082R  
QNO-6012R/6022R/6032R/6072R/6082R

Grupo de riesgo 1
ADVERTENCIA Este producto emite IR. No mire fijamente a la luz de funcionamiento.
Producto probado conforme a IEC 62471



ÍNDICE GENERAL

DESCRIPCIÓN

3

- 3 Instrucciones de Seguridad Importantes
- 6 Características Recomendadas del Ordenador
- 6 Especificaciones de la Tarjeta de Memoria Micro SD/SDHC/SDXC Recomendada
- 6 Especificaciones recomendadas para NAS
- 7 Componentes
- 8 Vista (QND-6012R/6022R/6032R)
- 10 Vista (QND-6072R/6082R)
- 12 Vista (QNO-6012R/6022R/6032R/6072R/6082R)
- 14 Vista (QNV-6012R/6022R/6032R/6072R/6082R)

INSTALACIÓN Y CONEXIÓN

16

- 16 Instalación (QND-6012R/6022R/6032R/6072R/6082R)
- 17 Instalación (QNO-6012R/6022R/6032R/6072R/6082R)
- 18 Instalación (QNV-6012R/6022R/6032R)
- 20 Instalación (QNV-6072R/6082R)
- 23 Inserción/Extracción de una Tarjeta de Memoria Micro SD
- 27 Alimentación y redes

CONEXIÓN Y CONFIGURACIÓN DE LA RED

31

- 31 Conectar la Cámara Directamente a la Red de Área Local
- 31 Conexión Directa de la Cámara a un Módem DSL/Cable Basado en DHCP
- 32 Cómo usar el Device Manager
- 32 Búsqueda automática de la cámara
- 32 Cómo configurar la dirección IP
- 33 Cómo registrar la cámara manualmente
- 33 Configuración automática de la IP
- 34 Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)
- 35 Conexión a la Cámara desde un PC local Compartido
- 35 Conexión a la Cámara desde un PC remoto a Través de Internet

WEB VIEWER

36

- 36 Conexión a la Cámara
- 37 Configuración de contraseña
- 37 Inicio de Sesión
- 37 Configuración del visor web de la cámara

APÉNDICE

38

- 38 Solución de Problemas
- 39 Open Source Announcement

CARACTERÍSTICAS RECOMENDADAS DEL ORDENADOR

- CPU : Intel(R) Core(TM) i7 a 3,4 GHz o superior
- RAM : 8G o superior
- SO admitido : Windows 7, 8.1, 10, Mac OS X 10.12, 10.13, 10.14
- Navegador recomendado: Google Chrome
- Navegadores compatibles: MS Explore11, MS Edge, Mozilla Firefox(solo Windows 64bit), Apple Safari(sólo compatible con Mac OS X)
- VGA : Tarjeta gráfica de vídeo PCIe 256 MB GDDR3 o superior

ESPECIFICACIONES DE LA TARJETA DE MEMORIA MICRO SD/SDHC/SDXC RECOMENDADA

- Capacidad recomendada : De 16 GB a 128 GB (tipo MLC)
- Fabricantes recomendados : SanDisk, Transcend
- Tipo de producto : Alta resistencia
- La compatibilidad varía en función de los fabricantes y tipos de tarjeta.

ESPECIFICACIONES RECOMENDADAS PARA NAS

- Capacidad recomendada : Se recomienda que sea de 200 GB o superior.
- Acceso simultáneo : Una unidad de NAS puede aceptar un máximo de accesos simultáneos de hasta dieciséis cámaras.
- Para esta cámara, se recomienda utilizar una unidad NAS con las siguientes especificaciones del fabricante.


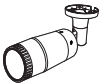






Productos recomendados	Tamaños disponibles
QNAP NAS	Accesos simultáneos para un máximo de 16 cámaras.
NAS Synology	Accesos simultáneos para un máximo de 16 cámaras.













■ El número de accesos a cámaras se reducirá si utiliza la unidad NAS para otros fines que no sean el de almacenamiento de vídeo.

## COMPONENTES

Compruebe si la cámara y los accesorios se incluyen en el paquete del producto.  
(Debido a los diferentes países de venta, los accesorios no son los mismos.)

Aspecto	Nombre de elemento	Cantidad	Descripción	Nombre del modelo
	Cámara	1		QND-6012R/6022R/ 6032R/6072R/6082R
		1		QNO-6012R/6022R/ 6032R/6072R/6082R
		1		QNV-6012R/6022R/ 6032R/6072R/6082R
	Manual de consulta rápida (Opcional)	1		QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Tarjeta de garantía (Opcional)	1		QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Plantilla	1	Guía de instalación del producto	QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Bloque de terminales de energía	1	Conectado al enchufe	QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R
	Llave en L	1	Se utiliza para controlar la dirección de la cámara	QNO-6012R/6022R/ 6032R/6072R/6082R

Aspecto	Nombre de elemento	Cantidad	Descripción	Nombre del modelo
	Llave en L (con forma de estrella)	1	Se utiliza para quitar y sustituir la tapa del domo	QNV-6012R/6022R/ 6032R/6072R/6082R
	Cable de alarma	1	Se utiliza al conectar a una alarma	QND-6012R/6022R/ 6032R/6072R/6082R
	Accesorio impermeable RJ45	1	Se usa para la instalación en lugares húmedos	QNO-6012R/6022R/ 6032R/6072R/6082R
	Protección solar	1	Protege la cámara de la luz directa del sol.	QNO-6012R/6022R/ 6032R/6072R/6082R
	Tornillo de fijación del protector solar	1	Fija la protección solar a la cámara.	QNO-6012R/6022R/ 6032R/6072R/6082R
	Cable de alimentación	1	Se utiliza para conectar al puerto de alimentación	QNV-6012R/6022R/ 6032R/6072R/6082R
	Cable de audio/alarma	1	Se utiliza para conectar al puerto de audio y alarma	QNV-6012R/6022R/ 6032R/6072R/6082R
	Cable para probar el monitor	1	Se utiliza para probar la conexión de la cámara en un dispositivo de visualización portátil	QND-6012R/6022R/ 6032R/6072R/6082R, QNV-6012R/6022R/ 6032R/6072R/6082R, QNO-6012R/6022R/ 6032R/6072R/6082R
	Pasacables	1	Se utiliza para conectar el cable LAN.	QNV-6012R/6022R/ 6032R/6072R/6082R
	Instalador de tapa	1	Se usa cuando se conecta un cable RJ45	QNV-6012R/6022R/ 6032R/6072R/6082R

Accesorios opcionales para la instalación

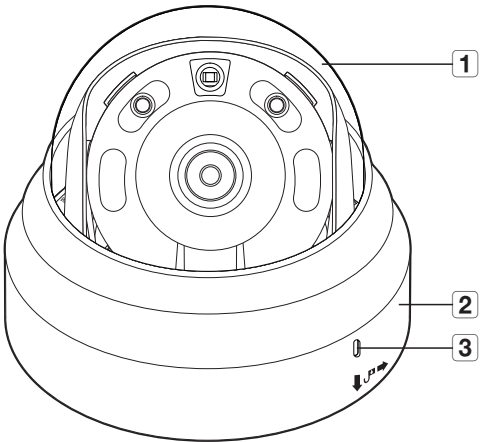
Para una instalación más sencilla, puede adquirir los accesorios opcionales apropiados disponibles.



Nombre del modelo	Montaje colgante	Caja trasera	Montaje de columna	Todo
QNV-6012R/6022R/6032R	SBP-122HMM	SBV-120GW		SBP-300LMW (Montaje en parapeto)
QNV-6072R/6082R	SBP-301HMM2	SBV-136BW		SBP-300CMW (Montaje en el techo)
QND-6012R/6022R/6032R	SBP-300HMM7			SBP-300WMW1 (Montaje en pared)
QND-6072R/6082R	SBP-122HMM			SBP-300NBW (Caja de instalación)
QNO-6012R/6022R/ 6032R/6072R/6082R		SBO-100B1	SBP-302PM	SBP-300PMW (Montaje de columna)
				SBP-300KMW (Montaje de esquina)

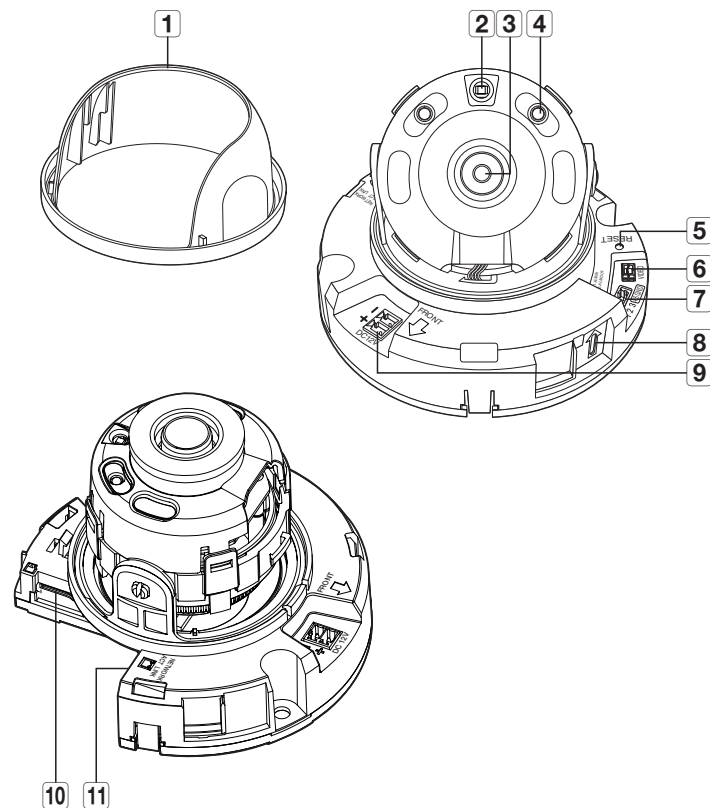
VISTA (QND-6012R/6022R/6032R)

Aspecto



Elemento	Descripción
1 Tapa curvada	Cubierta utilizada para proteger el objetivo y la unidad principal.
2 Caja de la cámara	Parte del alojamiento que cubre la carcasa de la cámara.
3 Orificio de micrófono	El micrófono está integrado

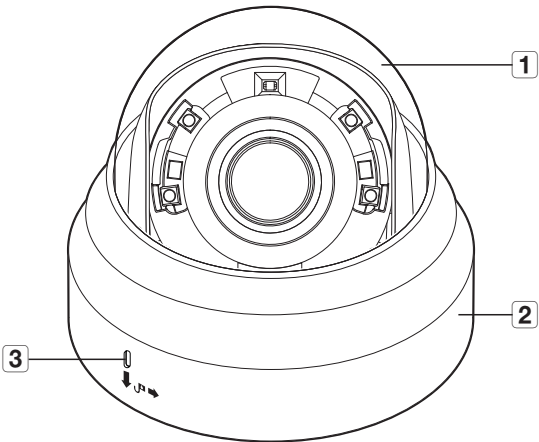
Componentes



Elemento		Descripción	
1	Cubierta interior	Funda protectora para el cuerpo principal.	
2	Sensor de iluminación	Detecta la luz entrante para controlar el LED de infrarrojos.	
3	Objetivo	Objetivo de la cámara.	
4	LED IR	Son LED de infrarrojos que se controlan mediante un sensor de iluminación.	
5	Botón de reinicialización	<p>Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema.</p> <p>■ Si reinicia la cámara, los ajustes de red se ajustarán de forma que se pueda habilitar DHCP. Si no hay ningún servidor DHCP en la red, debe ejecutar el programa del Device Manager para cambiar los ajustes básicos de la red tales como la dirección IP, la máscara de subred, la puerta de enlace, etc., antes de poder conectarse a la red.</p>	
6	Prueba de salida de monitor	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.	
7	Puerto E/S de alarma	ARM-IN	Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche
		ARM-OUT	Se utiliza para conectar la señal de salida de alarma.
		GND	Estos son los puertos comunes para conectar las señales de entrada/salida de la alarma.
8	Orificio de micrófono	El micrófono está integrado.	
9	Puerto de Alimentación	Puerto para el bloque de terminales de alimentación.	
10	Compartimento de la tarjeta de memoria Micro SD	Compartimento de la tarjeta de memoria Micro SD.	
11	Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.	

