Hanwha Vision

CÁMARA DE RED

Manual del usuario

XNV-6081Z/XNV-8081Z
XND-6081VZ/XND-8081VZ
XND-6081FZ/XND-8081FZ

CE

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.

INSTRUCIONES 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, 0,7 A o PoE, 0,27 A. (XND-6081FZ/XND-6081VZ)
16. 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, 0,75 A o PoE, 0,3 A. (XND-8081FZ/XND-8081VZ)
17. 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, 0,8 A, 24 V CA, 0,8 A o PoE, 0,3 A. (XNV-6081Z)
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, 0,85 A, 24 V CA, 0,9 A o PoE, 0,33 A.(XNV-8081Z)
19. 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.
20. 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.
21. 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.
22. 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.
23. La instalación o uso del producto en el agua puede causar daños graves al producto.
24. 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



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

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.

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CARACTERÍSTICAS RECOMENDADAS DEL ORDENADOR

- CPU : Intel(R) Core(TM) i7 a 3,4 GHz o superior
- RAM : 8G o superior
- SO admitido : MS Windows, Mac OS X
- Navegador recomendado: Google Chrome
  Navegadores compatibles: MS Explorer, MS Edge, Mozilla Firefox (solo Windows 64bit), Apple Safari (solo Mac OSX)

※ Consulte el apéndice para obtener información detallada sobre sistemas operativos y navegadores verificados.

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

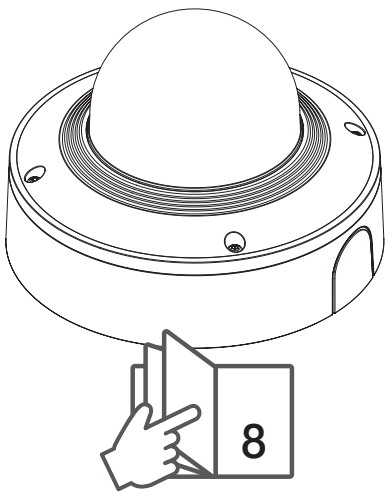
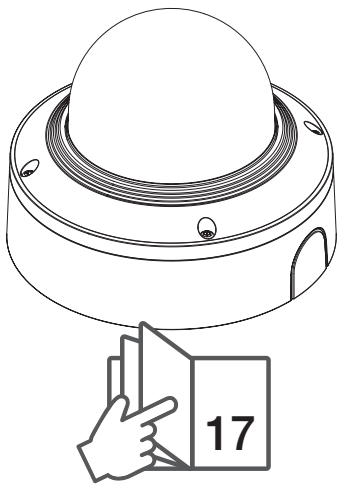
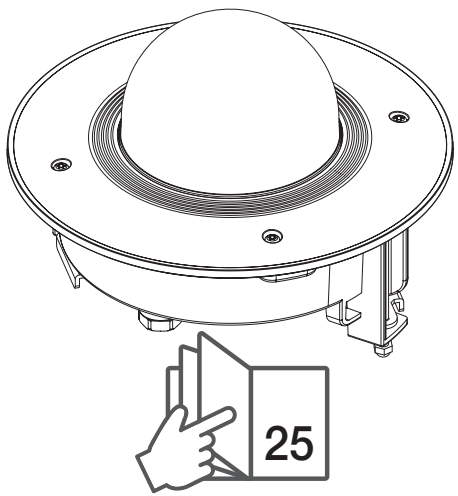
- Capacidad recomendada : De 16 GB a 256 GB (tipo MLC)
- Para esta cámara se recomiendan los siguientes tipos de tarjetas de memoria de los siguientes fabricantes.
  - Fabricante : SanDisk, Transcend
  - Familia de productos : High endurance

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.

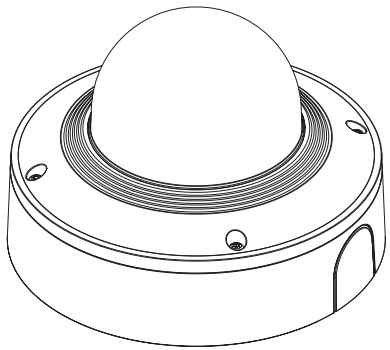
Productos recomendados	Tamaños disponibles
QNAP NAS	Accesos simultáneos para un máximo de 16 cámaras.
NAS Synology	Accesos simultáneos para un máximo de 16 cámaras.

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

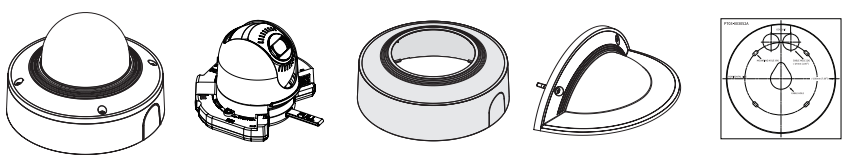
Domo antivandalismo exterior XNV-6081Z/XNV-8081Z	Domo antivandalismo interior XND-6081VZ/XND-8081VZ	Domo de montaje empotrado XND-6081FZ/XND-8081FZ
		

COMPONENTES

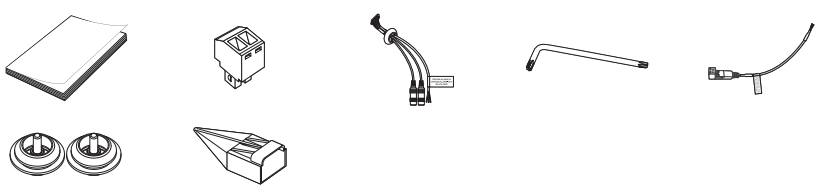
Debido a los diferentes países de venta, los accesorios no son los mismos.



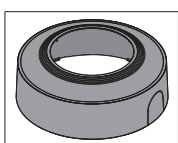
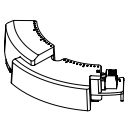
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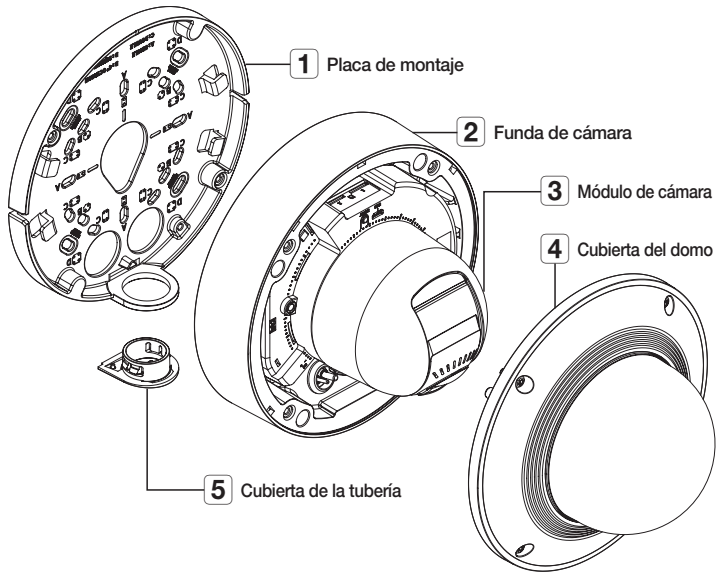
Color: Marfil

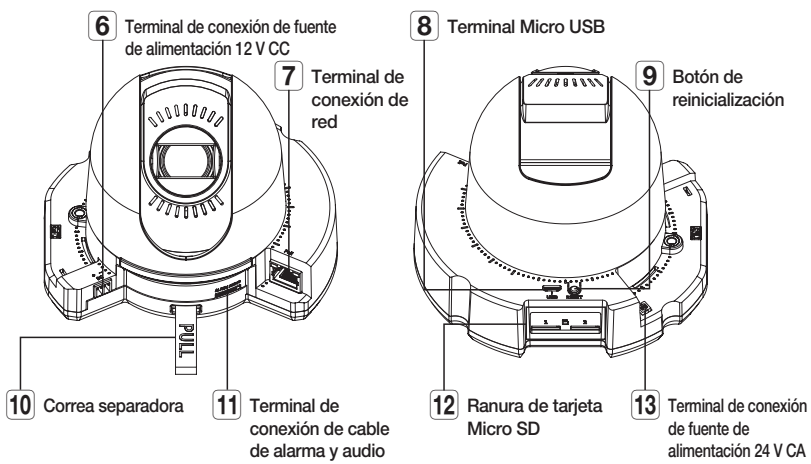


Opción (se vende por separado)

	
SBC-180B (Color: Negro)	SPC-100AC

VISTA





INSTALACIÓN

- La cámara es resistente al agua y cumple la norma IP67 / 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.

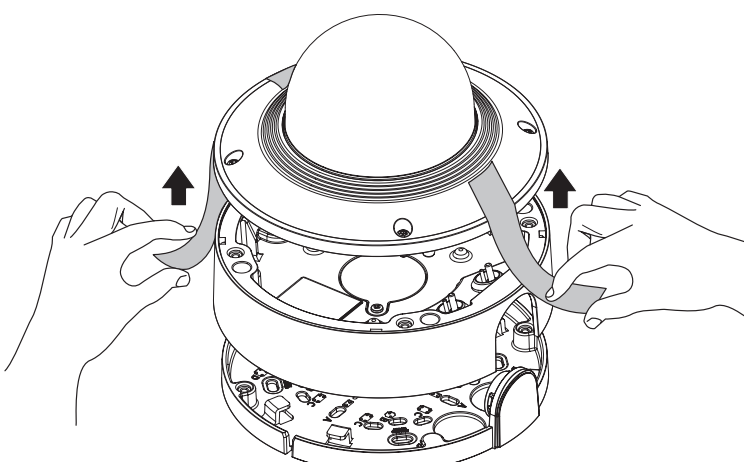
Precauciones antes de la instalación

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

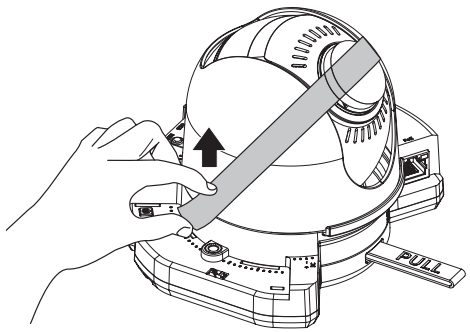
- Seleccione un lugar para la instalación que al menos soporte 5 veces el peso de la cámara.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- Si el producto se instala con excesiva fuerza, la cámara debido podría sufrir daños debido a un mal funcionamiento. Forzar el ensamblaje utilizando herramientas no compatibles puede dañar el producto.

Eliminación

1. Despegue la cinta que fija la funda de cámara.

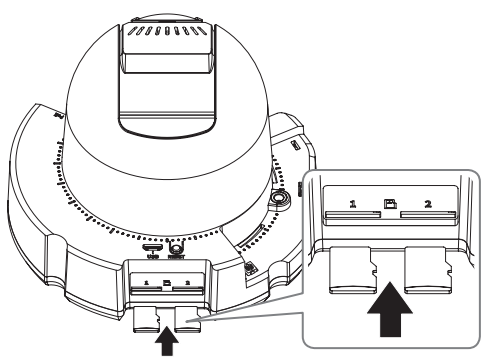


2. Despegue la cinta que se encuentra en el módulo de la cámara.



Inserción de una tarjeta de memoria Micro SD

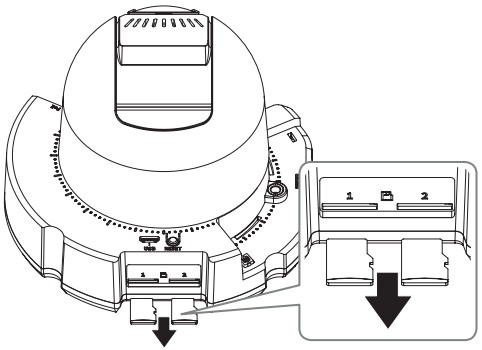
Deslice la tarjeta Micro SD en la ranura Micro SD del módulo de la cámara en la dirección de la flecha.



- Antes de instalar la cámara, debe insertar la tarjeta de memoria Micro SD mientras la fuente de alimentación y el cuerpo están separados.
- No lo inserte a la fuerza en la dirección inversa. Podría dañar la tarjeta de memoria Micro SD y el producto.
- Cuando llueve o la humedad es alta, no se recomienda que inserte o expulse una tarjeta Micro SD.
- Durante la instalación o extracción de la tarjeta de memoria Micro SD, asegúrese de colocar el cuerpo del producto sobre una superficie plana antes de trabajar en él para evitar accidentes por pérdida o caída de piezas.

Extracción de una tarjeta de memoria Micro SD

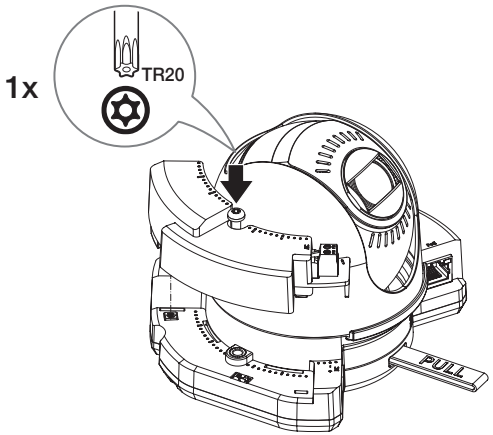
Presione suavemente hacia abajo en el extremo expuesto de la tarjeta de memoria como se muestra en el esquema para sacarla de la ranura.



- Tenga en cuenta que si empuja firmemente y suelta la tarjeta de memoria Micro SD al expulsarla, puede salirse.
- 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.

