Hanwha Vision

# AĞ KAMERASI

## Kullanım Kılavuzu

XNV-6081RE/XNV-8081RE
XND-6081REV/XND-8081REV

CE

# Ağ Kamerası
Kullanım Kılavuzu

**Telif hakkı**

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**Ticari marka**

Burada belirtilen her bir ticari marka tescillidir. Bu kılavuzda bahsi geçen ürünün adı ve ticari markalar ilgili şirketin tescilli ticari markalarıdır.

**Kısıtlama**

Bu dokümanın telif hakkı saklıdır. Resmi yetki olmadan, hiçbir koşul altında, bu doküman çoğaltılamaz, dağıtılamaz, kısmen veya tamamen değiştirilemez.

**Sorumluluk Reddi**

Hanwha Vision bu belgedeki içeriklerin bütünlüğünü ve doğruluğunu sağlamak için mümkün olan tüm çabayı göstermekle birlikte resmi bir garanti verilmemektedir. Bu belgenin kullanımı ve bundan kaynaklanan tüm sonuçların sorumluluğu tamamen kullanıcıya aittir.
Hanwha Vision bu belgenin içeriklerini önceden bildirim yapmadan değiştirme hakkını saklı tutar.

❖ **Tasarım ve spesifikasyonlar önceden bildirim yapılmadan değiştirilebilir.**

❖ **İlk yönetici kimliği "admin"dir ve ilk kez oturum açıldığında şifrenin ayarlanması gerekir.**
**Lütfen kişisel bilgilerinizi güvenli şekilde korumak ve bilgilerin çalınmasını önlemek için her üç ayda bir şifrenizi değiştirin.**
**Lütfen güvenlik ve şifrenin yanlış yönetilmesinden kaynaklanan diğer sorunların kullanıcının sorumluluğunda olduğunu unutmayın.**

## ÖNEMLİ GÜVENLİK YÖNERGELERİ

1. Bu yönergeleri okuyun.
2. Bu yönergeleri saklayın.
3. Uyarıları dikkate alın.
4. Yönergeyi takip edin.
5. Bu cihazı suyun yakınında kullanmayın.
6. Ürün yüzeyinde kirlenen alanı, yumuşak kuru veya nemli bir bezle silin.
   (Ürünün şeklini bozabilecek veya hasar verebilecek, alkol, solventler veya surfaktanlar içeren deterjan veya kozmetik ürünler kullanmayın)
7. Havalandırma deliklerini kapatmayın. Üreticinin talimatlarına göre kurun.
8. Radyatör, ısı aygıtları gibi ısı kaynaklarının veya (amplifikatörler dahil) ısı üreten diğer cihazların yaynına koymayın.
9. Güvenlik amaçlı polarize veya topraklamalı tip fişi bozmayın.
   Polarize fiş, biri diğerinden daha geniş iki ağza sahiptir. Topraklama tipi fiş iki ağza ve üç topraklama dişine sahiptir. Geniş ağız veya üçüncü diş güvenliğiniz için sağlanmıştır.
   Verilen fiş prizinize uymuyorsa tam uyan bir prizle değiştirmek için elektrikçiyle görüşün.
10. Özellikle fişlerde, priz yuvalarında ve üründen çıkan uçlarda sıkışan veya yürüyüş yolu üzerinde olan güç kablosunu koruyun.
11. Yalnızca üretici tarafından belirtilen ekleri/ aksesuarları kullanın.
12. Yalnızca üretici tarafından belirtilen veya cihazla birlikte satılan tekerlekli taşıma sehpası, kamera ayağı, üç ayaklı sehpa, dirsek veya masa kullanın. Tekerlekli taşıma sehpası kullanıldığında, devrilmeden kaynaklanabilecek yaralanmalardan kaçınmak için sehpa/cihaz kombinasyonunu dikkatli taşıyın.



13. Fırtına sırasında veya uzun süre kullanılmadan bırakıldığında bu cihazı prizden çıkartın.
14. Bütün servis işlemlerini yetkili servis personeline bildirin. Güç kaynağı kordonu veya fişin zarar görmesi, sıvının dökülmesi veya cihazın içine nesne düşmesi, cihazın yağmura veya neme maruz kalması, normal çalışmaması veya düşmesi gibi herhangi bir şekilde cihaz hasar gördüğünde servis gereklidir.
15. Bu ürünün “Sınıf 2” veya “LPS” olarak işaretlenmiş bir Listelenmiş Güç Kaynağı Ünitesi tarafından beslenmesi ve PoE(53V), 0,48A olarak derecelendirilmesi amaçlanmıştır. (XNV-6081RE/XND-6081REV)
16. Bu ürünün “Sınıf 2” veya “LPS” olarak işaretlenmiş bir Listelenmiş Güç Kaynağı Ünitesi tarafından beslenmesi ve PoE(53V), 0,48A olarak derecelendirilmesi amaçlanmıştır. (XNV-8081RE/XND-8081REV)
17. Bu ürünün yalıtım gücüyle beslenmesi amaçlanmıştır.
18. Ürünü kurarken aşırı güç kullanırsanız, kamera hasar görebilir ve arıza yapabilir.
    Uyumsuz aletler kullanarak ürünü zorla yüklerseniz, ürün hasar görebilir.
19. Ürünü kimyasal madde veya yağ buharı bulunan veya bunların oluşabileceği bir yere kurmayın. Soya yağı gibi yenilebilir yağlar ürüne hasar verebilir veya şeklini bozabilir; ürünü mutfakta veya mutfak masasına yakın bir yere kurmayın.
    Bu, ürünün zarar görmesine neden olabilir.
20. Ürünü kurarken, ürün yüzeyinin kimyasal madde ile lekelenmesine izin vermemeye dikkat edin.
    Temizleyici veya yapıştırıcı gibi bazı kimyasal solventler ürünün yüzeyine ciddi hasar verebilir.
21. Ürünü tavsiye edildiği şekilde kurmazsanız/kaldırmazsanız, üretim işlevleri/performans garanti edilemez.
    Kullanıcı kılavuzundaki “Kurulum ve Bağlantı” bölümüne bakarak ürünü kurun.
22. Ürünün su içinde kurulması veya kullanılması ürüne ciddi zararlar verebilir.
23. Hızlı sıcaklık değişimleri domun içinde buzlanmaya neden olabilse de, videoda sorun yaşanmayacaktır.