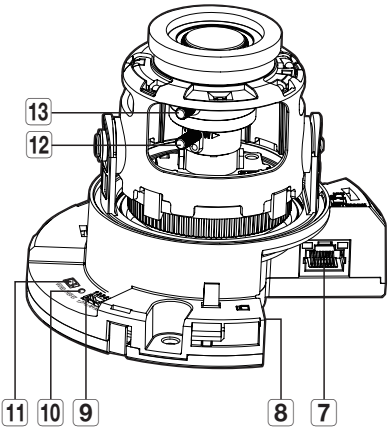
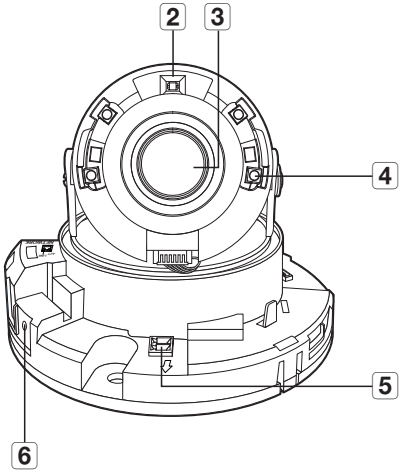
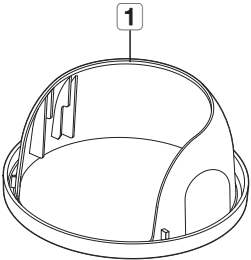
VISTA (QND-6072R/6082R)

Aspecto

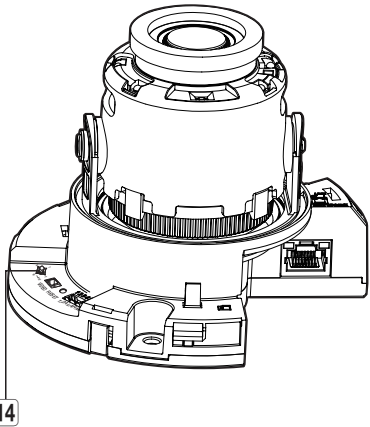


Elemento	Descripción
1 Tapa curvada	Cubierta utilizada para proteger el objetivo y la unidad principal.
2 Caja de la cámara	Parte del alojamiento que cubre la carcasa de la cámara.
3 Orificio de micrófono	El micrófono está integrado

Componentes



<QND-6072R>



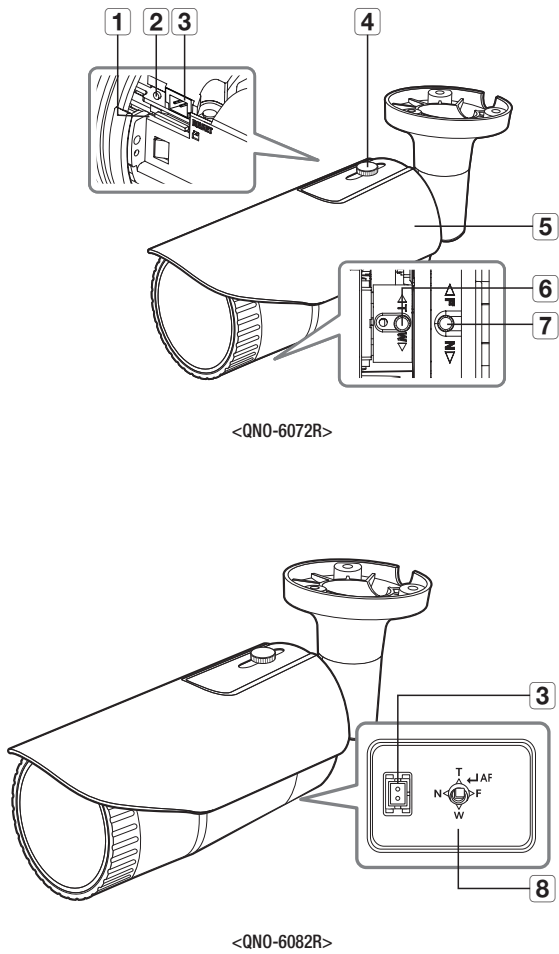
<QND-6082R>

Elemento	Descripción	
<b>1</b> Cubierta interior	Funda protectora para el cuerpo principal.	
<b>2</b> Sensor de iluminación	Detecta la luz entrante para controlar el LED de infrarrojos.	
<b>3</b> Objetivo	Objetivo de la cámara.	
<b>4</b> LED IR	Son LED de infrarrojos que se controlan mediante un sensor de iluminación.	
<b>5</b> Puerto de Alimentación	Puerto para el bloque de terminales de alimentación.	
<b>6</b> Orificio de micrófono	El micrófono está integrado.	
<b>7</b> Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.	
<b>8</b> Compartimento de la tarjeta de memoria Micro SD	Compartimento de la tarjeta de memoria Micro SD.	
<b>9</b> Puerto E/S de alarma	ARM-IN	Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche
	ARM-OUT	Se utiliza para conectar la señal de salida de alarma.
	GND	Estos son los puertos comunes para conectar las señales de entrada/salida de la alarma.
<b>10</b> Botón de reinicialización	<p>Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema.</p> <p>■ Si reinicia la cámara, los ajustes de red se ajustarán de forma que se pueda habilitar DHCP. Si no hay ningún servidor DHCP en la red, debe ejecutar el programa del Device Manager para cambiar los ajustes básicos de la red tales como la dirección IP, la máscara de subred, la puerta de enlace, etc., antes de poder conectarse a la red.</p>	
<b>11</b> Prueba de salida de monitor	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.	

Elemento	Descripción	
<b>12</b> Palanca de control de zoom (QND-6072R)	T	Acercar (Tele)
	W	Alejar (Wide)
	<p>Libere la palanca y muévela hacia la izquierda o hacia la derecha para acercar o alejar el zoom de la lente.</p> <p>Gire la palanca hacia la derecha para fijar la posición ajustada y evitar que se mueva.</p>	
<b>13</b> Palanca de control de enfoque (QND-6072R)	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
	<p>Libere la palanca y muévela hacia la izquierda o hacia la derecha para ajustar el enfoque de la lente.</p> <p>Gire la palanca hacia la derecha para fijar la posición ajustada y evitar que se mueva.</p>	
<b>14</b> Botón de control de zoom/enfoque (QND-6082R)	T	Acercar (Tele)
	W	Alejar (Wide)
	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
	Control del enfoque	Pulse este botón para un control automático del enfoque.

VISTA (QNO-6012R/6022R/6032R/6072R/6082R)

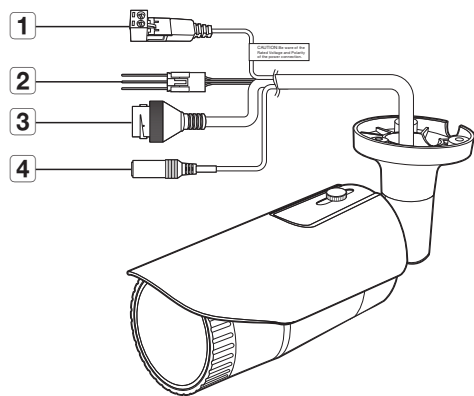
Aspecto



Elemento	Descripción	
1	Ranura para tarjeta Micro SD	(Espacio interno del producto) Se trata de una ranura en la que se puede insertar una tarjeta Micro SD.
2	Botón de reinicialización	Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema. <b>■</b> Si reinicia la cámara, los ajustes de red se ajustarán de forma que se pueda habilitar DHCP. Si no hay ningún servidor DHCP en la red, debe ejecutar el programa del Device Manager para cambiar los ajustes básicos de la red tales como la dirección IP, la máscara de subred, la puerta de enlace, etc., antes de poder conectarse a la red.
3	Prueba de salida de monitor	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.
4	Tornillo de fijación del protector solar	Fija la protección solar a la cámara.
5	Protección solar	Protege la cámara de la luz directa del sol.
6	Palanca de control de zoom (QNO-6072R)	T      Acercar (Tele)
		W      Alejar (Wide)
7	Palanca de control de enfoque (QNO-6072R)	N      Enfoque de un objeto cercano (Near)
		F      Enfoque de un objeto lejano (Far)
8	Botón de control de zoom/enfoque (QNO-6082R)	Libere la palanca y muévala hacia la izquierda o hacia la derecha para acercar o alejar el zoom de la lente. Gire la palanca hacia la derecha para fijar la posición ajustada y evitar que se mueva.
		N      Enfoque de un objeto cercano (Near)
		F      Enfoque de un objeto lejano (Far)
		Control del enfoque
		Pulse este botón para un control automático del enfoque.



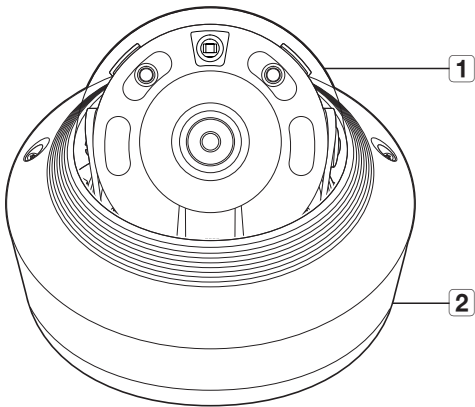
Componentes



Elemento		Descripción
1	Ouerto de Alimentación	Se utiliza para enchufar e l cable de alimentación.
	2	ARM-OUT
GND		Estos son los puertos comunes para conectar las señales de entrada/salida de la alarma.
ARM-IN		Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche
3	Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.
4	Toma de entrada de audio	Se utiliza para conectar un micrófono.

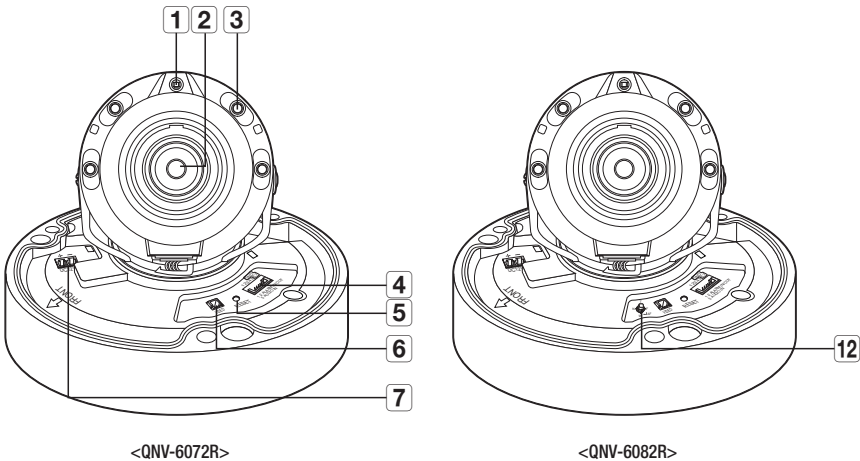
VISTA (QNV-6012R/6022R/6032R/6072R/6082R)

Aspecto

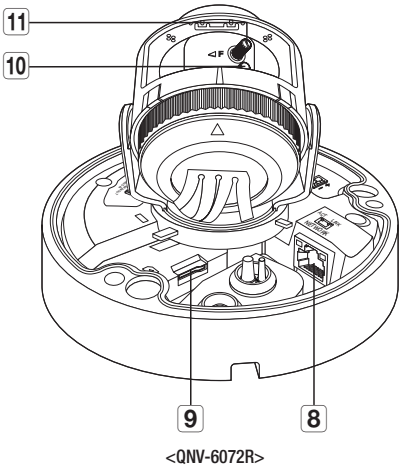


Elemento	Descripción
1 Tapa curvada	Cubierta utilizada para proteger el objetivo y la unidad principal.
2 Caja de la cámara	Parte del alojamiento que cubre la carcasa de la cámara.

Componentes



<QNV-6082R>



Elemento	Descripción	
<b>1</b> Sensor de iluminación	Detecta la luz entrante para controlar el LED de infrarrojos.	
<b>2</b> Objetivo	Objetivo de la cámara.	
<b>3</b> LED IR	Son LED de infrarrojos que se controlan mediante un sensor de iluminación.	
<b>4</b> Puerto del cable de audio y alarma	ARM-IN	Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche
	ARM-OUT	Se utiliza para conectar la señal de salida de alarma.
	GND	Estos son los puertos comunes para conectar las señales de entrada/salida de la alarma.
	AUDIO IN	Se utiliza para conectar un micrófono.
<b>5</b> Botón de reinicialización	<p>Este botón restaura los valores predeterminados de la cámara. Manténgalo pulsado durante unos 5 segundos para reiniciar el sistema.</p> <p>■ Si reinicia la cámara, los ajustes de red se ajustarán de forma que se pueda habilitar DHCP. Si no hay ningún servidor DHCP en la red, debe ejecutar el programa del Device Manager para cambiar los ajustes básicos de la red tales como la dirección IP, la máscara de subred, la puerta de enlace, etc., antes de poder conectarse a la red.</p>	
<b>6</b> Prueba de salida de monitor	Puerto de salida para monitorizar la prueba de la salida de vídeo. Utilice el cable del monitor de prueba para conectarlo a una pantalla móvil y realizar la prueba de vídeo.	
<b>7</b> Puerto de Alimentación	Puerto para el bloque de terminales de alimentación.	
<b>8</b> Puerto Red	Se utiliza para conectar el cable PoE o Ethernet para la conexión de red.	
<b>9</b> Compartimento de la tarjeta de memoria Micro SD	Compartimento de la tarjeta de memoria Micro SD.	
<b>10</b> Palanca de control de zoom (QNV-6072R)	T	Acercar (Tele)
	W	Alejar (Wide)
<b>11</b> Palanca de control de enfoque (QNV-6072R)	Libere la palanca y muévela hacia la izquierda o hacia la derecha para acercar o alejar el zoom de la lente.	
	Gire la palanca hacia la derecha para fijar la posición ajustada y evitar que se mueva.	
	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
<b>12</b> Botón de control de zoom/enfoque (QNV-6082R)	T	Acercar (Tele)
	W	Alejar (Wide)
	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
	Control del enfoque	Pulse este botón para un control automático del enfoque.