Instalar el módulo CA (se vende por separado: SPC-100AC)

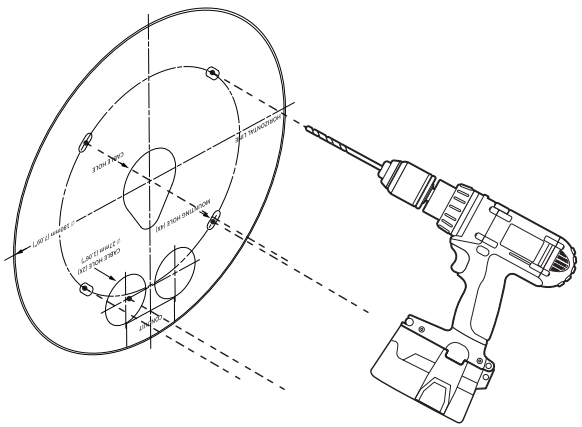
1. Instale el módulo CA como se muestra en la figura.
2. Ajuste el tornillo con la llave hexagonal.



Instalación (placa de montaje)

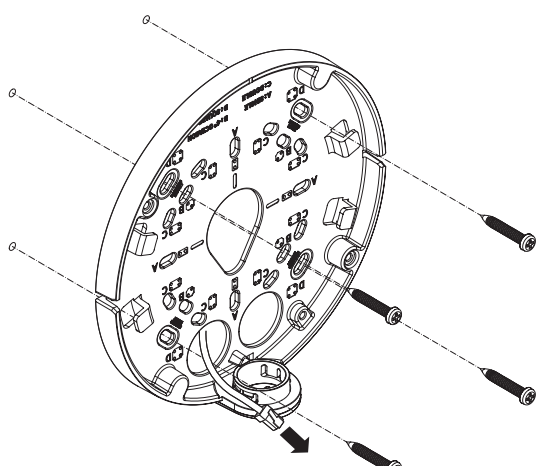
[Instalación directa en pared / techo]

1-1. Coloque la plantilla de instalación en la superficie deseada y taladre los orificios para los tornillos y cables.



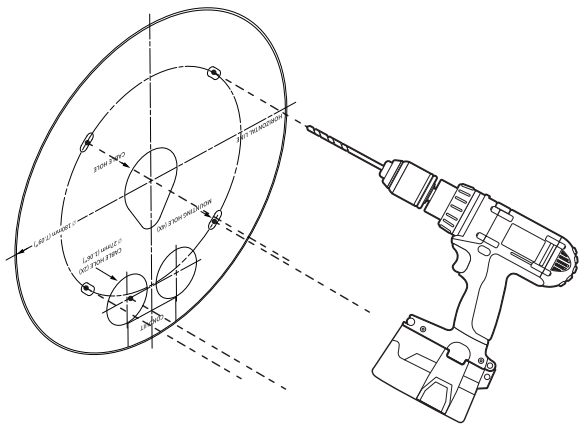
1-2. Asegure la placa de montaje con los tornillos apropiados.

1-3. Saque los cables necesarios, como los cables LAN / de alimentación / de audio y alarma a través del orificio en la placa de montaje.

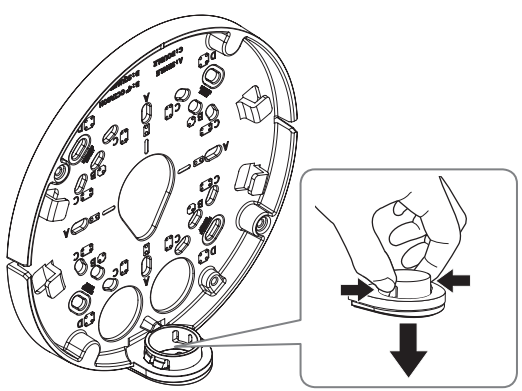


[Instalar usar la tubería]

2-1. Coloque la plantilla de instalación y taladre los orificios para los tornillos y cables.



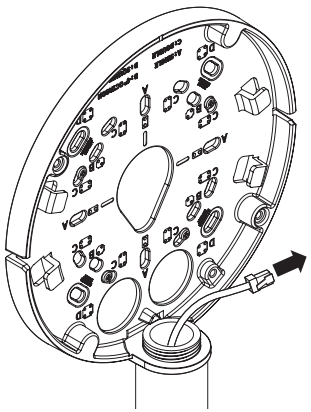
2-2. Separe la cubierta de la tubería de la placa de montaje al presionar sus lados.



2-3. Coloque la tubería en la placa de montaje.

2-4. Asegure la placa de montaje con los tornillos apropiados.

2-5. Saque los cables necesarios, como los cables LAN / de alimentación / de audio y alarma a través de la tubería.



Instalación (funda de cámara)

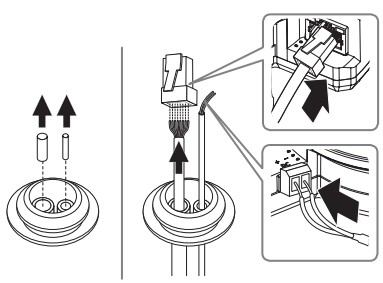
- Use un cojinete de cable conforme con el cable LAN que se conectará.
  - Cámara principal: use un cable con el diámetro de Ø5 a 6,5
  - Componentes: use un cable con el diámetro de Ø5 a 8,5

[Instalar Cables LAN / de alimentación]

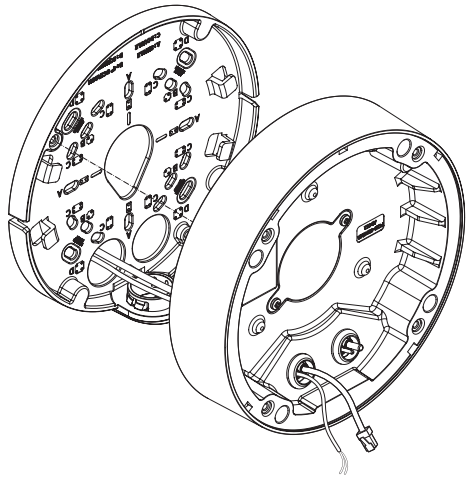
1-1. Quite las partes extruidas del cojinete que se usará.

1-2. Pase el cable LAN a través del orificio grande del cojinete y conéctelo al conector LAN.

1-3. (Cuando se usa la energía) Pase el cable de alimentación a través del orificio pequeño del casquillo y conéctelo al bloque terminal provisto.



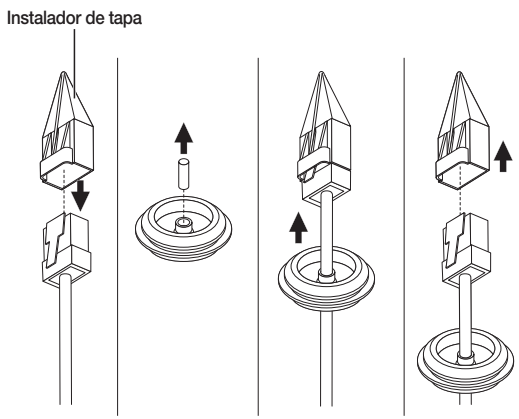
1-4. Monte el cojinete a la funda de cámara.



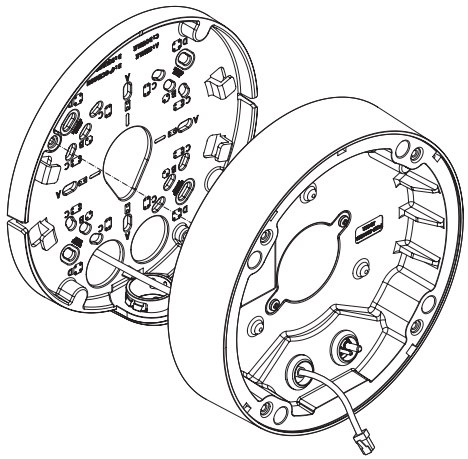
[Instalar el cable LAN] (IP66)

2-1. Quite la parte extruida del cojinete de un orificio provisto.

2-2. Utilice el instalador de tapa para pasar el cable RJ45 a través de él.

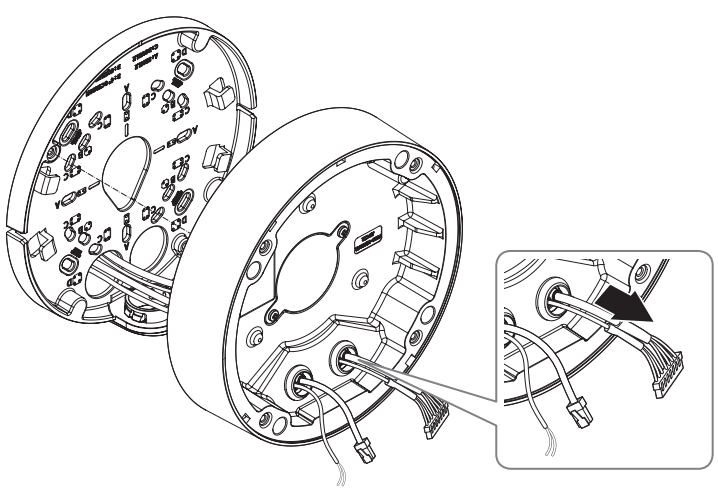


2-3. Monte el cojinete a la funda de cámara.

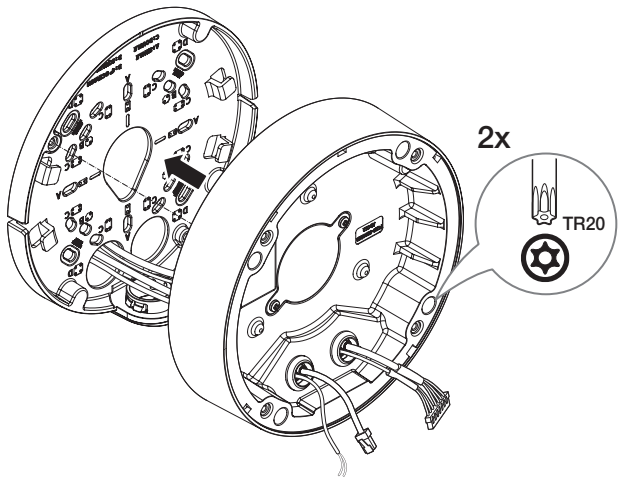


[Instalar cables de audio y alarma]

3-1. Monte el cojinete de los cables de audio y alarma provistos en la funda de cámara.



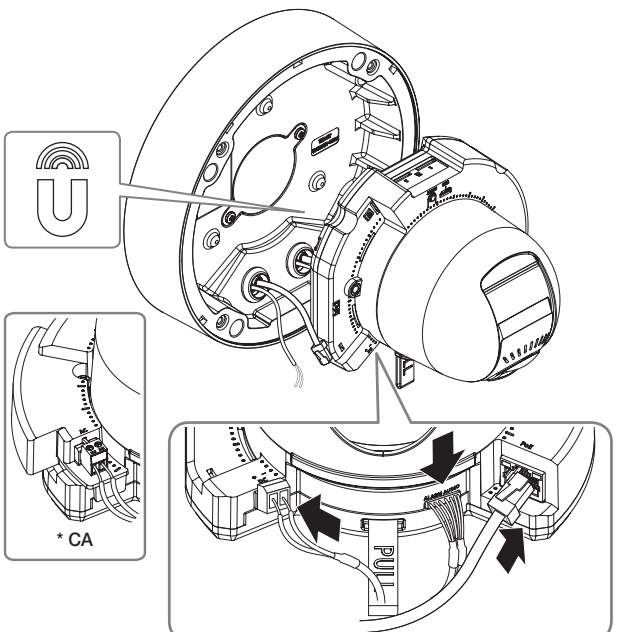
4. Una la placa de montaje con la funda de cámara.



Instalar el módulo de cámara

1. Conecte los cables de LAN / alimentación / audio y alarma al terminal del módulo de cámara.
2. Fije el módulo de cámara a la funda.

- Un imán está incrustado en la parte inferior del módulo.
- Tenga cuidado de que no haya objetos extraños entre las superficies que se unirán.



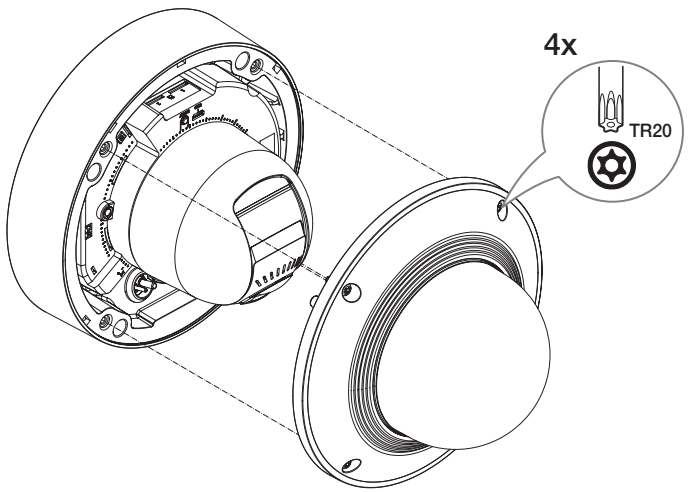
3. Para ajustar la lente en la dirección deseada, consulte la sección "**Ajuste de la dirección de la cámara**". (página 33)

Montar la cubierta del domo

[Instalación directa en pared / techo]

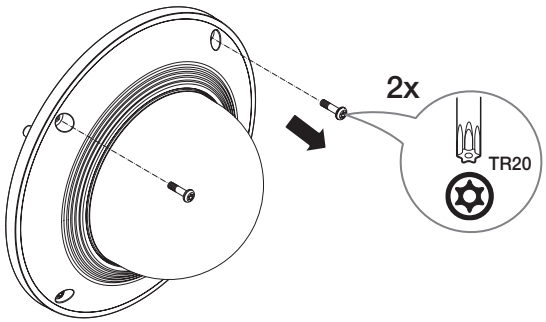
1. Monte la cubierta del domo.