Elemento	Descripción	
<b>12</b> Botón de control de zoom/enfoque (QNV-6082R)	T	Acercar (Tele)
	W	Alejar (Wide)
	N	Enfoque de un objeto cercano (Near)
	F	Enfoque de un objeto lejano (Far)
	Control del enfoque	Pulse este botón para un control automático del enfoque.

## INSTALACIÓN (QND-6012R/6022R/6032R/6072R/6082R)

### Precauciones antes de la instalación

Asegúrese de leer las siguientes instrucciones antes de instalar la cámara:

- Debe estar instalada en una zona (techo o pared) que pueda soportar 5 veces el peso de la cámara, incluido el soporte de la instalación.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.

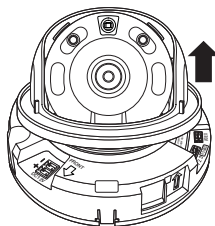
### Desmontaje

1. Con una mano mantenga firme la parte inferior de la cámara y gire la tapa en sentido contrario a las agujas del reloj con la otra mano para separarla.

- ! ■ No toque la parte transparente de la cubierta del domo una vez haya retirado la película protectora.

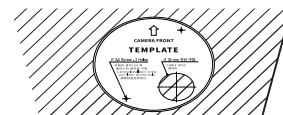


2. Levante la tapa interior y sepárela.

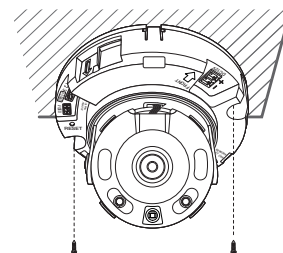


### Instalación

1. Considere la dirección que se va a supervisar, coloque la plantilla y haga agujeros siguiendo la plantilla.



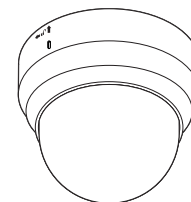
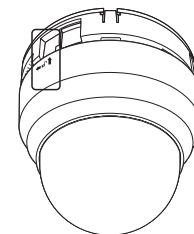
2. Mediante el uso de 2 tornillos de fijación, fije la cámara en 2 orificios perforados con una plantilla.
  - Coloque la marca <↑> impresa en la cámara para que quede en la dirección de funcionamiento de la cámara.
3. Conecte el terminal interior de la cámara con el cable correspondiente.
4. Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 23)



- ! ■ Recomendamos no tocar la lente, ya que esta se ha enfocado de modo correcto durante el proceso final de fabricación. Evite así que la lente se desenfoque o se ensucie de elementos extrañas.

5. Conecte la cubierta interior al cuerpo principal.
6. Mientras sujeta la parte posterior de la cámara con la mano, sujete y tire de la cubierta con la otra mano para alinear los dos símbolos de flecha, como se muestra en la figura.

- ! ■ Para montar la cubierta del domo, ponga las flechas de modo que coincidan una con otra y presione firmemente. Si la cubierta del domo se gira durante el montaje o se monta de forma incorrecta, puede ocurrir una reflexión difusa o la sección de la lente pueden rotar; esto causará que cambie el rango de disparo.
- Asegúrese de que la cubierta del domo está correctamente conectada a la parte inferior como se muestra en la figura. Si el ajuste a presión no se conecta correctamente, la cubierta del domo puede caer y causar lesiones.



## INSTALACIÓN (QNO-6012R/6022R/6032R/6072R/6082R)

- ! La cámara es resistente al agua y cumple la norma IP66. No obstante, el conector hembra conectado al cable externo no lo es. Se recomienda instalar este producto por debajo del borde de los aleros para evitar que el cable quede en el exterior.

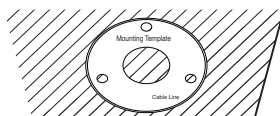
### Precauciones antes de la instalación

Asegúrese de leer las siguientes instrucciones antes de instalar la cámara:

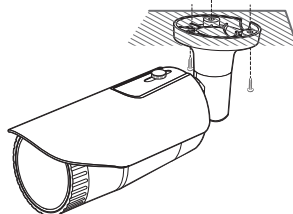
- Debe estar instalada en una zona (techo o pared) que pueda soportar 5 veces el peso de la cámara, incluido el soporte de la instalación.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- No utilice el orificio del parasol para ningún otro propósito que no sea para conectar el parasol.
- Para la cámara manual de lente focal variable, las funciones como el enfoque y el zoom deben ajustarse antes de la instalación. Al ajustar estos, asegúrese de evitar que se adhieran sustancias extrañas.

### Instalación

1. Considere la dirección que se va a supervisar, coloque la plantilla y haga agujeros siguiendo la plantilla.

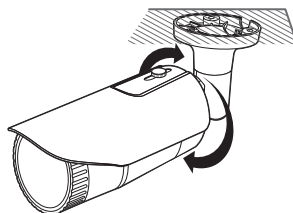


2. Inserte y apriete 3 tornillos de fijación en 3 orificios para fijar la cámara.
3. Conecte los cables adecuados con los terminales de la cámara.



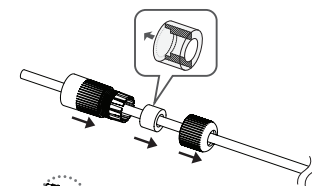
4. Ajuste la dirección de la cámara con la llave L suministrada.

- ! Al ajustar la posición de la cámara utilizando un soporte, afloje el tornillo del soporte, ajuste la cámara, y apriételo. Si intenta ajustarlo a la fuerza cuando el tornillo está apretado, podría causar ralladuras u otros problemas.

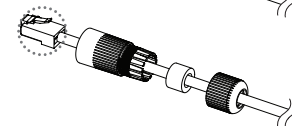


### Cómo conectar el cable impermeable RJ45 a un cable LAN

1. Inserte el cable en la dirección de la flecha.

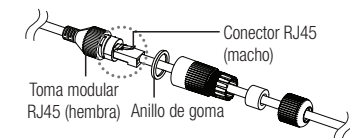


2. Conecte el conector LAN (macho) al cable.

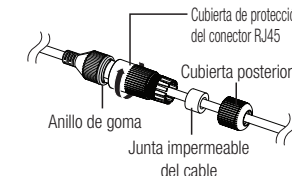


3. Conecte la toma modular RJ45 (hembra) al conector RJ45 (macho).

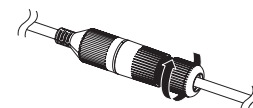
- ! Mantenga cada una de las partes separadas.



4. Instale girando la toma modular RJ45 (hembra) y la cubierta de protección RJ45 hacia la derecha (siga la flecha).



5. Instale girando la cubierta de protección RJ45 y la cubierta posterior hacia la derecha (siga la flecha). Cuando se instala la cubierta posterior, la junta impermeable de cable se conecta firmemente al cable para hacerla impermeable.



- ! Debe estar totalmente instalado para girar la cubierta posterior hasta el final de la rosca de tornillo del conector RJ45.

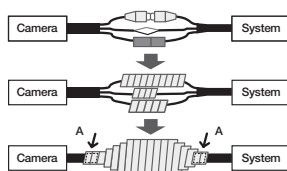
## Instalación en el exterior

Cuando instale la cámara en un lugar exterior, impermeabilícela con cinta de goma de butilo resistente al agua (disponible en tiendas), para que el agua no entre por el espacio del cable conectado al exterior.

1. Conecte los cables de alimentación, E/S, AUDIO y de la red LAN.

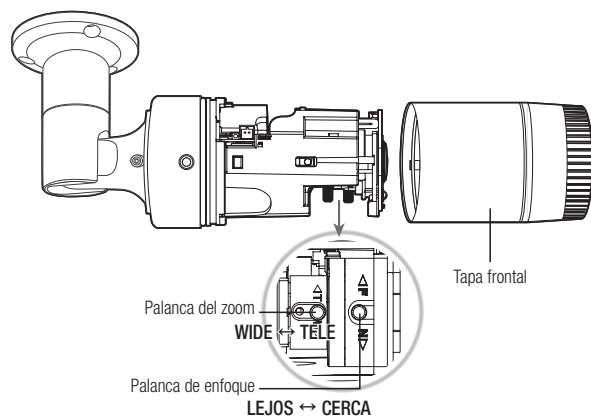
2. Envuelva el aislante negro del cable (Área A) y la parte de conexión del cable con cinta (de goma de butilo) impermeable, de modo que más de la mitad de esta cinta quede superpuesta.

- Si el aislante del cable no se impermeabiliza correctamente, puede haber filtraciones. Asegúrese que el cable queda protegido con una densa capa de cinta.
- La cinta de butilo resistente al agua está fabricada con goma de butilo, que puede estirarse el doble de su longitud normal.



## Para ajustar el factor de zoom o el enfoque (QNO-6072R)

- Afloje la tapa frontal como se muestra.
- Afloje ligeramente la palanca de zoom/enfoque.
- Coloque la palanca de zoom/enfoque en WIDE (CERCA) o TELE (LEJOS) según sea apropiado.
- A continuación, apriete la palanca de zoom/enfoque para fijar la posición ajustada.
- Gire la tapa frontal para apretarla.



- Para garantizar una impermeabilidad absoluta, apriete la tapa frontal girándola hasta el final. Al unir la cubierta delantera, combine el cuerpo principal y la cubierta delantera para que se fije el indicador de BLOQUEO.
- Utilice la palanca para ajustar el factor de zoom o el enfoque y gire la palanca a la derecha para fijarla.
- Antes de poder ajustar el factor de zoom/enfoque del objetivo, afloje y retire la tapa frontal.

## INSTALACIÓN (QNV-6012R/6022R/6032R)

- La cámara es resistente al agua y cumple la norma IP66. No obstante, el conector hembra conectado al cable externo no lo es. Se recomienda instalar este producto por debajo del borde de los aleros para evitar que el cable quede en el exterior.

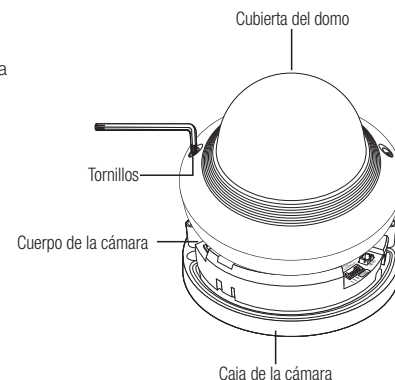
## Precauciones antes de la instalación

Asegúrese de leer las siguientes instrucciones antes de instalar la cámara:

- Debe estar instalada en una zona (techo o pared) que pueda soportar 5 veces el peso de la cámara, incluido el soporte de la instalación.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.

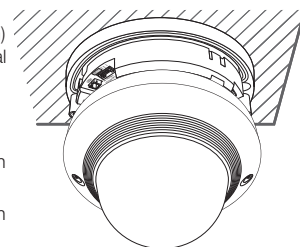
## Desmontaje

- Con la llave L suministrada, gire los 2 tornillos de fijación de la cubierta del domo hacia la izquierda para retirar la cubierta.



## Instalación

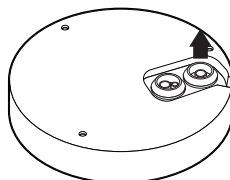
- Utilizando el patrón incluido como accesorio, perfora el agujero para el tornillo (diámetro de 6 mm, profundidad mínima de 55 mm) e inserte firmemente el taco de plástico incluido como accesorio al final de mismo.
- Haga coincidir el orificio de la parte inferior con el orificio del taco, insértelo y fíjelo con el tornillo de rosca cortante (M4.5xL50).
- Conecte y coloque los cables necesarios de forma que no puedan dañarse ni doblarse al instalar la cámara.
- Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 23)
- Cierre la cubierta del domo.
  - Asegure firmemente el tornillo de fijación con una llave L para evitar que el agua se filtre.



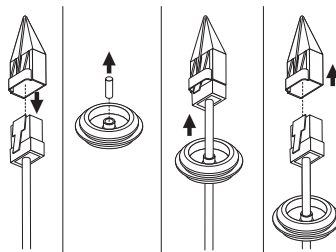
## Conectar el cable LAN

1. Retire la cubierta del domo de la carcasa.
2. Quite el cojinete de cable de la parte inferior como se muestra en la imagen.

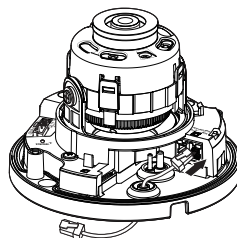
- ! ■ Utilice un pasacables adecuado para conectar el cable LAN.
- Cámara básica: utilice el cable con diámetro de Ø5-6,5.



3. Quite la parte extruida del cojinete de cable de un orificio provisto.
4. Utilice el instalador de tapa para pasar el cable LAN a través del cojinete de cable.

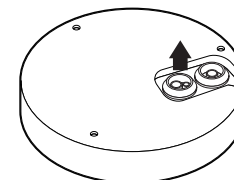


5. Pase el cable LAN a través del orificio creado tras quitar el cojinete de cable en el paso 2 y, a continuación, conéctelo al terminal de ethernet.
6. Introduzca el cojinete del cable LAN en el orificio.