- Asegúrese de ajustar firmemente los tornillos de sujeción para que no se produzca un problema debido a daños por agua.



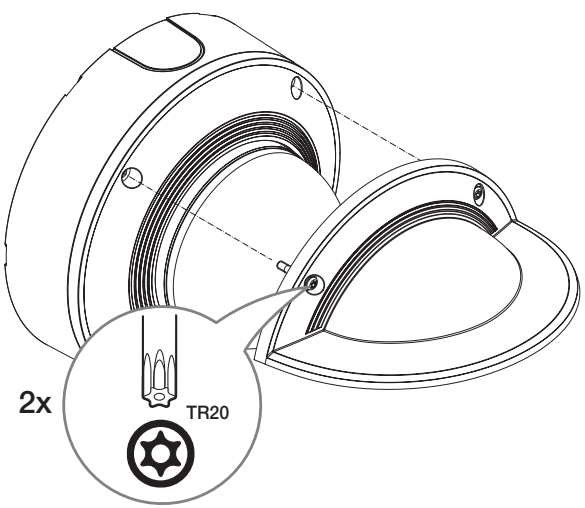
[Usar la tapa del clima]

1. Retire los tornillos de la cubierta del domo.



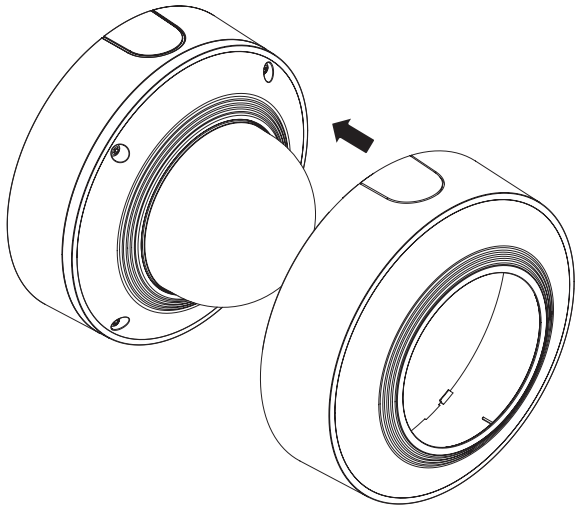
2. Monte la cubierta del domo.
3. Monte la tapa del clima a la cubierta del domo y ajuste los tornillos.

▪ Asegúrese de ajustar firmemente los tornillos de sujeción para que no se produzca un problema debido a daños por agua.

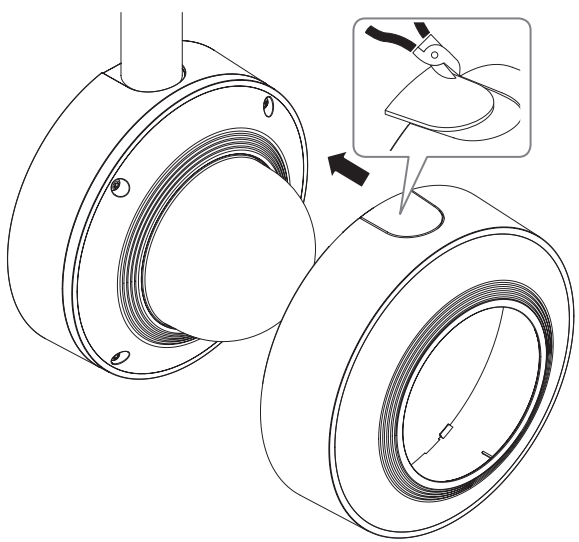


Aplicar / Quitar la cubierta de la superficie

1. Coloque la cubierta de la superficie, de manera que está alineada con la cubierta de la tubería.

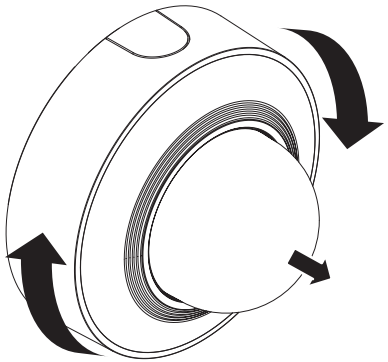


2. Para una cámara conectada a una tubería, antes de colocarla, primero, retire la cubierta de la tubería de la cubierta de la superficie.

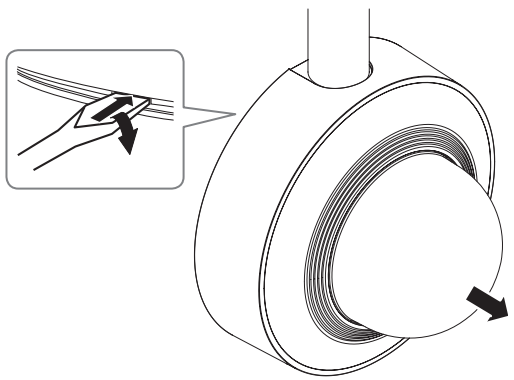


3. Para retirar la cubierta de la superficie, tire de ella mientras la gira en sentido horario, como se muestra en la figura.

- La instalación y extracción repetitiva de la cubierta de la superficie puede deformarla.
- La instalación y extracción de la cubierta de la superficie con una fuerza excesiva puede causar rayones en la superficie del producto.



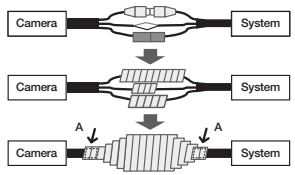
- Cuando una tubería estuviera conectada, suéltela mediante el uso de la herramienta apropiada.



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.

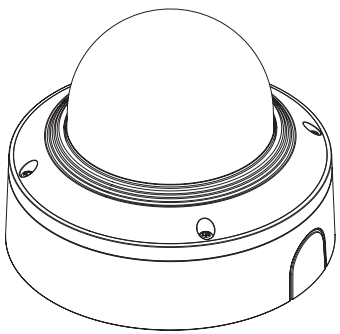
1. Conecte los cables de alimentación, E/S y de la red LAN.
2. Envuelva el aislante negro del cable (Área A) y la parte de conexión del cable con cinta (de goma de butilo) impermeable, de modo que más de la mitad de esta cinta quede superpuesta.



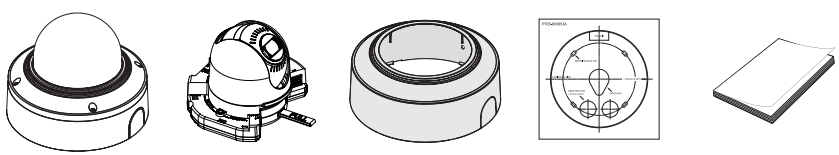
- Si el aislante del cable no se impermeabiliza correctamente, puede haber filtraciones. Asegúrese que el cable queda protegido con una densa capa de cinta.
- La cinta de butilo resistente al agua está fabricada con goma de butilo, que puede estirarse el doble de su longitud normal.

COMPONENTES

Debido a los diferentes países de venta, los accesorios no son los mismos.



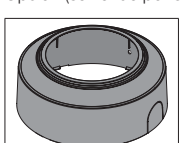
<XND-6081VZ/XND-8081VZ>



Color: Marfil

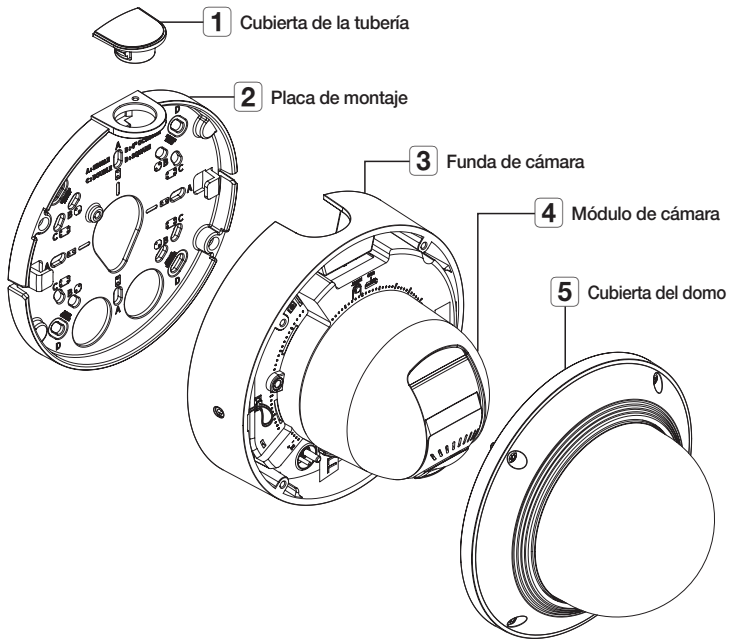


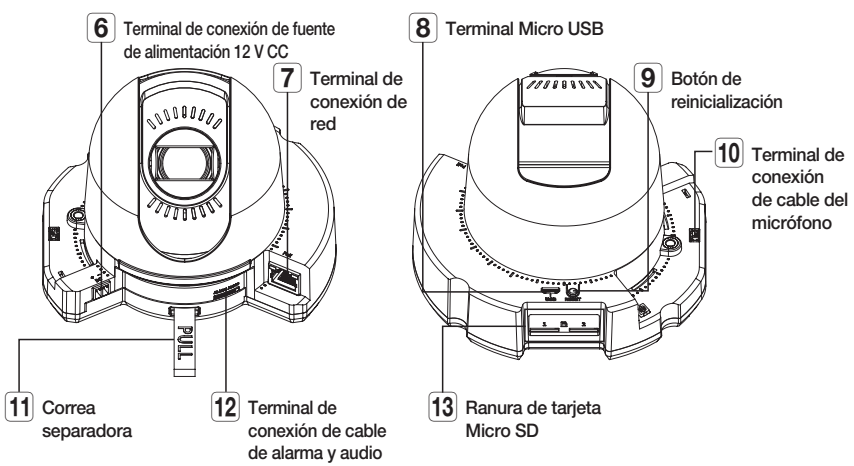
Opción (se vende por separado)



SBC-160B
(Color: Negro)

VISTA





INSTALACIÓN

- La cámara es resistente al agua y cumple la norma IP52. 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.

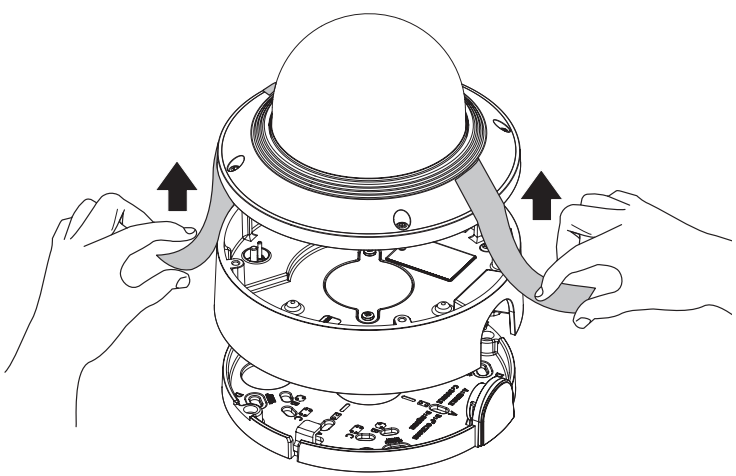
Precauciones antes de la instalación

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

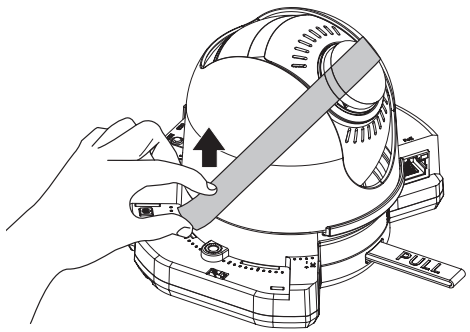
- Seleccione un lugar para la instalación que al menos soporte 5 veces el peso de la cámara.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- Si el producto se instala con excesiva fuerza, la cámara debido podría sufrir daños debido a un mal funcionamiento. Forzar el ensamblaje utilizando herramientas no compatibles puede dañar el producto.

Eliminación

1. Despegue la cinta que fija la funda de cámara.

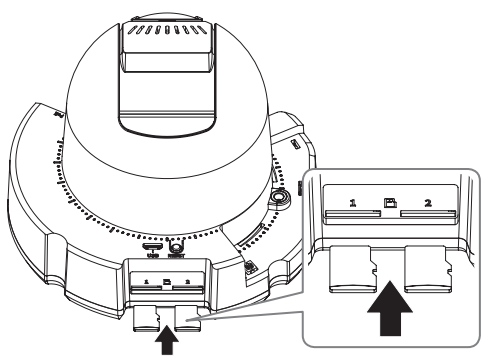


2. Despegue la cinta que se encuentra en el módulo de la cámara.



Inserción de una tarjeta de memoria Micro SD

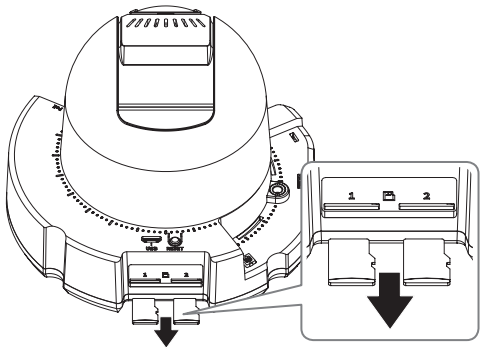
Deslice la tarjeta Micro SD en la ranura Micro SD del módulo de la cámara en la dirección de la flecha.



- Antes de instalar la cámara, debe insertar la tarjeta de memoria Micro SD mientras la fuente de alimentación y el cuerpo están separados.
- No lo inserte a la fuerza en la dirección inversa. Podría dañar la tarjeta de memoria Micro SD y el producto.
- Cuando llueve o la humedad es alta, no se recomienda que inserte o expulse una tarjeta Micro SD.
- Durante la instalación o extracción de la tarjeta de memoria Micro SD, asegúrese de colocar el cuerpo del producto sobre una superficie plana antes de trabajar en él para evitar accidentes por pérdida o caída de piezas.

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.

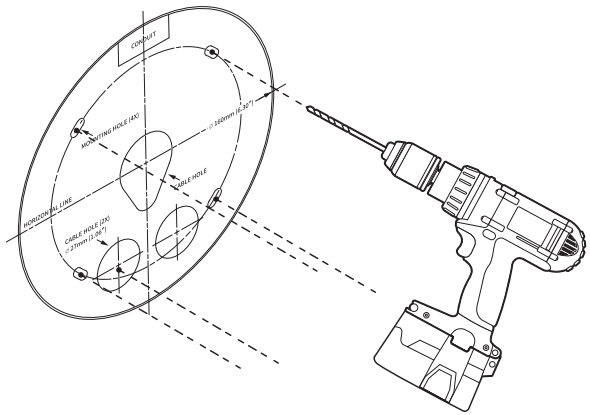


- Tenga en cuenta que si empuja firmemente y suelta la tarjeta de memoria Micro SD al expulsarla, puede salirse.
- Antes de retirar la tarjeta de memoria Micro SD, en <**Almacenamiento**>, ajuste el dispositivo en <**Des**> y pulse el botón [**Aplicar**] y apague la cámara.
- Si apaga la cámara o retira la tarjeta de memoria SD que contiene datos, puede perderlos o dañarlos.

Instalación (placa de montaje)

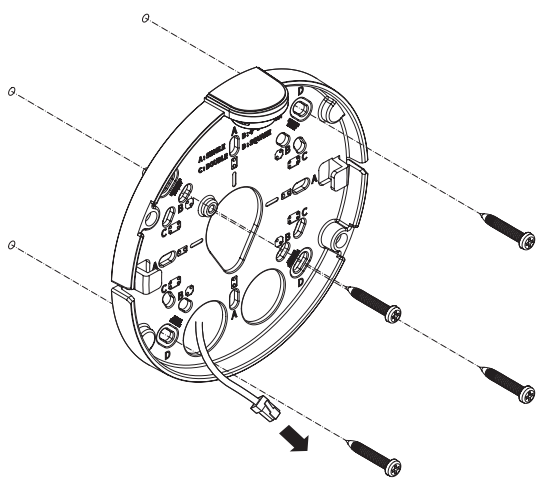
[Instalación directa en pared / techo]

1-1. Coloque la plantilla de instalación en la superficie deseada y taladre los orificios para los tornillos y cables.



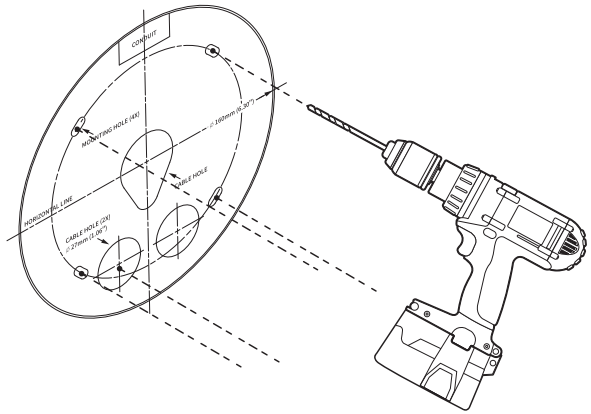
1-2. Asegure la placa de montaje con los tornillos apropiados.

1-3. Saque los cables necesarios, como los cables LAN / de alimentación / de audio y alarma a través del orificio en la placa de montaje.

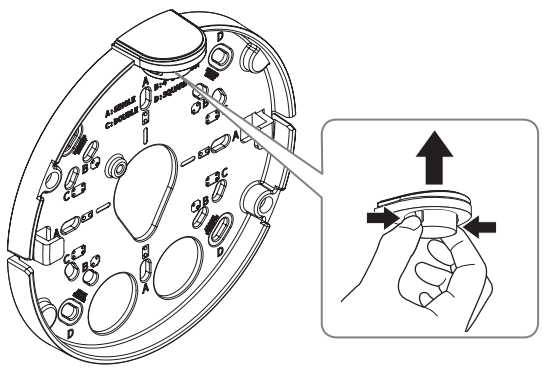


[Instalar usar la tubería]

2-1. Coloque la plantilla de instalación y taladre los orificios para los tornillos y cables.



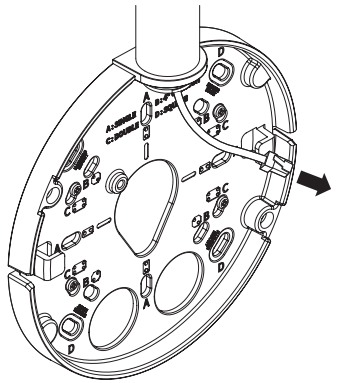
2-2. Separe la cubierta de la tubería de la placa de montaje al presionar sus lados.



2-3. Coloque la tubería en la placa de montaje.

2-4. Asegure la placa de montaje con los tornillos apropiados.

2-5. Saque los cables necesarios, como los cables LAN / de alimentación / de audio y alarma a través de la tubería.



Instalación (funda de cámara)

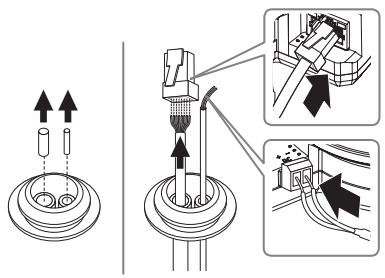
- Use un cojinete de cable conforme con el cable LAN que se conectará.
  - Cámara principal: use un cable con el diámetro de Ø5 a 6,5
  - Componentes: use un cable con el diámetro de Ø5 a 8,5

[Instalar Cables LAN / de alimentación]

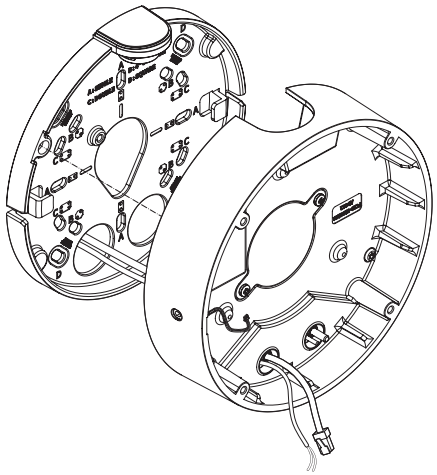
1-1. Quite las partes extruidas del cojinete que se usará.

1-2. Pase el cable LAN a través del orificio grande del cojinete y conéctelo al conector LAN.

1-3. (Cuando se usa la energía) Pase el cable de alimentación a través del orificio pequeño del casquillo y conéctelo al bloque terminal provisto.



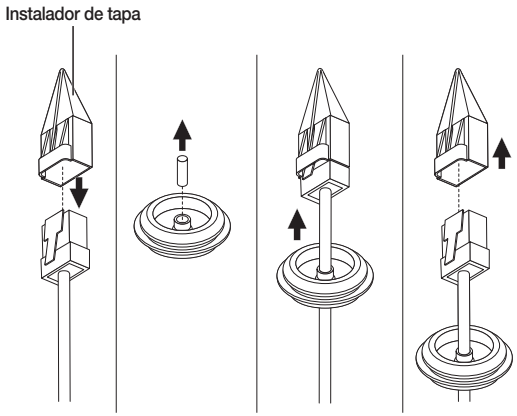
1-4. Monte el cojinete a la funda de cámara.



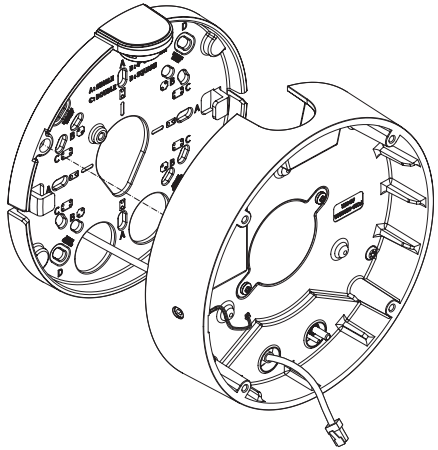
[Instalar el cable LAN]

2-1. Quite la parte extruida del cojinete de un orificio provisto.

2-2. Utilice el instalador de tapa para pasar el cable RJ45 a través de él.

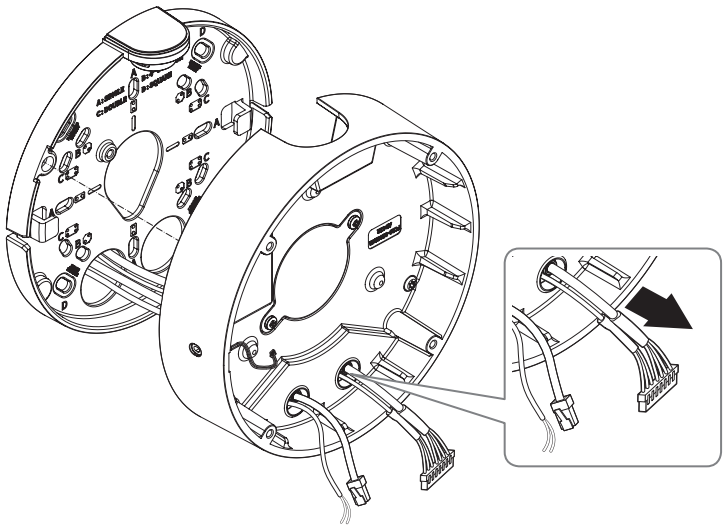


2-3. Monte el cojinete a la funda de cámara.

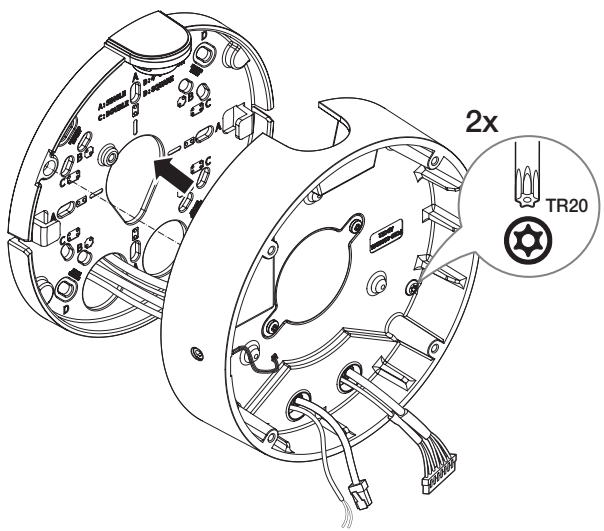


[Instalar cables de audio y alarma]

3-1. Monte el cojinete de los cables de audio y alarma provistos en la funda de cámara.



4. Una la placa de montaje con la funda de cámara.



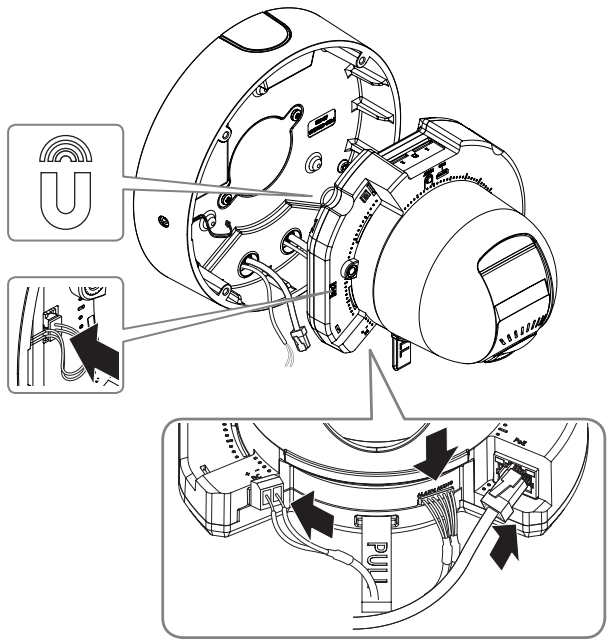
Instalar el módulo de cámara

1. Conecte los cables de LAN / alimentación / audio y alarma al terminal del módulo de cámara.

2. Fije el módulo de cámara a la funda.

- Un imán está incrustado en la parte inferior del módulo.
- Tenga cuidado de que no haya objetos extraños entre las superficies que se unirán.