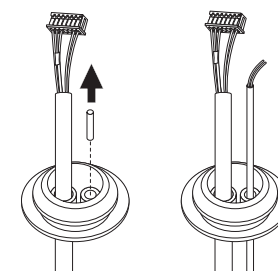


## Conectar el cable de audio/alarma y el cable de alimentación

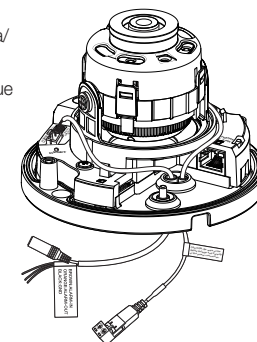
1. Retire la cubierta del domo de la carcasa.
2. Quite el cojinete de cable de la parte inferior como se muestra en la imagen.



3. Quite la pequeña parte extruida del cojinete del cable de alarma/ audio y pase el cable de alimentación a través del cojinete.



4. Pase el cable de alarma/audio a través del orificio creado tras quitar el cojinete de cable en el paso 2. Conecte cada uno al terminal de alarma/ audio y al bloque de terminal de encendido del PCB, respectivamente.
5. Al montar la cámara, cuelgue los cables en el gancho fijo para evitar que estos resulten dañados o queden apretados.
6. Introduzca el cojinete de los cables de alarma/audio en el orificio.
7. Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 23)
8. Coloque la cubierta del domo.



## INSTALACIÓN (QNV-6072R/6082R)



- La cámara es resistente al agua y cumple la norma IP66. No obstante, el conector hembra conectado al cable externo no lo es. Se recomienda instalar este producto por debajo del borde de los aleros para evitar que el cable quede en el exterior.

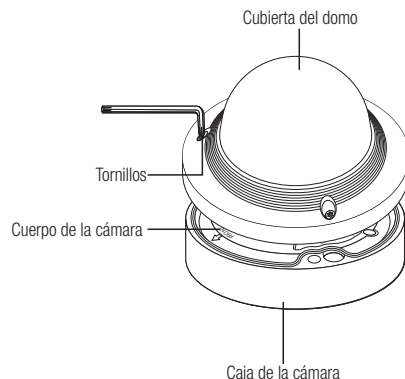
### Precauciones antes de la instalación

Asegúrese de leer las siguientes instrucciones antes de instalar la cámara:

- Debe estar instalada en una zona (techo o pared) que pueda soportar 5 veces el peso de la cámara, incluido el soporte de la instalación.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- Para la cámara manual de lente focal variable, las funciones como el enfoque y el zoom deben ajustarse antes de la instalación. Al ajustar estos, asegúrese de evitar que se adhieran sustancias extrañas.

### Desmontaje

- Con la llave L suministrada, gire los 3 tornillos de fijación de la cubierta del domo hacia la izquierda para retirar la cubierta.

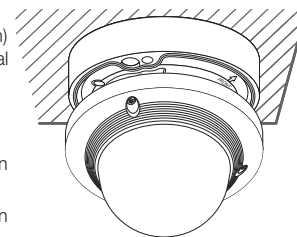


### Instalación

- Utilizando el patrón incluido como accesorio, perforo el agujero para el tornillo (diámetro de 6 mm, profundidad mínima de 55 mm) e inserte firmemente el taco de plástico incluido como accesorio al final de mismo.
- Haga coincidir el orificio de la parte inferior con el orificio del taco, insértelo y fíjelo con el tornillo de rosca cortante (M4.5xL50).
- Conecte y coloque los cables necesarios de forma que no puedan dañarse ni doblarse al instalar la cámara.
- Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 23)



- Para la cámara manual de lente focal variable, las funciones como el enfoque y el zoom deben ajustarse antes de la instalación. Al ajustar estos, asegúrese de evitar que se adhieran sustancias extrañas.
- Cierre la cubierta del domo.
    - Asegure firmemente el tornillo de fijación con una llave L para evitar que el agua se filtre.

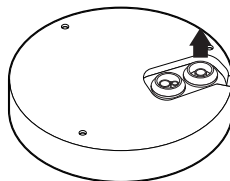




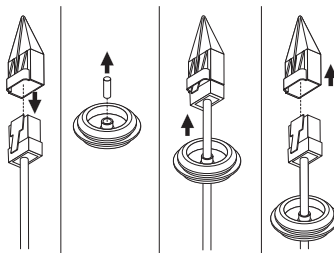
## Conectar el cable LAN

1. Retire la cubierta del domo de la carcasa.
2. Quite el cojinete de cable de la parte inferior como se muestra en la imagen.

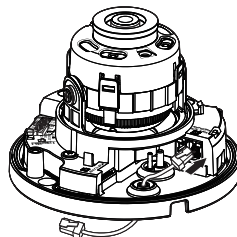
- Utilice un pasacables adecuado para conectar el cable LAN.
- Cámara básica: utilice el cable con diámetro de Ø5-6,5.



3. Quite la parte extruida del cojinete de cable de un orificio provisto.
4. Utilice el instalador de tapa para pasar el cable LAN a través del cojinete de cable.

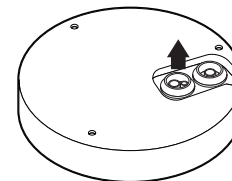


5. Pase el cable LAN a través del orificio creado tras quitar el cojinete de cable en el paso 2 y, a continuación, conéctelo al terminal de ethernet.
6. Introduzca el cojinete del cable LAN en el orificio.

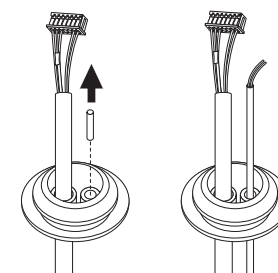


## Conectar el cable de audio/alarma y el cable de alimentación

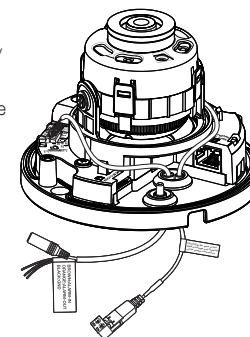
1. Retire la cubierta del domo de la carcasa.
2. Quite el cojinete de cable de la parte inferior como se muestra en la imagen.



3. Quite la pequeña parte extruida del cojinete del cable de alarma/ audio y pase el cable de alimentación a través del cojinete.



4. Pase el cable de alarma/audio a través del orificio creado tras quitar el cojinete de cable en el paso 2. Conecte cada uno al terminal de alarma/ audio y al bloque de terminal de encendido del PCB, respectivamente.
5. Al montar la cámara, cuelgue los cables en el gancho fijo para evitar que estos resulten dañados o queden apretados.
6. Introduzca el cojinete de los cables de alarma/audio en el orificio.
7. Ajuste el objetivo en la dirección que desee consultando la sección "Ajuste de la dirección de la cámara". (página 23)
8. Coloque la cubierta del domo.



## Colocación en el adaptador no suministrado

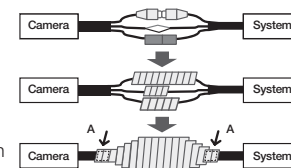
Elija y compre una de las opciones siguientes (no suministradas) apropiada para el lugar de instalación o que se adapte a sus preferencias.

1. Retire la cubierta del domo de la carcasa según se indica en el apartado "**Desmontado**". (página 20)
2. Utilice el tornillo de la máquina para fijar la carcasa de la cámara al adaptador no incluido.
3. Conecte y coloque los cables necesarios de forma que no puedan dañarse ni doblarse al instalar la cámara.
4. Instale la carcasa de la cámara en el orden inverso a las instrucciones de "**Desmontaje**".
5. Ajuste el objetivo en la dirección que desee consultando la sección "**Ajuste de la dirección de la cámara**". (página 23)
6. Cierre la cubierta del domo.
  - Asegure firmemente el tornillo de fijación con una llave L para evitar que el agua se filtre.

## Instalación en el exterior

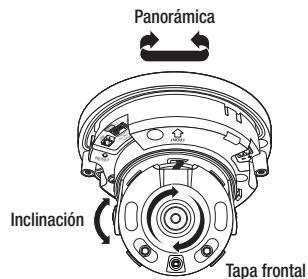
Cuando instale la cámara en un lugar exterior, impermeabilícela con cinta de goma de butilo resistente al agua (disponible en tiendas), para que el agua no entre por el espacio del cable conectado al exterior.

1. Conecte los cables de alimentación, E/S, AUDIO y de la red LAN.
2. Envuelva el aislante negro del cable (Área A) y la parte de conexión del cable con cinta (de goma de butilo) impermeable, de modo que más de la mitad de esta cinta quede superpuesta.



- Si el aislante del cable no se impermeabiliza correctamente, puede haber filtraciones. Asegúrese que el cable queda protegido con una densa capa de cinta.
- La cinta de butilo resistente al agua está fabricada con goma de butilo, que puede estirarse el doble de su longitud normal.

## Ajuste de la dirección de la cámara (QND-6012R/6022R/6032R/6072R/6082R, QNV-6012R/6022R/6032R/6072R/6082R)



### ■ Ajuste de la dirección de vigilancia

Puede ajustar la dirección de la cámara sólo cuando la cámara esté fija al techo. Girar la unidad de la cámara a la izquierda o a la derecha se denomina Panóramica, ajustar la inclinación se denomina Inclinación y girar el objetivo sobre su eje se denomina Rotación.

- El rango efectivo de la panorámica es de 350 grados.
- El rango efectivo de giro es de 355 grados.
- El rango efectivo de inclinación es de 67 grados.

- !**
- La imagen puede quedar cubierta por la carcasa de la cámara según el ángulo.
  - No gire la lente de enfoque/zoom con fuerza una vez que la carcasa del domo esté desinstalada. De lo contrario, puede realizar un enfoque incorrecto debido a un fallo del motor.

### ■ Métodos de ajuste

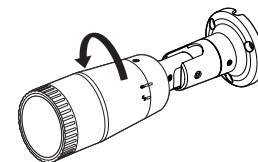
1. Tras instalar la cámara, ajuste el ángulo de panorámica teniendo en cuenta la dirección de vigilancia.
2. Ajuste el ángulo horizontal, de modo que la imagen no quede invertida.
3. Ajuste el ángulo de inclinación de forma que la cámara apunte hacia el objeto vigilado.

## INSERCIÓN/EXTRACCIÓN DE UNA TARJETA DE MEMORIA MICRO SD

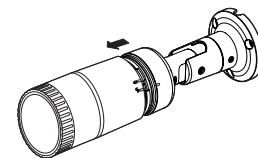
- !**
- Desconecte el cable de alimentación de la cámara antes de insertar la tarjeta de memoria Micro SD.
  - No inserte al revés la tarjeta de memoria Micro SD forzándola. Si lo hace, podría dañar la tarjeta de memoria Micro SD.
  - Cuando llueve o la humedad es alta, no se recomienda que inserte o expulse una tarjeta Micro SD.
  - El desmontaje de la cubierta del producto se debe efectuar en un plazo de 5 minutos, o se podría producir condensación interna.

### Inserción de una tarjeta de memoria Micro SD (QNO-6012R/6022R/6032R/6072R/6082R)

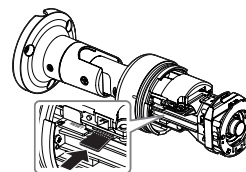
1. Gire la cubierta frontal en la dirección de DESBLOQUEO [↺].



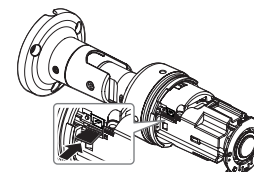
2. Tire y separe la cubierta frontal.



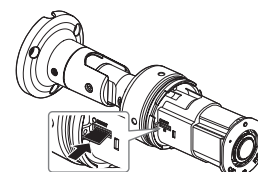
3. Inserte una tarjeta micro SD en la dirección de la flecha que aparece en la figura.



<QNO-6012R/6022R/6032R>



<QNO-6072R>

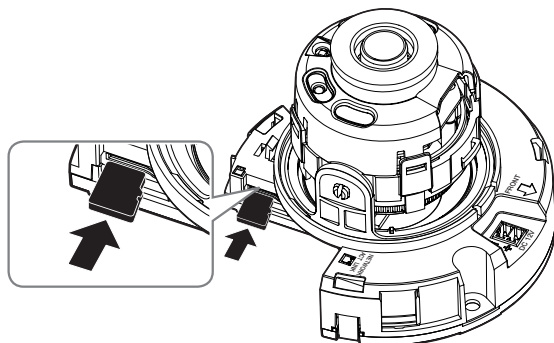


<QNO-6082R>

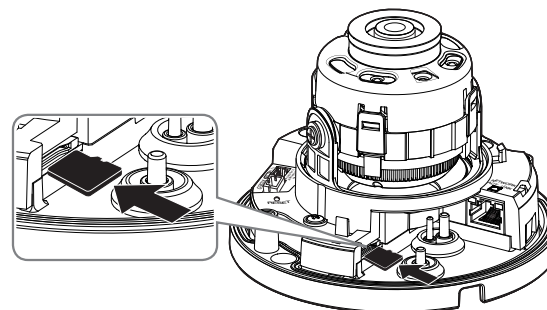
### Insertión de una tarjeta de memoria Micro SD

(QND-6012R/6022R/6032R/6072R/6082R, QNV-6012R/6022R/6032R/6072R/6082R)

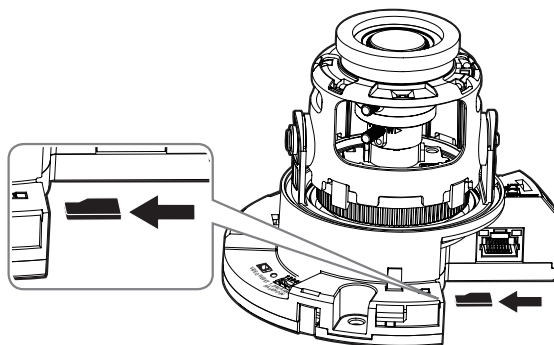
1. Separe la cubierta del domo de la cámara.
2. Inserte una tarjeta micro SD en la dirección de la flecha que aparece en la figura.