3. Conecte el cable del micrófono al módulo de cámara.



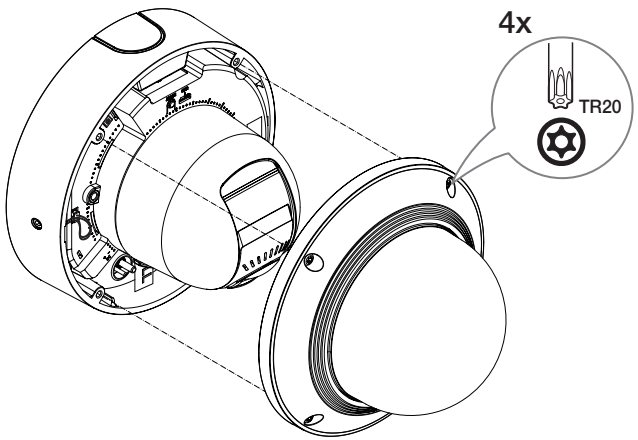
4. Para ajustar la lente en la dirección deseada, consulte la sección "**Ajuste de la dirección de la cámara**". (página 33)

Montar la cubierta del domo

[Instalación directa en pared / techo]

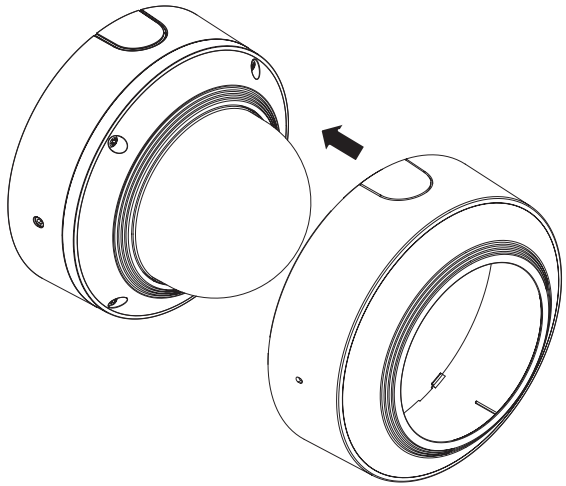
1. Monte la cubierta del domo.

- Asegúrese de ajustar firmemente los tornillos de sujeción para que no se produzca un problema debido a daños por agua.

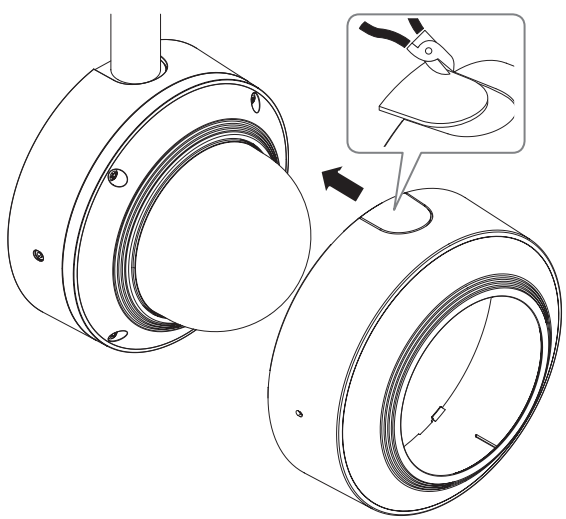


Aplicar / Quitar la cubierta de la superficie

1. Coloque la cubierta de la superficie, de manera que está alineada con la cubierta de la tubería.

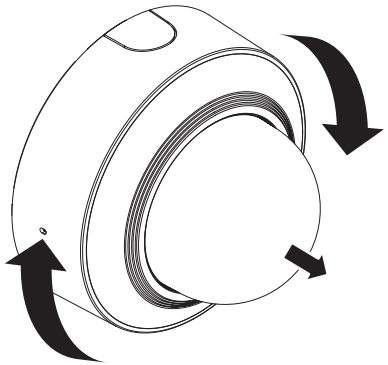


2. Para una cámara conectada a una tubería, antes de colocarla, primero, retire la cubierta de la tubería de la cubierta de la superficie.

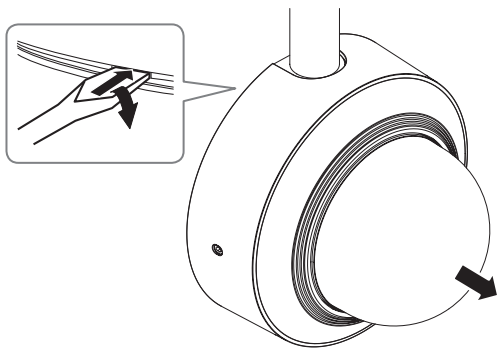


3. Para retirar la cubierta de la superficie, tire de ella mientras la gira en sentido horario, como se muestra en la figura.

- La instalación y extracción repetitiva de la cubierta de la superficie puede deformarla.
- La instalación y extracción de la cubierta de la superficie con una fuerza excesiva puede causar rayones en la superficie del producto.



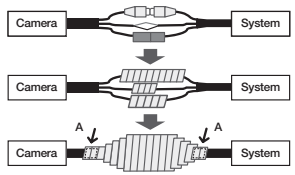
- Cuando una tubería estuviera conectada, suéltela mediante el uso de la herramienta apropiada.



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.

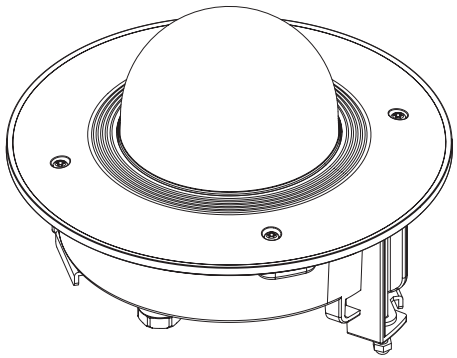
1. Conecte los cables de alimentación, E/S y de la red LAN.
2. Envuelva el aislante negro del cable (Área A) y la parte de conexión del cable con cinta (de goma de butilo) impermeable, de modo que más de la mitad de esta cinta quede superpuesta.



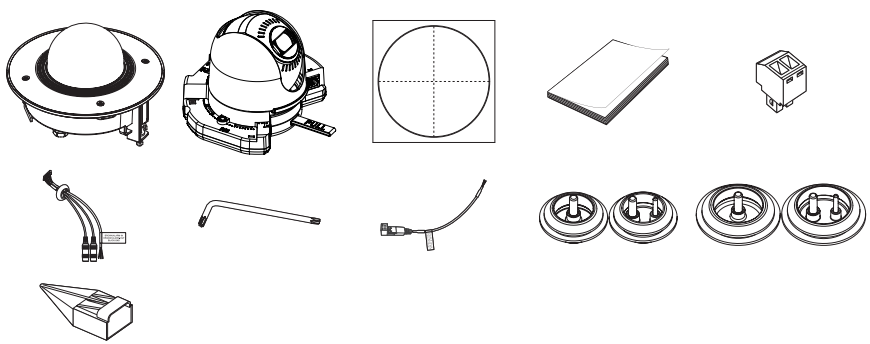
- Si el aislante del cable no se impermeabiliza correctamente, puede haber filtraciones. Asegúrese que el cable queda protegido con una densa capa de cinta.
- La cinta de butilo resistente al agua está fabricada con goma de butilo, que puede estirarse el doble de su longitud normal.

COMPONENTES

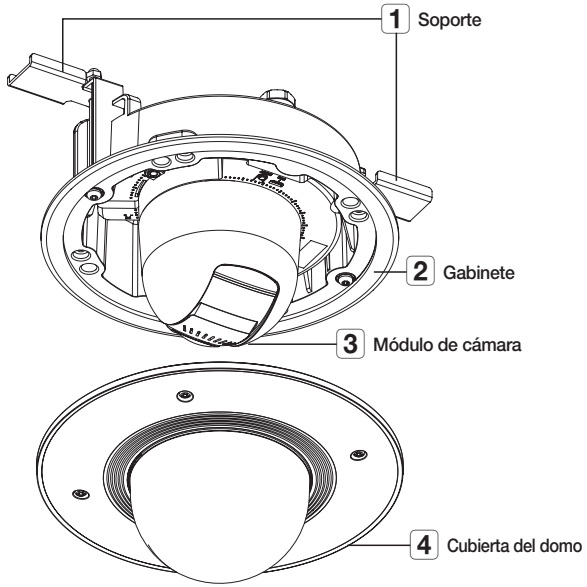
Debido a los diferentes países de venta, los accesorios no son los mismos.

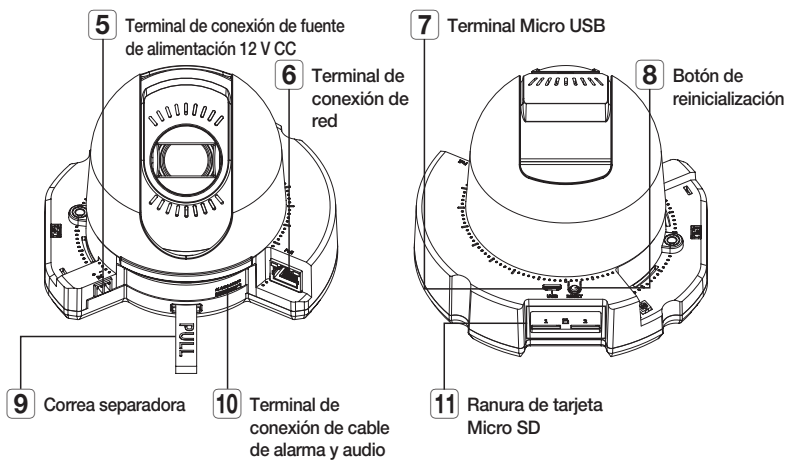


<XND-6081FZ/XND-8081FZ>



VISTA





INSTALACIÓN

- La cámara es resistente al agua y cumple la norma IP52. 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.

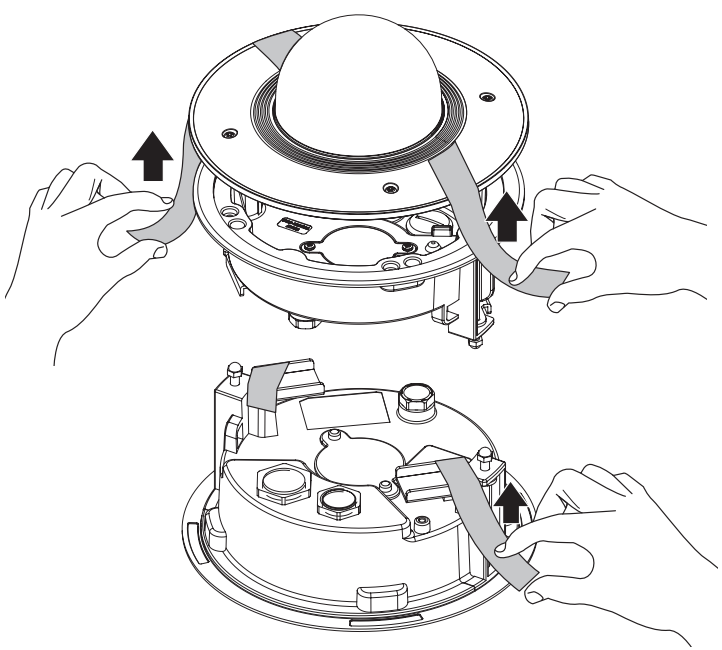
Precauciones antes de la instalación

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

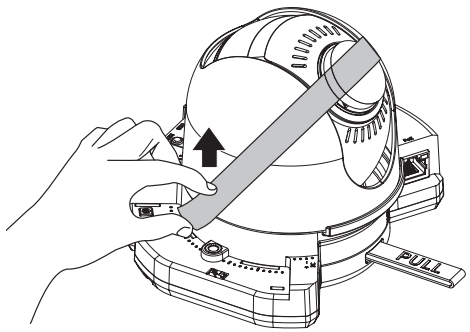
- Seleccione un lugar para la instalación que al menos soporte 5 veces el peso de la cámara.
- Cables doblados o pelados pueden causar daños en el producto o producir un incendio.
- Por razones de seguridad, mantenga alejado a todo el mundo del lugar de la instalación. Y guarde aparte las pertenencias personales, como precaución.
- Si el producto se instala con excesiva fuerza, la cámara debido podría sufrir daños debido a un mal funcionamiento. Forzar el ensamblaje utilizando herramientas no compatibles puede dañar el producto.

Eliminación

1. Despegue la cinta que fija la funda de cámara.

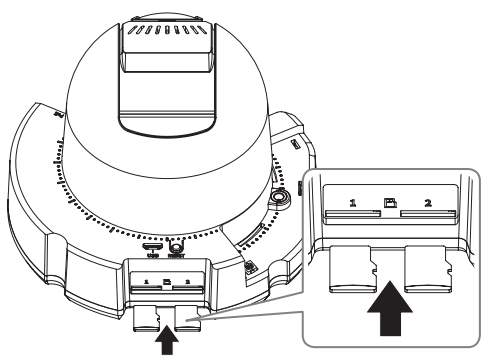


2. Despegue la cinta que se encuentra en el módulo de la cámara.



Inserción de una tarjeta de memoria Micro SD

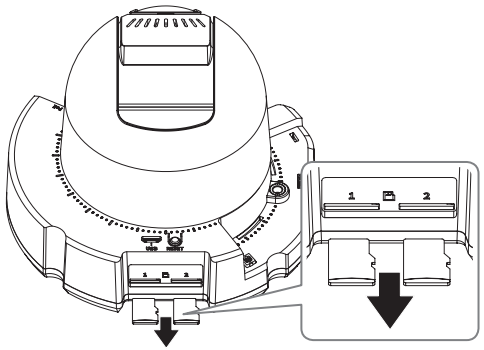
Deslice la tarjeta Micro SD en la ranura Micro SD del módulo de la cámara en la dirección de la flecha.



- Antes de instalar la cámara, debe insertar la tarjeta de memoria Micro SD mientras la fuente de alimentación y el cuerpo están separados.
- No lo inserte a la fuerza en la dirección inversa. Podría dañar la tarjeta de memoria Micro SD y el producto.
- Cuando llueve o la humedad es alta, no se recomienda que inserte o expulse una tarjeta Micro SD.
- Durante la instalación o extracción de la tarjeta de memoria Micro SD, asegúrese de colocar el cuerpo del producto sobre una superficie plana antes de trabajar en él para evitar accidentes por pérdida o caída de piezas.