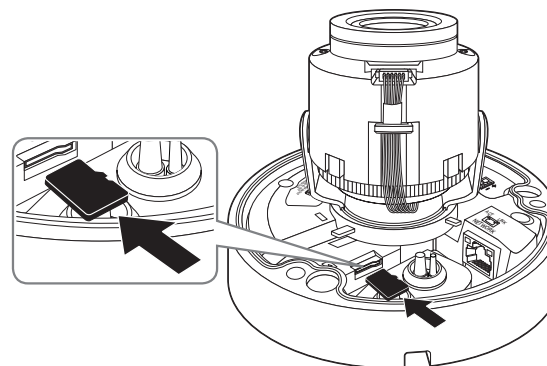
<QND-6012R/6022R/6032R>



<QNV-6012R/6022R/6032R>



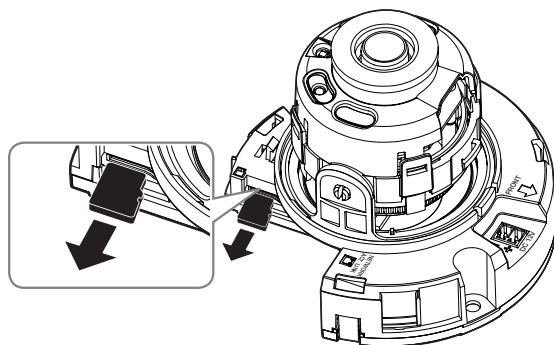
<QND-6072R/6082R>



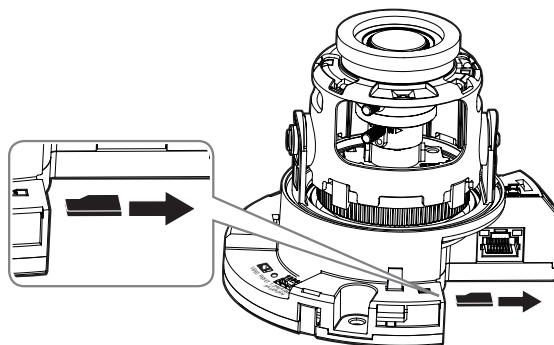
<QNV-6072R/6082R>

## Extracción de una tarjeta de memoria Micro SD

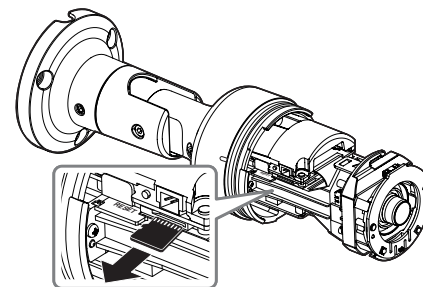
Presione suavemente hacia abajo en el extremo expuesto de la tarjeta de memoria como se muestra en el esquema para sacarla de la ranura.



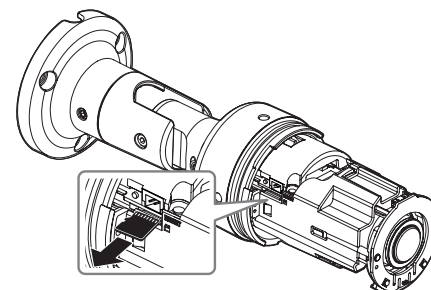
<QND-6012R/6022R/6032R>



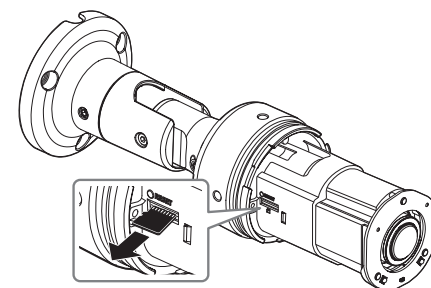
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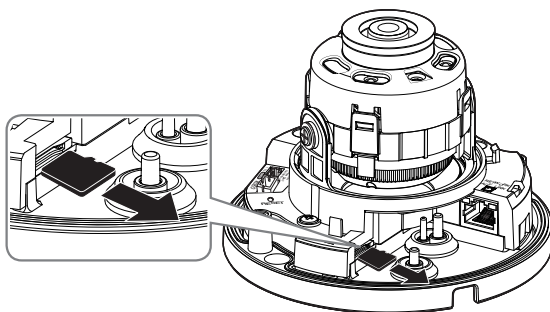
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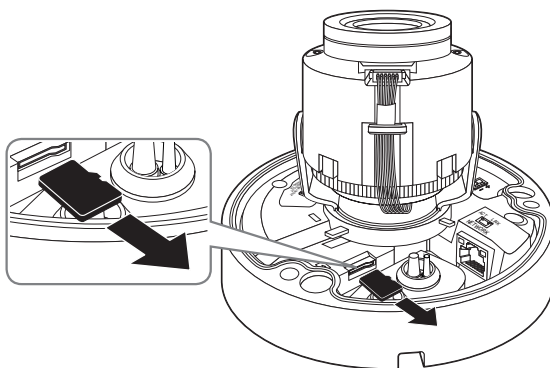
<QNO-6072R>



<QNO-6082R>



<QNV-6012R/6022R/6032R>



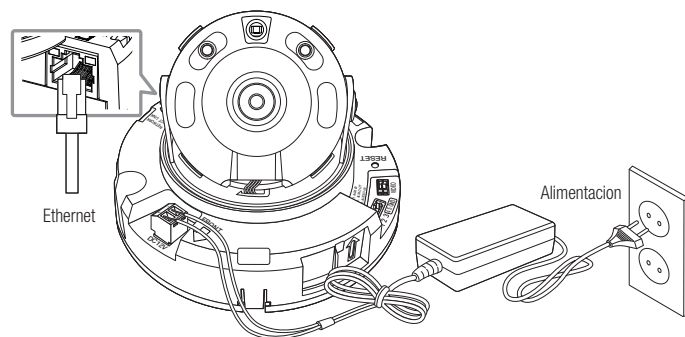
<QNV-6072R/6082R>



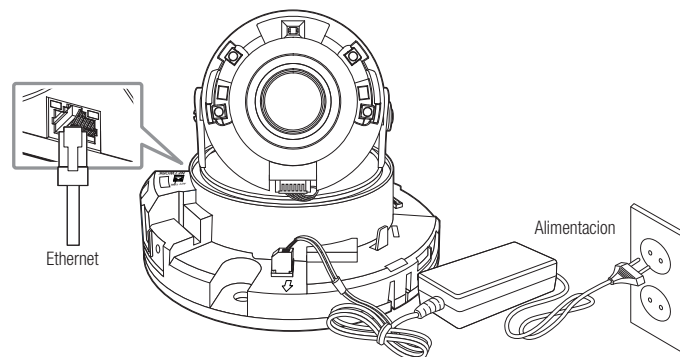
- Si se presiona demasiado fuerte la tarjeta de memoria Micro SD, al liberarla es posible que salga despedida sin control de la ranura.
- Antes de retirar la tarjeta de memoria Micro SD, en **<Almacenamiento>**, ajuste el dispositivo en **<Des>** y pulse el botón **[Aplicar]** y apague la cámara.
- Si apaga la cámara o retira la tarjeta de memoria SD que contiene datos, puede perderlos o dañarlos.

## ALIMENTACIÓN Y REDES

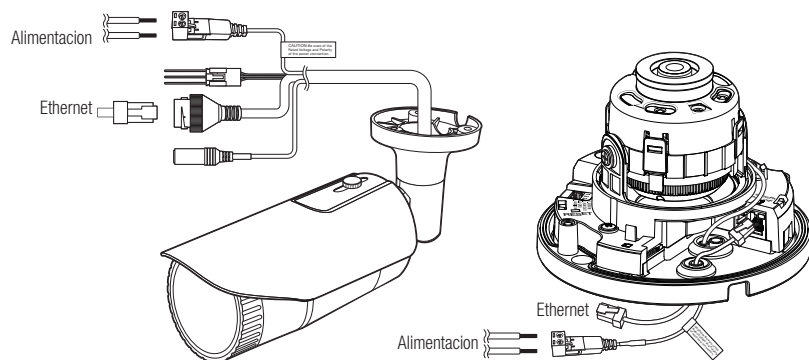
- Antes de conectar el enchufe de alimentación de 12 V de CC a la toma de corriente, primero monte el bloque de terminal.



<QND-6012R/6022R/6032R>

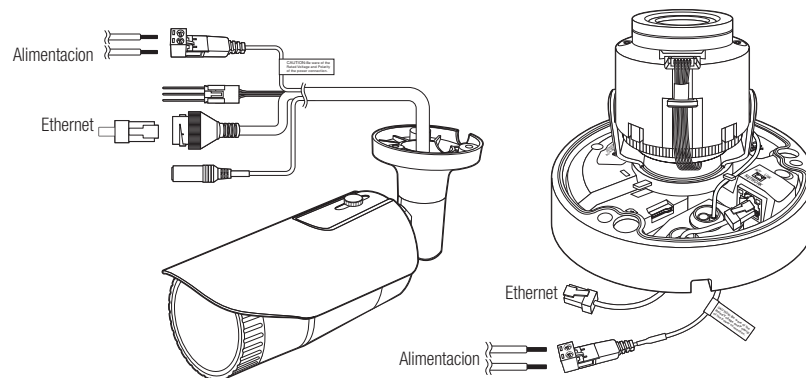


<QND-6072R/6082R>



<QNO-6012R/6022R/6032R>

<QNV-6012R/6022R/6032R>



<QNO-6072R/6082R>


<QNV-6072R/6082R>

Conexión Ethernet

Conecte el cable Ethernet a la red local o a Internet.

Alimentación eléctrica

Utilice el destornillador para conectar cada línea (+, -) del cable de alimentación al puerto de alimentación correspondiente de la cámara.

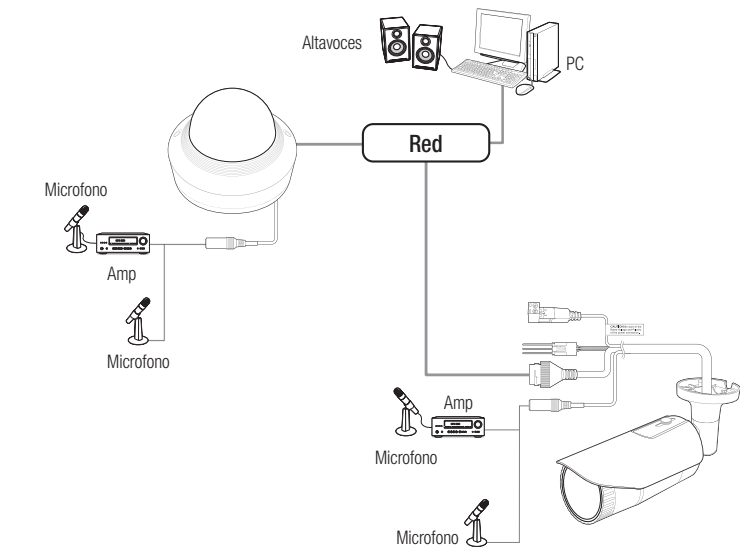
- 
- Si se aplican al mismo tiempo las fuentes de alimentación de PoE y 12 V de CC, el producto recibirá alimentación de 12 V de CC.
    - También puede utilizar un enrutador que incorpore PoE para suministrar energía a la cámara.
    - Utilice PoE que sea compatible con los protocolos IEEE 802.3af.
    - Se recomienda utilizar solo o una fuente de alimentación entre PoE y de 12 VCC.
  - Tenga cuidado de no invertir la polaridad al conectar el cable de alimentación.
  - Si desea conectar un dispositivo externo, debe apagar el dispositivo externo antes de continuar.

Características del cable de red

Elemento	Contenido	Observaciones
Conector	RJ45	
Ethernet	10/100BASE-T	10/100 Mbps
Cable	Categoría 5e	
Distancia máx.	100M	Resistencia de CC ≤ 0,125 Ω / m
Soporte PoE	IEEE 802.3af	

- 
- Si se utiliza un cable que no sea estándar de Categoría 5e, no se garantiza la distancia de transmisión de 100 metros.

Conectar la Entrada de Audio



1. Conecte el puerto AUDIO IN de la cámara al micrófono o al puerto LINE OUT.

- 
- El modelo QND solo admite el micrófono integrado.

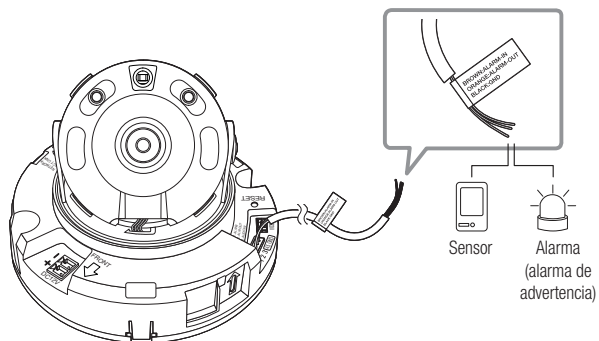
2. Compruebe las especificaciones de entrada de audio.

- **Códec de Audio**
  - Entrada de audio : G.711 PCM (Tasa de bits: 64 kbps/Frecuencia de muestreo: 8 kHz), ADPCM G.726 (Tasa de bits: 16 Kbps, 24 Kbps, 32 Kbps, 40 kbps/Frecuencia de muestreo: 8 kHz)
- **Audio Full dúplex**
- **Entrada de Audio (QND-6012R/6022R/6032R/6072R/6082R) :** Micrófono integrado
- **Entrada de Audio (QNO-6012R/6022R/6032R/6072R/6082R, QNV-6012R/6022R/6032R/6072R/6082R) :** Seleccionable (micrófono/entrada de línea), tensión admitida: 2.5 V CC (4 mA), impedancia de entrada: 2K Ohm

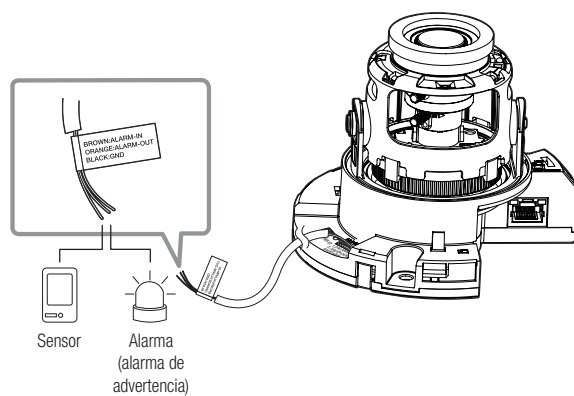


## Conexión al cuadro del puerto de E/S

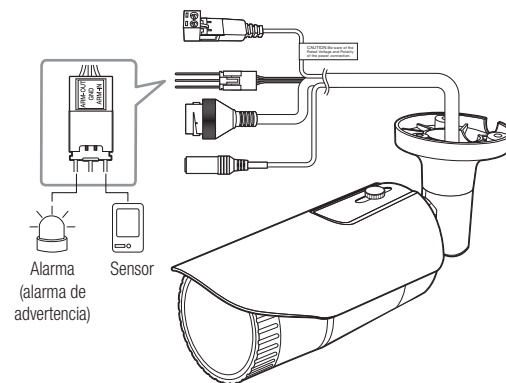
Conecte el cable de E/S de la alarma al puerto correspondiente en la caja de puertos.



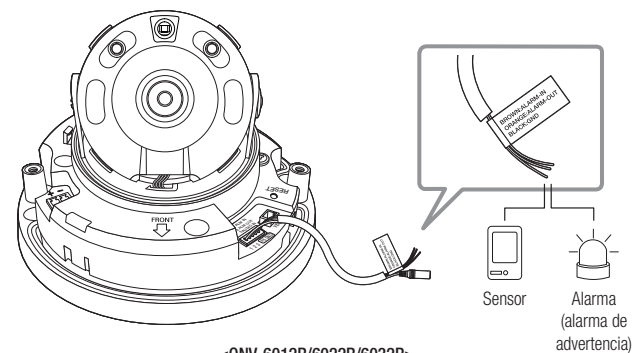
<QND-6012R/6022R/6032R>



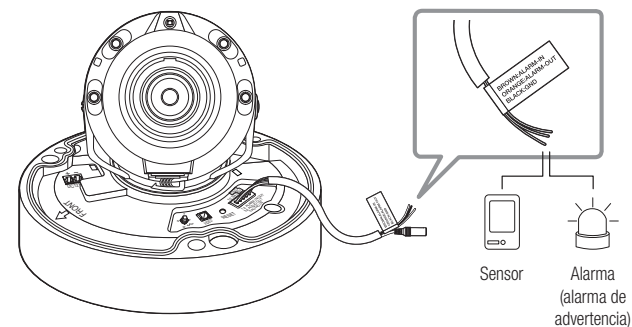
<QND-6072R/6082R>



<QNO-6012R/6022R/6032R/6072R/6082R>



<QNV-6012R/6022R/6032R>



<QNV-6072R>

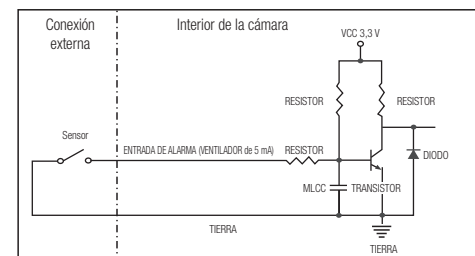
- ALARM-IN : Se utiliza para conectar el sensor de entrada de la alarma o el sensor externo de día/noche.
- ALARM-OUT : Se utiliza para conectar la señal de salida de alarma.
- GND : Puerto común para la señal de entrada/salida de alarma.

! Si los dispositivos (por ejemplo, luz parpadeante, alarma) que superan los límites de voltaje y potencia se conectan con el método de colector abierto, puede producirse un error de funcionamiento. Consulte el "Diagrama de cableado de salida de alarma" para conectar dispositivos que superen las cifras de voltaje y corriente.

## Para conectar el sensor externo

Conecte un filamento de cada línea de señal (2 filamentos) de los sensores al puerto [ALARM IN], y conecte el otro filamento en el puerto [GND].

## Diagrama de cableado de entrada de alarma

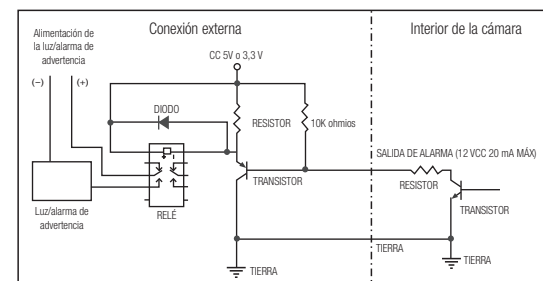


## Para conectar la salida de alarma

Si los dispositivos (por ejemplo, luz parpadeante, alarma) que superan los límites de voltaje y potencia se conectan con el método de colector abierto, puede producirse un error de funcionamiento.

Consulte el diagrama de conexión de salida de alarma inferior cuando conecte dispositivos que superen las condiciones de tensión y corriente.

## Diagrama de cableado de salida de alarma

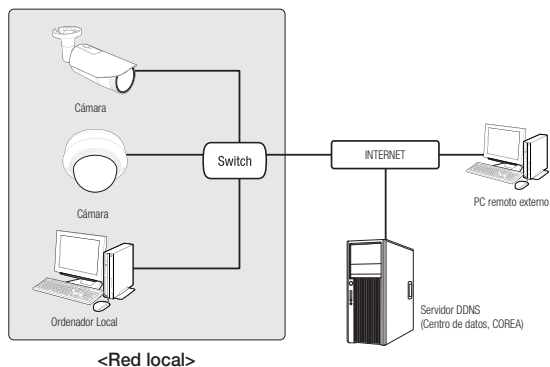


Puede fijar la configuración de red de acuerdo con sus configuraciones de red.

## CONECTAR LA CÁMARA DIRECTAMENTE A LA RED DE ÁREA LOCAL

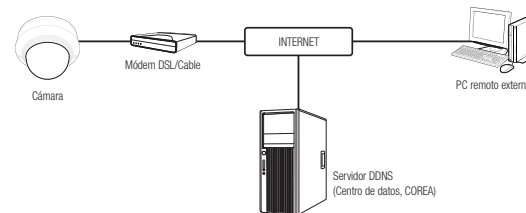
### Conectar con la cámara desde un ordenador local en la LAN

1. Abrir un navegador de Internet en su ordenador local.
2. Introduzca la dirección IP de la cámara en la barra de direcciones del navegador.



- Un ordenador remoto con una Internet externa fuera de la red LAN podría no poder conectarse a la cámara instalada en la intranet, en caso de que el reenvío de puertos no esté correctamente configurado o se haya instalado un cortafuegos. En este caso, para solucionar el problema, póngase en contacto con su administrador de red.
- En el Device Manager, puede utilizar la contraseña inicial, "4321", para configurar la dirección IP, la máscara de subred, la puerta de enlace, el puerto HTTP, el puerto VNP y el tipo de IP. Después de cambiar la interfaz de red, para mayor seguridad, acceda al visor web y cambie la contraseña.
- Como valor predeterminado de fábrica, la dirección IP se asignará automáticamente desde el servidor DHCP. Si no hay ningún servidor DHCP disponible, la dirección IP se definirá en 192.168.1.100. Para cambiar la dirección IP, utilice el Device Manager. Para obtener más información sobre el uso del Device Manager, consulte "Cómo usar el Device Manager". (Página 32)

## CONEXIÓN DIRECTA DE LA CÁMARA A UN MÓDEM DSL/CABLE BASADO EN DHCP



1. Conectar el PC del usuario directamente a la cámara de red.
2. Ejecute el Device Manager y cambie la dirección IP de la cámara de tal manera que pueda usar el navegador web en su ordenador de sobremesa para conectarse a Internet.
3. Utilice el navegador de Internet para conectar a Web Viewer.
4. Vaya a la página [Config.].
5. Vaya a [Red] – [DDNS] y configure los ajustes de DDNS.
6. Vaya a [Basic] – [IP & Puerto] y establezca el tipo de IP para [DHCP].
7. Conecte la cámara, retirada del PC, directamente en el módem.
8. Reinicie la cámara.



- Para obtener información sobre cómo configurar el DDNS, consulte la ayuda en línea de Web Viewer.
- Para obtener información sobre cómo configurar el formato de IP, consulte la ayuda en línea de Web Viewer.

CÓMO USAR EL DEVICE MANAGER

- Puede descargar el programa del Device Manager desde el menú <Support> – <Online Tool> en el sitio web de Hanwha Vision (<https://www.HanwhaVision.com>).
- Asimismo, puede encontrar más instrucciones sobre el Device Manager en el menú <Ayuda> de la página principal.

BÚSQUEDA AUTOMÁTICA DE LA CÁMARA

Si hay una cámara conectada a la misma red del ordenador en donde está instalado el Device Manager, puede encontrar esa cámara de la red usando la función de buscar.

1. Haga clic en <Buscar> en la página principal del Device Manager.
2. Marque la cámara de la lista.
  - Compruebe la dirección MAC en el adhesivo de la cámara.

CÓMO CONFIGURAR LA DIRECCIÓN IP

Si desea cambiar el ajuste de la red de la cámara, el signo <Inicio de sesión Aceptar> debe aparecer en el campo <Estado>. Haga clic en el campo <Autenticación> de la página principal para iniciar sesión.

Configuración de la IP estática

Inserte y configure manualmente la dirección IP y la información del puerto.

1. Haga clic en la cámara de la lista para la que desea cambiar el ajuste de la IP.
2. Haga clic en <IP Assign (Asignación de la IP)> en la página principal del Device Manager.
3. Seleccione <Asignar la siguiente dirección IP>.
  - La información IP de la cámara de mostrará según se ha configurado previamente.
4. Complete las categorías relacionadas con el campo IP & Puerto.

Si no se utiliza un Enrutador de banda ancha

- Pida al administrador de la red que establezca el valor de la <Dirección IP>, la <Máscara subred> y la <Gateway(Puerta de enlace)>.
- HTTP Puerto : se utiliza para acceder a la cámara utilizando el explorador de Internet, por defecto en 80.
  - VNP Puerto : se utiliza para controlar la transferencia de señales de vídeo, por defecto en 4520.
  - RTSP Puerto : este puerto controla la transmisión de datos en tiempo real. Su valor inicial es 554.

Si se utiliza un Enrutador de banda ancha

- IP Address : introduzca una dirección que se encuentre en el rango de IP facilitado por el enrutador de banda ancha. ej.) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : La <Subnet Mask> del enrutador de banda ancha será la <Subnet Mask> de la cámara.
- Gateway : La <Local IP Address> del enrutador de banda ancha será la <Gateway> de la cámara.

- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.
- Para obtener información adicional sobre el reenvío de puertos del enrutador de banda ancha, consulte "Configuración de Reenvío del Rango de Puertos (Asignación de Puertos)". (Página 34)

Si el Enrutador de banda ancha tiene más de una cámara conectada

Configure los ajustes relacionados con IP y los ajustes relacionados con Port de forma distinta entre sí. ej.)

Categoría		Cámara 1	Cámara 2
Ajustes relacionados con IP	Dirección IP	192.168.1.100	192.168.1.101
	Máscara subred	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
Ajustes relacionados con el puerto	HTTP Puerto	8080	8081
	VNP Puerto	4520	4521
	RTSP Puerto	554	555

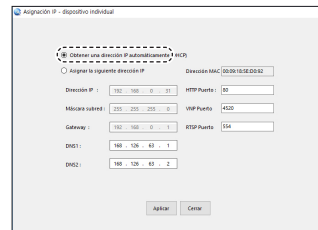
- Si <HTTP Puerto> se define con un valor distinto a 80, debe facilitar el número de <Port> en la barra de direcciones del explorador de Internet antes de poder acceder a la cámara. ej.) `http://Dirección IP : HTTP Port`  
`http://192.168.1.100:8080`
5. Haga clic en el botón [Aplicar].
  6. Si aparece el mensaje de que la acción se ha realizado correctamente, haga clic en [Aceptar].