Extracción de una tarjeta de memoria Micro SD

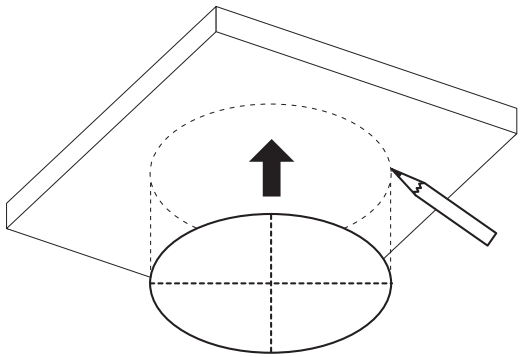
Presione suavemente hacia abajo en el extremo expuesto de la tarjeta de memoria como se muestra en el esquema para sacarla de la ranura.

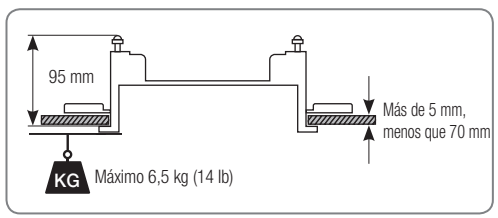


- Tenga en cuenta que si empuja firmemente y suelta la tarjeta de memoria Micro SD al expulsarla, puede salirse.
- Antes de retirar la tarjeta de memoria Micro SD, en <**Almacenamiento**>, ajuste el dispositivo en <**Des**> y pulse el botón [**Aplicar**] y apague la cámara.
- Si apaga la cámara o retira la tarjeta de memoria SD que contiene datos, puede perderlos o dañarlos.

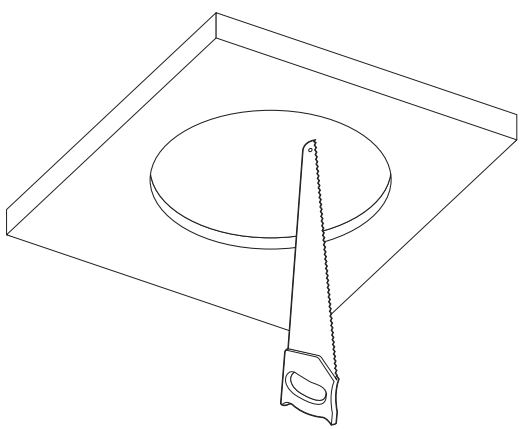
Instalación (Gabinete)

1. Coloque la plantilla de instalación en el techo y marque su ubicación con un lápiz.





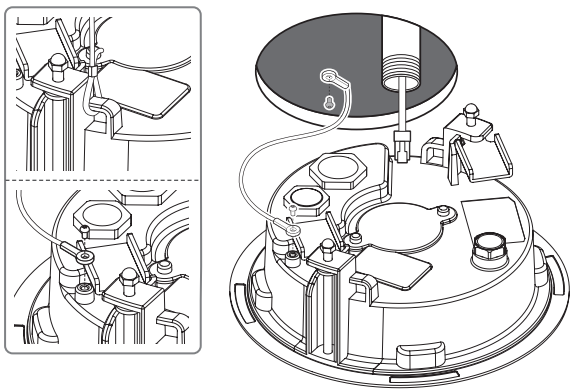
2. Monte la plantilla de instalación y taladre los orificios.



3. Conecte el cable de seguridad.

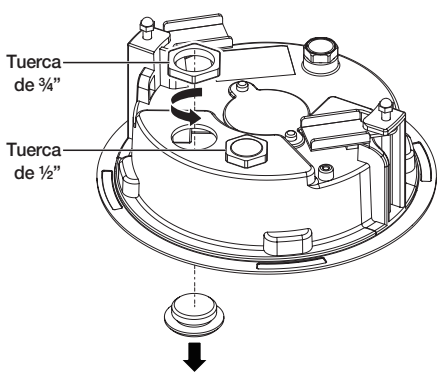
- No se proporciona un cable de seguridad.

Por ejemplo

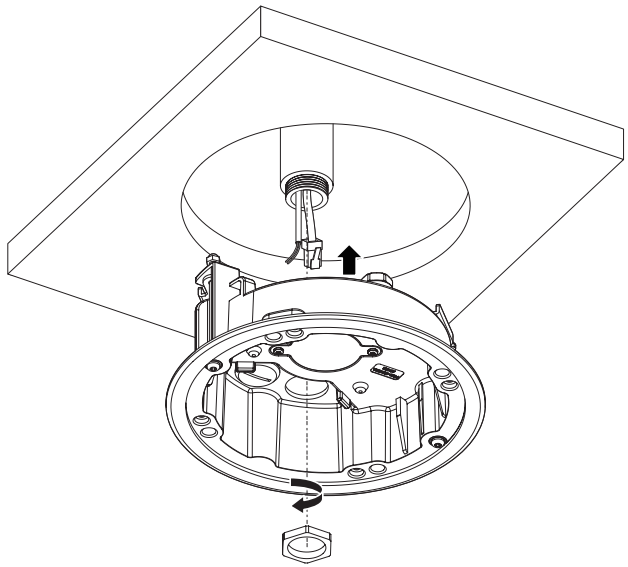


[Usar la tubería]

4-1. Instale la tubería en un orificio adecuado.



4-2. Saque los cables necesarios, como los cables LAN / de alimentación / de audio y alarma a través de la tubería.



Instalación (funda de cámara)

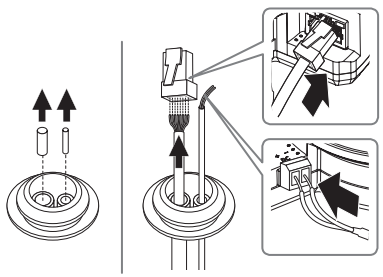
- Use un cojinete de cable conforme con el cable LAN que se conectará.
  - Componentes: use un cable con el diámetro de Ø5 a 8,5

[Instalar Cables LAN / de alimentación]

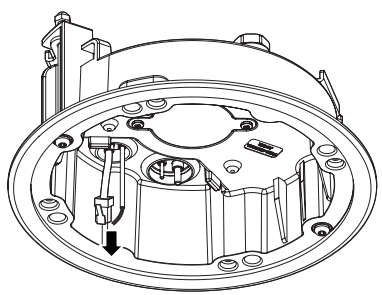
1-1. Quite las partes extruidas del cojinete que se usará.

1-2. Pase el cable LAN a través del orificio grande del cojinete y conéctelo al conector LAN.

1-3. (Cuando se usa la energía) Pase el cable de alimentación a través del orificio pequeño del casquillo y conéctelo al bloque terminal provisto.



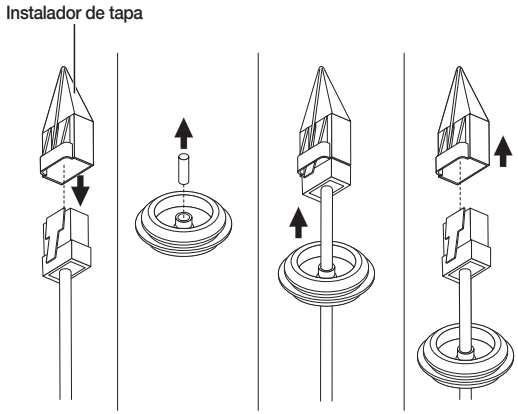
1-4. Monte el cojinete en el gabinete.



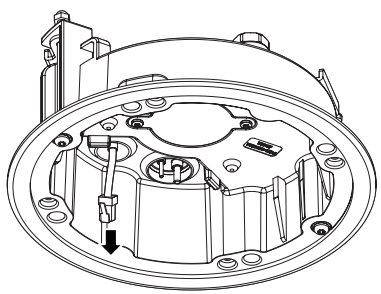
[Instalar el cable LAN]

2-1. Quite la parte extruida del cojinete de un orificio provisto.

2-2. Utilice el instalador de tapa para pasar el cable RJ45 a través de él.

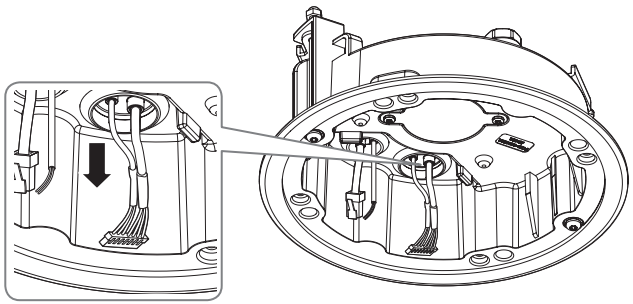


2-3. Monte el cojinete en el gabinete.



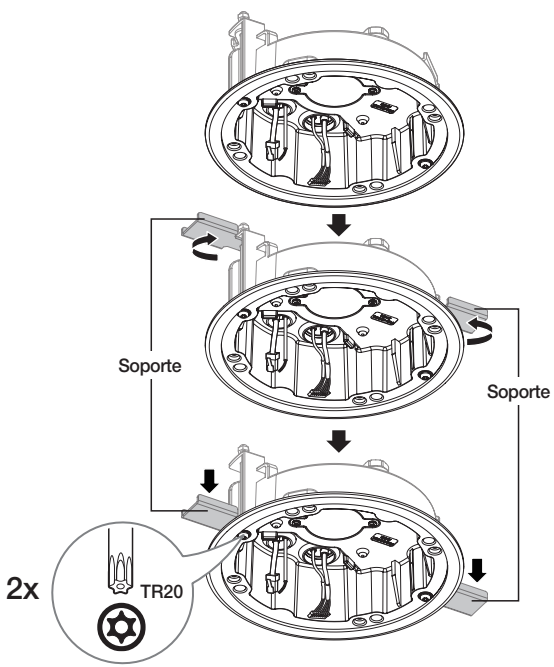
[Instalar cables de audio y alarma]

3-1. Monte el cojinete de los cables de audio y alarma provistos en la funda de cámara.



4. Gire los tornillos en el gabinete para fijarlo al techo.

- El soporte fijará el gabinete al techo.
- Asegúrese de que el gabinete está fijo en el techo de manera firme.

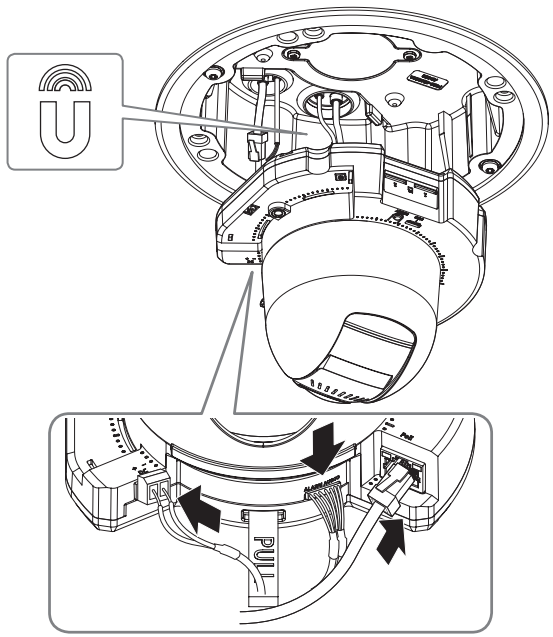


Instalar el módulo de cámara

1. Conecte los cables de LAN / alimentación / audio y alarma al terminal del módulo de cámara.

2. Fije el módulo de cámara a la funda.

- Un imán está incrustado en la parte inferior del módulo.
- Tenga cuidado de que no haya objetos extraños entre las superficies que se unirán.

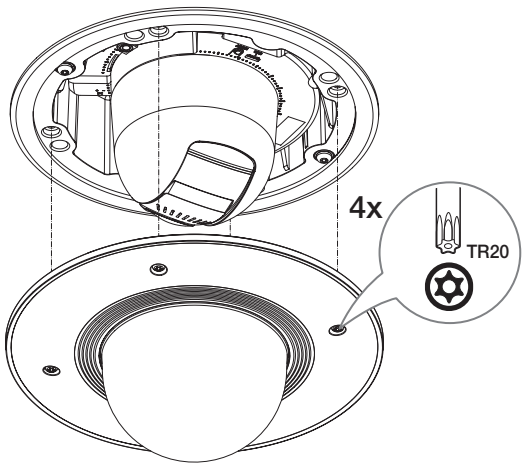


3. Para ajustar la lente en la dirección deseada, consulte la sección "**Ajuste de la dirección de la cámara**". (página 33)

Montar la cubierta del domo

1. Monte la cubierta del domo.

- Asegúrese de ajustar firmemente los tornillos de sujeción para que no se produzca un problema debido a daños por agua.

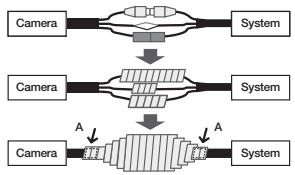


Outdoor installation

When you install it outside of the building, please waterproof it with waterproof butyl rubber tape (can be purchased in stores) so that water does not leak from the gap of the cable connected to the outside.

1. Connect the power, I/O, and LAN cables.

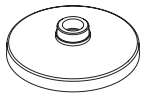
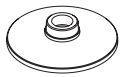
2. Wrap the black cable jacket (Area A) and the cable connection area with waterproof (butyl rubber) tape so that more than half of the butyl rubber tape is overlapped.