## Configuración de la IP dinámica

Reciba la dirección IP desde DHCP

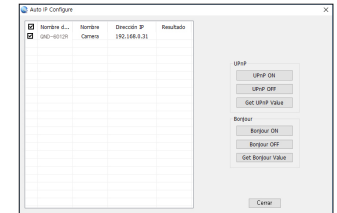
- Ejemplo de entorno de IP dinámica
  - Si a un enrutador de banda ancha, con cámaras conectadas, se le asigna una dirección IP mediante el servidor DHCP
  - Si se conecta la cámara directamente al módem utilizando los protocolos DHCP
  - Si las IP se asignan mediante el servidor DHCP interno a través de la LAN

1. Haga clic en la cámara de la lista para la que quiera cambiar la configuración de la IP.
2. Haga clic en **<IP Assign (Asignación de la IP)>** en la página principal del Device Manager.
3. Seleccione **<Obtener una dirección IP automáticamente (DHCP)>**.
4. Haga clic en botón **[Aplicar]**.
5. Si se muestra el mensaje de acción realizada correctamente, haga clic en **[Aceptar]**.



## CONFIGURACIÓN AUTOMÁTICA DE LA IP

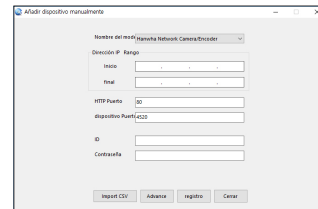
1. Haga clic en la cámara de la lista para la que quiera configurar automáticamente la IP.
2. En la página principal del Device Manager, haga clic en **< + >**.
  - Aparecerá el menú de configuración del equipo.
3. En el menú, haga clic en **<Auto IP Configure (Configuración IP automática)>**.
4. Haga clic en el botón **[Cerrar]**.



## CÓMO REGISTRAR LA CÁMARA MANUALMENTE

Si la cámara no puede encontrarse usando la función de buscar, puede registrarla remotamente insertando manualmente la información de la IP si la cámara está conectada a la red externa.

1. Haga clic en **<Add Devices (Agregar dispositivos)>** – **<Añadir dispositivo manualmente>** de la página principal del Device Manager.
2. Inserte el intervalo de la dirección IP que está buscando
3. Seleccione el **<Nombre del modelo>** de la cámara que ha registrado e inserte el puerto HTTP, el puerto VNP, la ID y la contraseña.
4. Haga clic en el botón **[Registro]**.
5. Compruebe que la cámara esté registrada.
  - Verifique la dirección MAC en el adhesivo de la cámara.

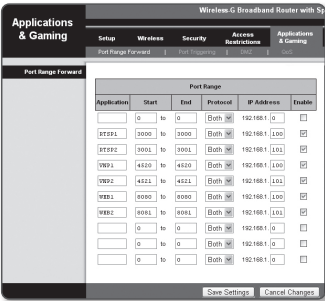


CONFIGURACIÓN DE REENVÍO DEL RANGO DE PUERTOS (ASIGNACIÓN DE PUERTOS)

Si ha instalado un enrutador de banda ancha con una cámara conectada, debe definir el reenvío del rango de puertos en el enrutador de banda ancha de forma que un PC remoto pueda acceder a la cámara en él.

Reenvío manual del rango de puertos

- 1. En el menú de configuración del enrutador de banda ancha, seleccione <Applications & Gaming> - <Port Range Forward>. Para definir el reenvío del rango de puertos para un enrutador de banda ancha de terceros, consulte el manual del usuario de dicho enrutador de banda ancha.
- 2. Seleccione <TCP> y <UDP Port> por cada cámara conectada al enrutador de banda ancha. El número de cada puerto que se configura para el router IP debe establecerse de acuerdo con el número de puerto designado en <Config.> - <Basic> - <IP & Puerto> en el visor web de la cámara.viewer.
- 3. Una vez hecho, haga clic en [Save Settings]. Se guardarán los ajustes.

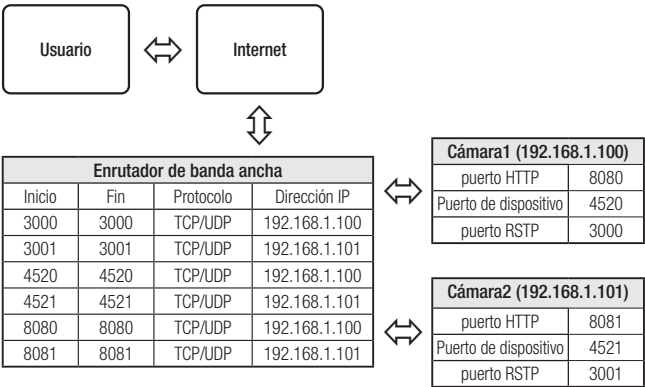


- El ajuste del reenvío del puerto es un ejemplo de configuración del router de la IP de CISCO.
- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.

Configuración del reenvío del rango de puertos de varias cámaras de red

- Puede definir una regla de reenvío de puertos en el dispositivo enrutador de banda ancha a través de su página Web de configuración.
- Un usuario puede cambiar los puertos usando la pantalla de configuración de la cámara.

Cuando la Cámara 1 y la Cámara 2 estén conectadas a un enrutador :



- El enrutamiento de puerto se puede hacer sin una configuración adicional del router si este está adaptado para la función UPnP (Universal Plug and Play). Después de conectar la cámara de red, seleccione la casilla de verificación del menú <Conexión rápida> en <DDNS> en "Configuración -> Red -> DDNS".

## CONEXIÓN A LA CÁMARA DESDE UN PC LOCAL COMPARTIDO

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1. Ejecute el Device Manager.  
Rastreará las cámaras conectadas y mostrará una lista de ellas.
2. Haga doble clic en una cámara para acceder a ella.  
Se inicia el explorador de Internet y se conecta a la cámara.



- También puede acceder a la cámara introduciendo la dirección IP de la cámara encontrada en la barra de direcciones del explorador de Internet.

## CONEXIÓN A LA CÁMARA DESDE UN PC REMOTO A TRAVÉS DE INTERNET

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En un ordenador remoto que no esté en el clúster de la red del router de banda ancha no está permitido, por lo que los usuarios pueden acceder a las cámaras dentro de la red de un router de banda ancha mediante el uso de la URL del DDNS de la cámara.

1. Antes de poder acceder a una cámara de una red de enrutador de banda ancha, debe haber definido el reenvío del rango de puertos para el enrutador de banda ancha.
2. Desde el PC remoto, inicie el explorador de Internet e introduzca la dirección URL de DDNS de la cámara, o la dirección IP del enrutador de banda ancha en la barra de direcciones.  
ej.) <http://ddns.hanwha-security.com/ID>

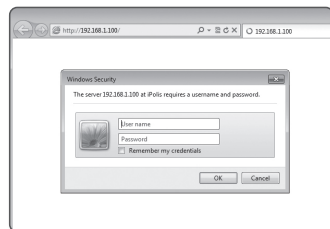


- Para utilizar DDNS, regístrese en la página de inicio de DDNS (<http://ddns.hanwha-security.com>) y registre el producto en **[Mi DDNS]>[Registrar producto]**.

## CONEXIÓN A LA CÁMARA

### Procedimiento normal

1. Inicie el explorador de Internet.
2. Introduzca la dirección IP de la cámara en la barra de direcciones.  
ej.) • Dirección IP (IPv4) : 192.168.1.100 → http://192.168.1.100  
- Debe aparecer el diálogo de inicio de sesión.  
• Dirección IP (IPv6) : 2001:230:abcd:ffff:0000:0000:ffff:1111 → http://[2001:230:abcd:ffff:0000:ffff:1111] - Debe aparecer el diálogo de inicio de sesión.



### Si el número de puerto HTTP no es 80

1. Inicie el explorador de Internet.
2. Introduzca la dirección IP y el número de puerto HTTP de la cámara en la barra de direcciones.  
ej.) Dirección IP : 192.168.1.100:HTTP Port number(8080)  
→ http://192.168.1.100:8080 - Debe aparecer el diálogo de inicio de sesión.

### Utilización del URL

1. Inicie el explorador de Internet.
2. Introduzca el URL de DDNS de la cámara en la barra de direcciones.  
ej.) Dirección URL : http://ddns.hanwha-security.com/ID  
- Debe aparecer el diálogo de inicio de sesión.



- La conexión de red está desactivada en el entorno LAN.

### Conexión a través de UPnP

1. Ejecute el sistema cliente o sistema operativo para el protocolo UPnP.
2. Haga clic en el nombre de la cámara para realizar la búsqueda.  
En el sistema operativo Windows, haga clic en el nombre de la cámara de búsqueda en el menú de red.  
- Aparece la ventana de inicio de sesión.

### Conexión a través de Bonjour

1. Ejecute el sistema cliente o el sistema operativo para el protocolo Bonjour.
2. Haga clic en el nombre de la cámara para realizar la búsqueda.  
En el sistema operativo Mac, haga clic en el nombre de la cámara buscada desde la pestaña Bonjour de Safari.  
- Aparece la ventana de inicio de sesión.

### Para comprobar la dirección de DDNS

Si la cámara está conectada directamente a un módem de cable basado en DHCP o a un módem DSL, la dirección IP cambiará cada vez que intente conectarse al ISP (la compañía a la que se suscribió). Si este es el caso, no se le informará de la dirección IP modificada por el DDNS.

Una vez que registre el dispositivo con IP dinámica en el servidor DDNS, puede fácilmente cambiar la IP modificada cuando intente acceder al dispositivo.

Para registrar el dispositivo en el servidor de <DDNS>, entre en http://ddns.hanwha-security.com y registre primero el dispositivo y, a continuación, establezca <Red> - <DDNS> de Web Viewer en <DDNS>, y facilite el <ID de producto> utilizado durante el registro de DDNS.

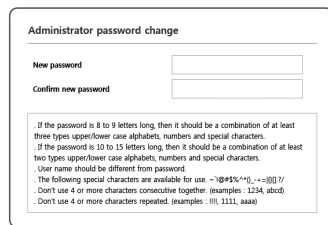


## CONFIGURACIÓN DE CONTRASEÑA

Al acceder al producto por primera vez, debe registrar la contraseña de inicio de sesión.

Cuando aparezca la ventana **"Cambiar contraseña"**, introduzca la contraseña nueva.

- Para una nueva contraseña que tenga entre 8 y 9 dígitos, debe utilizar por lo menos 3 mayúsculas/ minúsculas, 3 números y 3 caracteres especiales. Para una contraseña que tenga entre 10 y 15 dígitos, debe utilizar por lo menos 2 de los tipos mencionados.
  - Caracteres especiales que se permiten: ~!@#\$%^&\*()\_+=|{}?/
- Para mayor seguridad, no se recomienda repetir los mismos caracteres ni entradas consecutivas de teclado en las contraseñas.
- Si ha perdido su contraseña, puede pulsar el botón **[RESET]** para iniciar el producto. Así pues, no pierda la contraseña utilizando un bloc de notas o memoricela.



## CONFIGURACIÓN DEL VISOR WEB DE LA CÁMARA

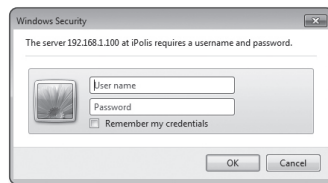
1. Haga clic en el icono **[Configurar (⚙)]**.
2. Aparece la ventana de Ajustes.
3. Puede configurar a través de la red los ajustes de información básica de la cámara, vídeo, audio, red, evento, análisis y sistema.
4. Haga clic en **<Ayuda (?)>** para ver descripciones detalladas de cada función.

## INICIO DE SESIÓN

Siempre que acceda a la cámara, aparecerá la ventana de inicio de sesión.

Introduzca el ID de usuario y la contraseña para acceder a la cámara.

1. Introduzca **"admin"** en el cuadro de entrada **<User name>**. La ID del administrador, **"admin"**, es fija y no es posible cambiarla.
2. Introduzca la contraseña en el campo de entrada **<Password>**.
3. Haga clic en **[OK]**. Si ha iniciado sesión correctamente, verá la pantalla de Live Viewer.



- Al acceder al visor de la cámara web, preste especial atención a la seguridad comprobando que los datos de imagen estén encriptados.
- Si marca la opción **"Remember my credentials"** una vez realizada la entrada, la próxima vez se iniciará sesión automáticamente sin que se le pida introducir la información de inicio de sesión.
- Podrá disfrutar de la mejor calidad de vídeo si el tamaño de pantalla es del 100%. Si se reduce la relación existe el riesgo de cortar la imagen en los bordes.