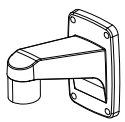
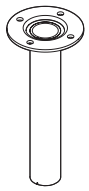


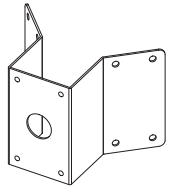
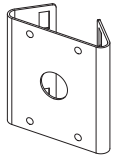
- If the cable jacket is not waterproofed properly, then it can directly cause leakage. Make sure to protect the cable with a dense layer of taping.
- Waterproof butyl tape is made of butyl rubber that can be stretched to twice its normal length.

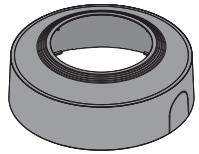
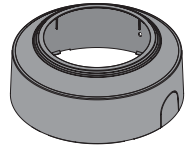
ACCESORIOS OPCIONALES PARA LA INSTALACIÓN

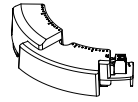
Es posible adquirir los accesorios opcionales adecuados.

	Montaje colgante	Montaje colgante
Nombre del modelo	SBP-187HMW	SBP-167HMW
		
Modelo compatible	XNV-6081Z/8081Z	XND-6081VZ/8081VZ

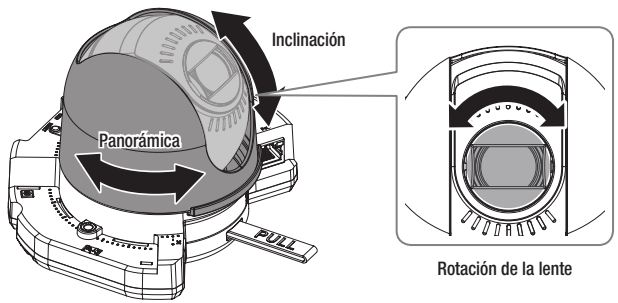
	Montaje de pared	Montaje de techo
Nombre del modelo	SBP-300WMW1	SBP-300CMW
		
Modelo compatible	SBP-180HMW/160HMW	SBP-180HMW/160HMW

	Montaje de esquina	Montaje de columna
Nombre del modelo	SBP-300KMW	SBP-300PMW
		
Modelo compatible	SBP-300WMW1	SBP-300WMW1

	Cubierta de la superficie	Cubierta de la superficie
Nombre del modelo	SBC-180B (Negro)	SBC-160B (Negro)
		
Modelo compatible	XNV-6081Z/8081Z	XND-6081VZ/8081VZ

	Módulo de energía 24 V CA
Nombre del modelo	SPC-100AC
	
Modelo compatible	XNV-6081Z/8081Z

Ajuste de la dirección de la cámara



▪ Ajuste de la dirección de vigilancia

Puede ajustar la dirección de la cámara sólo cuando la cámara esté fija al techo.
En este momento, la rotación del cuerpo principal de la cámara en la dirección izquierda y derecha se llama PANORÁMICA, y el ajuste del ángulo de la cámara se llama INCLINACIÓN.

- El rango efectivo de la panorámica es de ±175˚ grados.
- La suma de los ángulos de rotación es ±175˚ como máximo.
- El rango efectivo de inclinación es de 85˚ grados.

▪ En un ángulo de inclinación de 75˚ o más, puede producirse un bloqueo de la vista o una imagen borrosa en alguna parte de la pantalla según la ampliación del zoom.

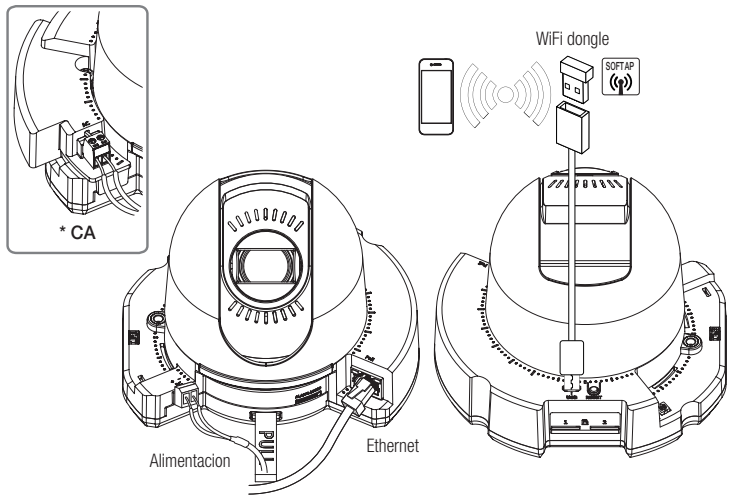
▪ No gire a la fuerza ni presione la lente de enfoque / zoom. De lo contrario, el enfoque podría no funcionar correctamente debido a una falla del motor.

▪ Métodos de ajuste

1. Ajuste el ángulo de paneo teniendo en cuenta la dirección que se quiere monitorear.
2. Ajuste el ángulo horizontal para que el video no se voltee cuando se rote.
3. Ajuste el ángulo de inclinación hacia la dirección que se quiere monitorear.

▪ No lo ajuste directamente con la mano.
Acceda al web viewer para ajustar la dirección a monitorear.

CONEXIÓN CON OTROS DISPOSITIVOS



▪ Se suministra el terminal de salida Micro USB del producto para facilitar la instalación, aunque no se recomienda utilzarlo con fines de gesión.

Conexión Ethernet

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

Conexión de WiFi

Configuración de la cámara

1. Conecte el adaptador OTG (5 pines) y el dongle WiFi al terminal micro USB.

Configuración del smartphone

1. Instale la aplicación de instalación de Wisenet.
2. Seleccione el SSID de la cámara después de encender el WiFi.
3. Ejecute la aplicación de instalación de Wisenet.
4. Cuando inicie sesión en la cámara, el vídeo se conectará.
   - El vídeo se reproducirá sin estar conectado durante la conexión inicial.
5. Puede ajuatar el ángulo de visión mientras ve el vídeo a través del smartphone.

Fabricante de dongle recomendado

Fabricante	Modelo
NETIS	WF2123 n300
EDIMAX	EW-7811Un
IP Time	N100mini
TP-LINK	TL-WN823N V1
ASUS	USB-N13
NETGEAR	WNA3100M

Alimentación eléctrica

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

- Si las fuentes de alimentación para PoE y 12 V CC se encienden simultáneamente, el dispositivo recibirá alimentación de ambos.
  - 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.
- Tenga cuidado de no invertir la polaridad al conectar el cable de alimentación.
- La energía CA está disponible después de la compra de un módulo de CA (SPC-100AC).
  - Modelos: XNV-6081Z/XNV-8081Z
  - Si las fuentes de alimentación para PoE y 24 V CA se encienden simultáneamente, se usará la fuente de alimentación externa (24 V CA).
  - La 24 V CA se puede conectar como no polar.
- Si desea conectar un dispositivo externo, debe apagar el dispositivo externo antes de continuar.
- Conecte primero el conjunto y la línea de alimentación del adaptador y, a continuación, conecte el cable de alimentación a la toma de la pared.

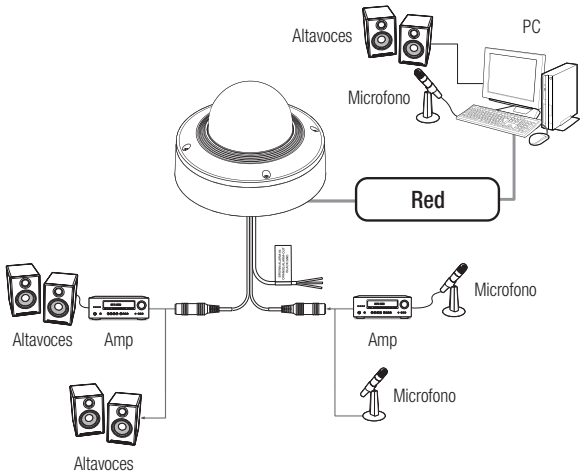
Características del cable de alimentación para cada modelo

Modelo	Potencia de entrada	Tipo de cable (AWG)	Longitud del cable (Max.)
XND-6081FZ/VZ XND-8081FZ/VZ	DC 12V	#18	27m
		#20	17m
XNV-6081Z/ XNV-8081Z	DC 12V	#18	24m
		#20	15m
	AC 24V	#18	40m
		#20	28m

Características del cable de red

Elemento	Contenido	Observaciones
Conector	RJ45 (10/100BASE-T)	
Ethernet	10/100BASE-T	
Cable	UTP de categoría 5e	
Distancia máx.	100M	
Soporte PoE	IEEE 802.3af	

Conectar la Entrada/Salida de Audio



1. Conecte el puerto AUDIO IN de la cámara con el micrófono o al puerto LINE OUT del amplificador al que está conectado el micrófono.

   ▪ Puede usar el micrófono interno de la cámara sin una conexión del micrófono externo (solo aplica a los modelos XND-6081VZ/XND-8081VZ).

2. Conecte el puerto AUDIO OUT de la cámara con el micrófono o al puerto LINE IN del amplificador al que está conectado el altavoz.
3. Compruebe las especificaciones de entrada de audio.

- **Códec de Audio**
  - Entrada de audio : G.711 PCM (Velocidad en bits: 64 kbps / Frecuencia de muestreo: 8 kHz), G.726 ADPCM (Velocidad en bits: 16 Kbps, 24 Kbps, 32 Kbps, 40 Kbps / Frecuencia de muestreo: 8 kHz), AAC (Bit Rate: 48Kbps / Frecuencia de muestreo: 16kHz)
  - Salida de audio : G.711 PCM (Velocidad en bits: 64 kbps / Frecuencia de muestreo: 8 kHz)
- **Audio Full dúplex**
- **Entrada de Audio (XND-6081VZ/XND-8081VZ)** : Seleccionable (micrófono/entrada de línea/micrófono integrado), tensión admitida: 2,5 V CC (4 mA), impedancia de entrada: 2K Ohm
- **Entrada de Audio (XND-6081FZ/XND-8081FZ/XNV-6081Z/XNV-8081Z)** : Seleccionable (micrófono/entrada de línea), tensión admitida: 2.5 V CC (4 mA), impedancia de entrada: 2K Ohm
- **Salida de audio** : Salida de línea (conector mono de 3,5 mm), salida máxima: 1 Vms
- **Impedancia de salida de línea :** 600Ω

▪ En el caso de que acceda al web viewer y seleccione un micrófono externo como fuente de entrada de audio en <**Video y Audio**> - <**Configuración de audio**>, se recomiendan las siguientes especificaciones:

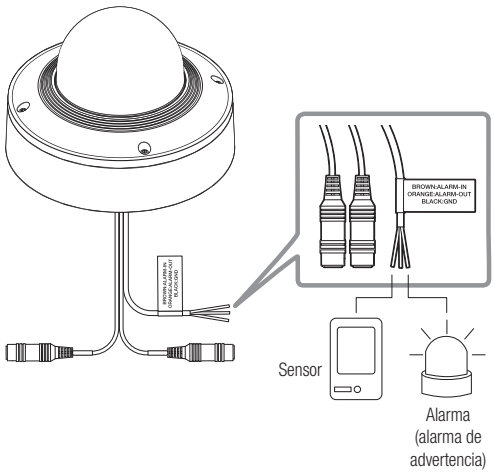
- Gama de frecuencia: 40-16 000 Hz
- Impedancia: 1500 Ω
- Sensibilidad: -40±3 dB (7,1-14,1 mV)

▪ En cualquiera de los siguientes casos, el rendimiento de la clasificación de sonido puede estar degradado o funcionar mal:

- Si se escuchan muchos disparos continuamente en un corto intervalo (por ejemplo, el sonido de una ametralladora) en lugar de un sonido de disparo único
- Si el ruido es demasiado alto para que se distinga el ruido y el sonido destino
- Si se registran dos o más sonidos diferentes simultáneamente.
- Si la clasificación de sonido se aplica mientras se usa la función de eliminación de ruido en un lugar silencioso
- Si la fuente del sonido de aplausos o gritos está cerca de la cámara (dentro de 1 metro)
- Si un sonido que no pertenece a ninguna de las categorías de clasificación de sonido (sonido de avión, sonido de sirena, etc.) se oye en muy fuerte de repente.
- Si el micrófono externo no cumple con las especificaciones recomendadas.

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.



- ALARM-IN : Se utiliza para conectar el sensor de entrada de alarma.
- 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 superan las cifras de voltaje y corriente. (página 36)

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

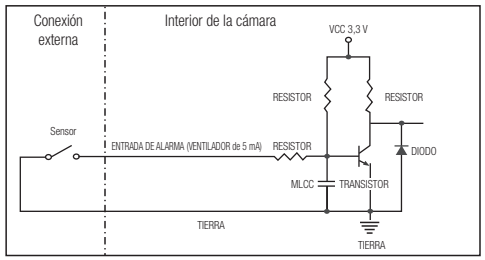
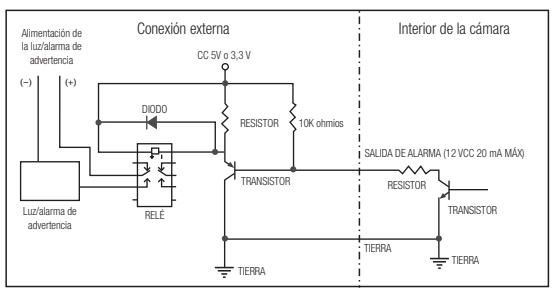


Diagrama de cableado de salida de alarma

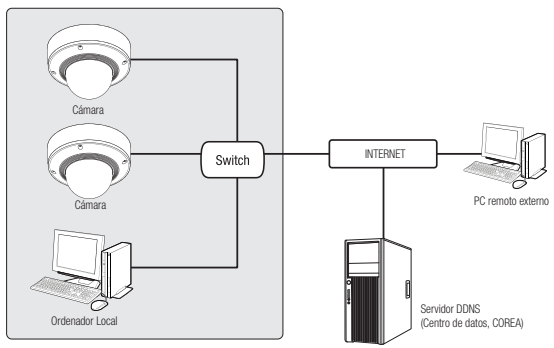


Puede fijar la configuración de red de acuerdo con sus configuraciones de red.