## SOLUCIÓN DE PROBLEMAS

PROBLEMA	SOLUCIÓN
Quando un usuario de Windows 10 accede al visor web a través de Chrome o Firefox, el volumen de sonido del micrófono cambia periódicamente.	<ul style="list-style-type: none"> <li>Esto es lo que sucede cuando el controlador del micrófono se ha configurado en el controlador Realtek. Instale el dispositivo de audio de alta definición (controlador predeterminado de Windows) o el controlador de terceros como el controlador de micrófono.</li> </ul>
No se visualiza ningún vídeo al acceder al visor web sin plug-in en Safari a través de HTTPS.	<ul style="list-style-type: none"> <li>En la ventana emergente de autenticación que aparece cuando se accede inicialmente a https, haga clic en "Ver certificado de autenticación" y seleccione la casilla "Confiar siempre al conectar con la IP del visor web designado".</li> <li>Si el visor web continúa sin mostrar un vídeo después de seleccionar "Siguiente" en la ventana de mensaje siguiente, pulse la tecla de Comando + Q para salir del navegador Safari, obtenga acceso de nuevo y siga los procedimientos indicados anteriormente.</li> </ul>
No se puede acceder a la cámara desde un navegador web.	<ul style="list-style-type: none"> <li>Compruebe para asegurarse de que las configuraciones de Red de la cámara son las apropiadas.</li> <li>Compruebe para asegurarse de que todos los cables de red se han conectado bien.</li> <li>Si está conectado mediante DHCP, compruebe que la cámara puede admitir direcciones IP dinámicas sin problemas.</li> <li>Si la cámara está conectada al Enrutador de banda ancha, compruebe que el reenvío de puertos está configurado adecuadamente.</li> </ul>
El Visualizador se desconecta durante el control.	<ul style="list-style-type: none"> <li>Los Visualizadores conectados se desconectan debido a cualquier cambio en las configuraciones de cámara o de red.</li> <li>Compruebe todas las conexiones de red.</li> </ul>
No se visualiza ningún vídeo cuando se accede de nuevo al visor web o se conecta con el streaming al cliente.	<ul style="list-style-type: none"> <li>El número máximo de perfiles disponible es 3. La conexión puede perderse si se utiliza 4 o más perfiles. Ejemplo) Si accede a MJPEG, H264 y H265 y luego accede con un perfil diferente, se perderá la conexión.</li> </ul>
La cámara conectada a la red no se detecta en el programa del Device Manager.	<ul style="list-style-type: none"> <li>Apague las configuraciones de cortafuegos en su ordenador, y luego vuelva a buscar la cámara.</li> </ul>
Se superponen imágenes.	<ul style="list-style-type: none"> <li>Compruebe si dos o más cámaras están configuradas en una única dirección multicast en lugar de diferentes direcciones. Si se utiliza una única dirección para varias cámaras, las imágenes se pueden superponer.</li> </ul>

PROBLEMA	SOLUCIÓN
No aparece imagen.	<ul style="list-style-type: none"> <li>Si el método de transmisión está configurado como multicast, compruebe si hay un router que admita multicast en el LAN al que esté conectado la cámara.</li> </ul>
La voz no se graba aunque se configuren los ajustes de entrada de audio.	<ul style="list-style-type: none"> <li>Debe activar la casilla &lt;Entrada de audio&gt; en &lt;Básico&gt; - &lt;Perfil de vídeo&gt;.</li> </ul>
<Detección de movimiento> de <Analítica> está ajustado en <Activar>, pero no me llega una notificación por correo electrónico, ni siquiera cuando se ha producido un evento de análisis.	<ul style="list-style-type: none"> <li>Verifique los ajustes en la secuencia siguiente: <ul style="list-style-type: none"> <li>A. Compruebe los ajustes de &lt;Fecha y hora&gt;.</li> <li>B. &lt;Detección de movimiento&gt; debe definirse en &lt;Activar&gt;.</li> <li>C. Compruebe si la opción &lt;E-mail&gt; del menú &lt;Config. de evento&gt; está marcada para ser utilizada.</li> </ul> </li> </ul>
No se puede grabar en la tarjeta de memoria Micro SD.	<ul style="list-style-type: none"> <li>Compruebe si la tarjeta de memoria está defectuosa.</li> </ul>
La tarjeta de memoria Micro SD está insertada pero no funciona correctamente.	<ul style="list-style-type: none"> <li>Compruebe si la tarjeta de memoria se ha insertado en la dirección correcta. En esta cámara, no se garantiza el funcionamiento de una tarjeta de memoria formateada con otros dispositivos</li> <li>Formatee de nuevo la tarjeta de memoria en el menú &lt;Config.&gt; → &lt;Evento&gt; → &lt;Almacenamiento&gt;.</li> </ul>
No se puede grabar en la NAS.	<ul style="list-style-type: none"> <li>Compruebe que la información registrada en la NAS es correcta.</li> </ul>
Se está indicando que la configuración de la NAS ha fallado.	<ul style="list-style-type: none"> <li>Compruebe que la dirección IP de NAS sea válida.</li> <li>Compruebe que el ID / contraseña de NAS sea válido</li> <li>Compruebe que puede acceder a la carpeta designada como la carpeta básica utilizando el ID de la NAS.</li> <li>Asegúrese de que los elementos SMB / CIFS de NAS estén sin marcar.</li> <li>Compruebe que la dirección IP de NAS y la dirección IP de la cámara tengan el mismo formato. Ejemplo) el valor inicial de la NAS y de la máscara de subred de la cámara es 255.255.255.0. Si la dirección IP es 192.168.20.32 entonces la dirección IP de NAS debe estar entre 192.168.20.1 y 192.168.20.255.</li> <li>Verifique si ha intentado acceder como otro usuario sin formatear la carpeta básica almacenada o usada.</li> <li>Compruebe que utilizó las unidades NAS recomendadas.</li> </ul>

# OPEN SOURCE ANNOUNCEMENT

## GPL/LGPL software license

The software included in this product contains copyrighted software that is licensed under the GPL/LGPL. You may obtain the complete Corresponding Source code from us for a period of three years after our last shipment of this product by sending email to help.cctv@hanwha.com

If you want to obtain the complete Corresponding Source code in the physical medium such as CD-ROM, the cost of physically performing source distribution might be charged.

### GPL SW

Component Name	License	URL
Base Kernel	GPL 2.0	
Busybox	GPL 2.0	http://www.busybox.net/downloads/snapshots
iproute2-4.3.0	GPL 2.0	
iptables-1.4.21	GPL 2.0	http://ftp.netfilter.org/pub/iptables
ethtool-4.2	GPL 2.0	
mtdd-1.5.2	GPL 2.0	ftp://ftp.infradead.org/pub/mtdd-utils
mi-diag-2.11	GPL 2.0	
rp-pppoe-3.11	GPL 2.0	http://www.roaringpenguin.com/pppoe/
wpa_supplicant-2.5	GPL 2.0	
bash-4.3.30	GPL 3.0	
zerocoinf	GPL 2.0	

### LGPL SW

Component Name	License	URL
glibc	LGPL 2.0	
inetutils	LGPL 3.0	
neon-0.29.6	LGPL 2.0	http://www.webdav.org/neon/

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This package is an SSL implementation written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).

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9. "Modified Source Code" means a source program modified from the Source Code for the purpose of improving its performance, increasing or decreasing its function, and the like. The Ported Source Code shall not be included in the Modified Source Code.
10. "Binary Code" means an executable code form which is created by compiling programs, which include all or part of the Source Code or the Modified Source Code.
11. "Derivative Work" means the Modified Source Code or the Binary Code.
12. "Embedded Product" means any product which operates with executable code form of the Source Code, the Modified Source Code or the Binary Code loaded on its hardware.
13. "End User" means a consumer who uses the Embedded Product.
14. "System Developer" means any person who develops the Embedded Product by itself or has a third party develop the same, and provides, whether with or without payment, the End User with the Embedded Product.
15. "Distributor of Modification" means any person who produces the Modified Source Code and, whether with or without payment, distributes the same to any third party.

**16.** "Patch for Modification" means a difference, program, system, or the like in order to create the Modified Source Code from the Source Code or the Binary Code thereof.

**17.** "Vicarious Execution of Patch Processing" means vicarious execution service to create the Modified Source Code applying the Patch for Modification to the Source Code or the Binary Code thereof.

**18.** "Source Code User" means a person who uses the Source Code.

**19.** "Distribution" means any of the following acts:

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3. to distribute a copy of a work to the general public or a large number of specific persons.

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1. The copyrights of the Source Code shall be owned by Ken Sakamura.

**Article 4. License of Source Code**

1. As provided for in this Article, T-Engine Forum shall provide, and grant a license to use, the Source Code free of charge to any person who has taken the necessary procedure for registration as prescribed by T-Engine Forum and agreed to the T-License.
  2. The Source Code shall be distributed exclusively by T-Engine Forum. Any person who obtains the Source Code under Article 4.1 above shall not make any re-Distribution of the Source Code.
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    1. to perform any and all acts set forth in the Article 4.3 above.
    2. to develop and manufacture the Embedded Product containing the Binary Code, and, whether with or without payment, provide the End User with the same and make the Binary Code available to the End User on the Embedded Product.
5. The Source Code User and the System Developer shall be obligated to give a notice that the Source Code is used, in such a way as separately specified by T-Engine Forum, when they use the Source Code or the Binary Code, or make the Binary Code available for the End User on the Embedded Product.

**Article 5. Distribution of Modified Source Code**

1. Any of A- members of T-Engine Forum may become the Distributor of Modification by obtaining the approval of T-Engine Forum through the registration procedure as prescribed by the Forum provided that only the department of the A- member which has taken the registration procedure may distribute the Modified Source Code in such a way as provided for in this Article as long as it holds the Amembership.
2. The Distributor of Modification may create the Modified Source Code based on the Source Code provided by T-Engine Forum and the Patch for Modification to be applied to create such Modified Source Code from the Source Code.
3. The Distributor of Modification shall, prior to the distribution, inform T-Engine Forum of and register a name and description of the Modified Source Code in such a way as specified by T-Engine Forum.
4. The Distributor of Modification shall determine the name of the Modified Source Code subject to the rules separately established by T-Engine Forum and publish an appropriate notice as required by the rules on the Patch for Modification and the Modified Source Code.
5. The Distributor of Modification may distribute the Modified Source Code to a third party, whether with or without payment, provided that the Distributor of Modification shall take the necessary measures to prohibit the third party from making the re-Distribution of the Modified Source Code.
6. Developer with the Patch for Modification. Provided, however, that the Distributor of Modification shall be obligated to confirm that the System Developer is the Source Code User duly licensed under Article 4.1.
7. The Distributor of Modification may perform the Vicarious Execution of Patch Processing for the System Developer.
8. The System Developer shall not distribute the Modified Source Code in further modified form to any third party as a stand-alone software product.
9. The System Developer may, under the same obligation as imposed in Article 4.5, make the Embedded Product available for the End User through use of the Patch for Modification distributed by the Distributor of Modification or the Derivative Works obtained through the Vicarious Execution of Patch Processing.

**Article 6. Distribution and Registration of the Ported Source Code**

1. The Source Code User and the System Developer may, whether with or without charge, distribute to any third party only the following parts of the Ported

Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware:

1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.
2. The Header File; provided that the Header File shall be distributed together with the Binary Code of the Ported Source Code.
2. Any member of T-Engine Forum may request T-Engine Forum to register and distribute, as an original source code for T-Kernel, the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
3. Any member of T-Engine Forum who requests the distribution mentioned in the preceding paragraph shall accede to the following conditions:
  1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.
  2. The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.
  3. The member shall submit test results of the Ported Source Code to T-Engine Forum when requesting the distribution.
4. In the event that T-Engine Forum accepts the request mentioned in Article 6.2, T-Engine Forum shall register and distribute the Ported Source Code as the Source Code for T-Kernel. Provided, however, that the Ported Source Code may be treated in the same way as the Modified Source Code until the time of registration hereunder.
5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

**Article 7. Use for Other Purpose**

1. Any use of the Source Code, the Modified Source Code or the Ported Source Code other than those stipulated in Articles 4, 5 and 6 shall be subject to the prior approval of T-Engine Forum.

**Article 8. Limited Warranty**

1. T-Engine Forum and the copyright holder of the Source Code warrant that the Source Code does not infringe third party's copyrights. Provided, however, that T-Engine Forum and the copyright holder of the Source Code make no warranty as to the Hardware-dependent Part and/or Compiler- dependent Part set forth in Article 6.2 in the Ported Source Code by any third party.
2. Neither T-Engine Forum nor the copyright holder of the Source Code warrants that the Source Code will fit for any particular purpose of the Source Code User.
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1. Neither T-Engine Forum nor the copyright holder of the Source Code shall be liable for any damages (including, but not limited to, damages resulting from loss of profit, business interruption, loss of business information or any other pecuniary damage) arising out of use or impossibility of use of the Source Code, even if T-Engine Forum and the copyright holder have been informed of the possibility of such damages.

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**Article 11. Governing Law and Language**

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Julian Seward, [jseward@bzip.org](mailto:jseward@bzip.org)

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Jean-loup Gailly Mark Adler

[jloup@gzip.org](mailto:jloup@gzip.org) [madler@alumni.caltech.edu](mailto:madler@alumni.caltech.edu)

The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://www.ietf.org/rfc/rfc1950.txt> (zlib format), [rfc1951.txt](http://www.ietf.org/rfc/rfc1951.txt) (deflate format) and [rfc1952.txt](http://www.ietf.org/rfc/rfc1952.txt) (gzip format).



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