CONECTAR LA CÁMARA DIRECTAMENTE A LA RED DE ÁREA LOCAL

Conectar con la cámara desde un ordenador local en la LAN

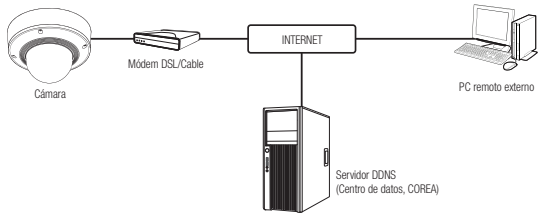
1. Abrir un navegador de Internet en su ordenador local.
2. Introduzca la dirección IP de la cámara en la barra de direcciones del navegador.



<Red local>

- 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.
- 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 38)

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.

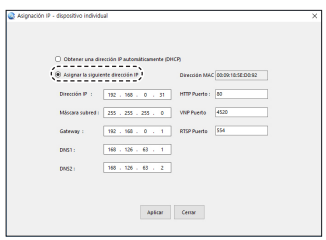
CÓMO CONFIGURAR LA DIRECCIÓN IP

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.



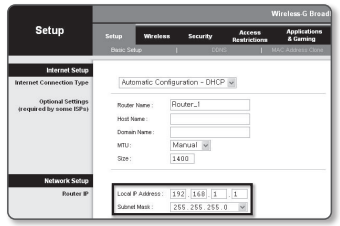
Si no se utiliza un Enrutador de banda ancha

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 40)

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

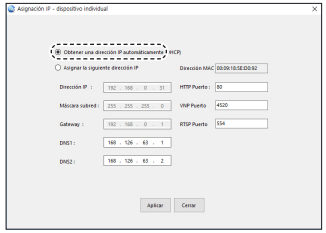
5. Haga clic en el botón [**Aplicar**].
6. Si aparece el mensaje de que la acción se ha realizado correctamente, haga clic en [**Aceptar**].

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

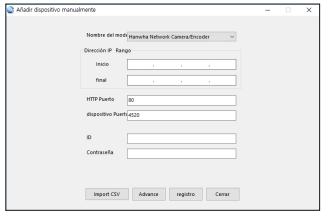
1. Haga clic en la cámara de la lista para la que quiera cambiar la configuración de la IP.
2. Haga clic en <**IP Assign (Asignación de la IP)**> en la página principal del Device Manager.
3. Seleccione <**Obtener una dirección IP automáticamente (DHCP)**>.
4. Haga clic en botón [**Aplicar**].
5. Si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



CÓMO REGISTRAR LA CÁMARA MANUALMENTE

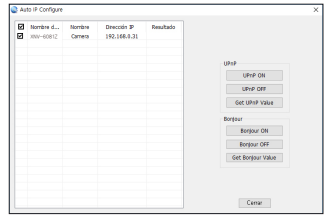
Si la cámara no puede encontrarse usando la función de buscar, puede registrarla remotamente insertando manualmente la información de la IP si la cámara está conectada a la red externa.

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 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**].

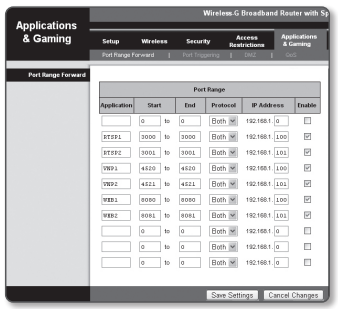


CONFIGURACIÓN DE REENVÍO DEL RANGO DE PUERTOS (ASIGNACIÓN DE PUERTOS)

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.

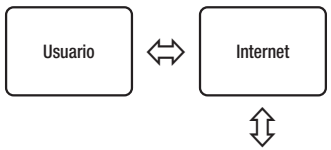


- El ajuste del reenvío del puerto es un ejemplo de configuración del router de la IP de CISCO.
- Es posible que los ajustes difieran dependiendo del modelo de enrutador de banda ancha conectado. Para obtener información adicional, consulte el manual de usuario del enrutador aplicable.

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 :



Enrutador de banda ancha			
Inicio	Fin	Protocolo	Dirección IP
3000	3000	TCP/UDP	192.168.1.100
3001	3001	TCP/UDP	192.168.1.101
4520	4520	TCP/UDP	192.168.1.100
4521	4521	TCP/UDP	192.168.1.101
8080	8080	TCP/UDP	192.168.1.100
8081	8081	TCP/UDP	192.168.1.101

Cámara1 (192.168.1.100)	
puerto HTTP	8080
Puerto de dispositivo	4520
puerto RSTP	3000

Cámara2 (192.168.1.101)	
puerto HTTP	8081
Puerto de dispositivo	4521
puerto RSTP	3001

- 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

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

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.

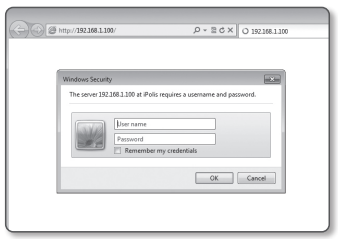
1. Antes de poder acceder a una cámara de una red de enrutador de banda ancha, debe haber definido el reenvío del rango de puertos para el enrutador de banda ancha.
2. Desde el PC remoto, inicie el explorador de Internet e introduzca la dirección URL de DDNS de la cámara, o la dirección IP del enrutador 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 :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.

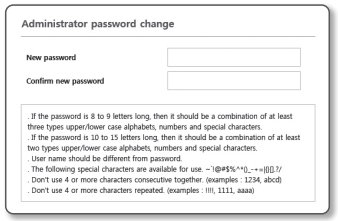
Para comprobar la dirección de DDNS

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.

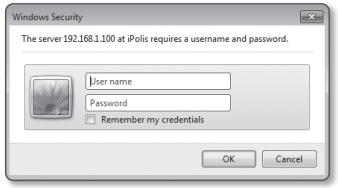


- Para una nueva contraseña que tenga entre 8 y 9 dígitos, debe utilizar por lo menos 3 mayúsculas/ minúsculas, 3 números y 3 caracteres especiales. Para una contraseña que tenga entre 10 y 15 dígitos, debe utilizar por lo menos 2 de los tipos mencionados.
  - Caracteres especiales que se permiten. : ~`!@#$%^*()_-+=|{}[].?/
- 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 memorícela.

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.

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.

SOLUCIÓN DE PROBLEMAS

PROBLEMA	SOLUCIÓN
Cuando un usuario de Windows 10 accede al visor web a través de Chrome o Firefox, el volumen de sonido del micrófono cambia periódicamente.	• 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.
¿Cuáles son las especificaciones para los archivos WAVE necesarios para reproducir audio en el momento de un evento?	• Se recomienda la frecuencia de muestreo de 48.000 KHz o menos. • Para los bits por muestra (bps), se recomienda hasta 8/16 bit. • Solo es compatible el formato de codificación PCM.
No se visualiza ningún vídeo al acceder al visor web sin plug-in en Safari a través de HTTPS.	• 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". • 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.
No se puede acceder a la cámara desde un navegador web.	• Compruebe para asegurarse de que las configuraciones de Red de la cámara son las apropiadas. • Compruebe para asegurarse de que todos los cables de red se han conectado bien. • Si está conectado mediante DHCP, compruebe que la cámara puede admitir direcciones IP dinámicas sin problemas. • Si la cámara está conectada al Enrutador de banda ancha, compruebe que el reenvío de puertos está configurado adecuadamente.
El Visualizador se desconecta durante el control.	• Los Visualizadores conectados se desconectan debido a cualquier cambio en las configuraciones de cámara o de red. • Compruebe todas las conexiones de red. • Si la cámara está conectada por una red PPPoE, es posible que el Visualizador se desconecte con condiciones de red pobres.
La cámara conectada a la red no se detecta en el programa del Device Manager.	• Apague las configuraciones de cortafuegos en su ordenador, y luego vuelva a buscar la cámara.
Se superponen imágenes.	• Compruebe si dos o más cámeras 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.
No aparece imagen.	• 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.

PROBLEMA	SOLUCIÓN
La voz no se graba aunque se configuren los ajustes de entrada de audio.	• Debe activar la casilla <Entrada de audio> en <Básico> - <Perfil de video>.
<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.	• Verifique los ajustes en la secuencia siguiente: A. Compruebe los ajustes de <Fecha y hora>. B. <Detección de movimiento> debe definirse en <Activar>. C. Compruebe si la opción <E-mail> del menú <Config. de evento> está marcada para ser utilizada.
No se encuentra ninguna señal en el puerto de salida de alarma cuando se genera un evento de análisis de vídeo inteligente.	• Compruebe los ajustes del puerto de salida de alarma.
No se puede grabar en la tarjeta de memoria Micro SD.	• Compruebe si la tarjeta de memoria está defectuosa.
La tarjeta de memoria Micro SD está insertada pero no funciona correctamente.	• 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 • Formatee de nuevo la tarjeta de memoria en el menú <Config.> → <Evento> → <Almacenamiento>.
No se puede grabar en la NAS.	• Compruebe que la información registrada en la NAS es correcta.
Se está indicando que la configuración de la NAS ha fallado.	• Compruebe que la dirección IP de NAS sea válida. • Compruebe que el ID / contraseña de NAS sea válido • Compruebe que puede acceder a la carpeta designada como la carpeta básica utilizando el ID de la NAS. • Asegúrese de que los elementos SMB / CIFS de NAS estén sin marcar. • 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. • Verifique si ha intentado acceder como otro usuario sin formatear la carpeta básica almacenada o usada. • Compruebe que utilizó las unidades NAS recomendadas.

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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	
mtd-1.5.2	GPL 2.0	ftp://ftp.infradead.org/pub/mtd-utils
mii-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	
zeroconf	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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lighttpd is a secure, fast, compliant, and very flexible webserver that has been optimized for high-performance environments. It has a very low memory footprint compared to other webservers and takes care of cpuload. Its advanced feature-set (FastCGI, CGI, Auth, Output-Compression, URL-Rewriting and many more) make lighttpd the perfect webserver-software for every server that suffers load problems. Simple Network Management Protocol (SNMP) is an Internetstandard protocol for managing devices on IP networks. It is used mostly in network management systems to monitor the devices attached to the network for conditions that need administrative attention. Net-SNMP is a suite of applications used to implement SNMP v1, SNMP v2c and SNMP v3 using both IPv4 and IPv6. For more additional information, send email to help.cctv@hanwha.com.

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- Version 1.1

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It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

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T-License [License Agreement for Source Code of T-Kernel]

established by T-Engine Forum
on January 23, 2004
revised on June 17, 2004
revised on December 21, 2006
revised on March 24, 2009

Article 1. Scope of License Agreement

1. This License Agreement sets forth copyrights and the terms and conditions of use applicable to the source code of T-Kernel distributed by T-Engine Forum and any derivative work created therefrom.

Article 2. Definition

1. "T-Kernel" means a real-time operating system controlled and distributed by T-Engine Forum on behalf of the copyright holder thereof.

2. "Source Code" means a source program, including related comments and documentations, for the T-Kernel and the Ported Source Code defined in Article 2.8 which is registered with T-Engine Forum.

3. "Hardware-dependent Part" means the part of the Source Code which depends on hardware and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.

4. "Compiler-dependent Part" means the part of the Source Code which depends on compiler and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.

5. "Header File" means the part of the Source Code which contains definitions necessary to develop application programs.

6. "T-Engine Hardware" means the hardware which is manufactured in accordance with the T-Engine Hardware specifications or the µT-Engine Hardware specifications issued by T-Engine Forum, and registered with T-Engine Forum.

7. "Similar Hardware to T-Engine Hardware" means any hardware (including software which emulates hardware) other than that defined in Article 2.6 above, on which the T-Kernel can be operated.

8. "Ported Source Code" means a source program produced from the Source Code by modifying only its Hardwaredependent Part and/or Compiler-dependent Part to enable it to be operated on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware. The Ported Source Code which is registered with T-Engine Forum shall be included in the Source Code.

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.

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2. to transmit a work to the general public through the Internet communication, broadcasting, and the like automatically in response to a request from the public; and

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

Article 3. Copyright

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 copy and/or modify the Source Code provided by T-Engine Forum hereunder for its own research, development and the like.

2. to run the Source Code provided by T-Engine Forum hereunder for its own research, development and the like.

3. to run the Source Code modified in accordance with the provision of Article 4.3 (1) above for its own research, development and the like.

4. to distribute the Binary Code created from the Source Code provided by T-Engine Forum hereunder or from the Source Code modified in accordance with the provision of Article 4.3 (1) above.

4. In accordance with the license granted under Article 4.1 above, the System Developer may perform the following acts:

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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2. In case of breach of this License Agreement by a member of T-Engine Forum, T-Engine Forum may take appropriate measures against the member; for example, the member is disqualified from membership, depending on what kind of breach has been committed by it.

3. Any legal dispute which may arise in relation to any breach of this License Agreement shall be subject to the exclusive jurisdiction of the Tokyo District Court.

Article 11. Governing Law and Language

1. This License Agreement shall be governed by and interpreted under the laws of Japan.

2. This License Agreement is executed in both Japanese text and English text provided that the Japanese text shall govern the interpretation and performance of this License Agreement.

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bzip2/libbzip2 version 1.0.5 of 10 December 2007

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Iperf performance test

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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 (deflate format) and rfc1952.txt (gzip format).



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