## UYARI

YANGIN VEYA ELEKTRIK ŞOKU RISKINI AZALTMAK IÇIN, BU CIHAZI YAĞMUR VEYA NEME MARUZ BIRAKMAYIN. CİHAZDAKİ HAVALANDIRMA IZGARALARINA VEYA DİĞER DELİKLERE HİÇBİR METAL NESNE SOKMAYIN.

Cihaza sıvı damlatılmamalı veya dökülmemelidir; ayrıca vazo gibi sıvı dolu nesneler cihazın yakınında bulunmamalıdır.

Yaralanmaları önlemek için, bu cihaz montaj talimatlarına göre Duvara/tavana güvenli şekilde monte edilmelidir.

## DİKKAT




## GRAFİK SEMBOLLERİNİN AÇIKLAMASI



Eşkenar üçgen içindeki ok uçlu şimşek sembolü, ürün muhafazasında, kişiyi elektrik çarpmasına maruz bırakabilecek büyüklükte “tehlikeli gerilim” olduğunu kullanıcıya haber vermeyi amaçlar.



Eşkenar üçgen içindeki ünlem işareti, ürünle beraber verilen literatürde önemli çalışma ve bakım (servis) talimatlarının olduğunu kullanıcıya haber vermeyi amaçlar.

## Sınıf I yapısı

Sınıf I yapısındaki bir cihaz, koruyucu topraklama bağlantısı bulunan bir ELEKTRİK prizine bağlanmalıdır.

## Pil

Piller (takılı pil takımı veya piller), güneş ışığı, ateş veya benzeri yüksek ısı kaynaklarına maruz bırakılmamalıdır.

Pil değiştirilemez.

## CIHAZIN BAĞLANTISINI KESME

Arızalanması halinde elektrik fişini çekerek cihazdan çıkarın. Lütfen bölgenizdeki bir tamirciyi arayın.

**ABD dışındaki bölgelerde, HAR koduyla onaylanan bir kuruluşun aksesuarlarıyla birlikte kullanılabilir.**

## DİKKAT

Bu servis talimatları yalnızca yetkili servis personeline yöneliktir.
Elektrik çarpması riskini azaltmak için, gerekli yetkileriniz olmadığı sürece çalıştırma talimatlarında yer alan servis işlemlerinden başka bir işlem gerçekleştirmeyin.

Lütfen güç girişini yalnızca bir kamera ile kullanın; diğer cihazlar bağlanmamalıdır.

**ITE yalnızca PoE ağlarına bağlanabilir, harici bir tesise yöneltilemez.**

Lütfen aşağıdaki önerilen güvenlik önlemlerini dikkatle okuyun.

- Bu cihazı düz olmayan bir yüzeye yerleştirmeyin.
- Doğrudan güneş ışığına maruz kalacağı bir yüzeye, ısıtma cihazlarının yakınına veya aşırı soğuk bir alana monte etmeyin.
- Bu cihazı iletken nesnelerin yakınına yerleştirmeyin.
- Bu cihazı kendiniz onarmaya çalışmayın.
- Ürünün üzerine su dolu bir bardak koymayın.
- Manyetik kaynakların yakınına monte etmeyin.
- Havalandırma açıklıklarını kapatmayın.
- Ürünün üzerine ağır nesneler koymayın.
- Kamerayı kurarken/sökerken lütfen koruyucu eldiven giyin.
  Ürünün yüksek sıcaklıktaki yüzeyi yanmaya neden olabilir.

Kullanım Kılavuzu, ürünlerin nasıl kullanılabileceğini gösteren bir kılavuz kitaptır.

Kitaptaki kullanım sembolü şu anlamlara gelmektedir.

- Referans : Ürünün kullanımına yardımcı olacak bilgiler sağlandığında
- Uyarı : Talimata uyulmaması nedeniyle ürünün zarar görmesi veya yaralanma olasılığı söz konusuysa

※ Lütfen bu kılavuzu ürünleri kullanmadan önce güvenliğiniz için okuyun ve güvenli bir yerde saklayın.

Ayrı olarak satın aldığınız üçüncü taraf ürünlerinin (örn. lensler, aksesuarlar) kalitesini garanti etmemekteyiz.

Ürünleri birbirine bağlamak için düzgün şekilde topraklanmış STP (ekranlı burgulu çift) kullanın.

Özel kurulum ortamlarında telsiz iletişiminde girişim olabilir.
Ürün ile radyo iletişim cihazı arasında elektromanyetik dalga girişimleri olduğunda, ikisi arasında belirli mesafeyi korumanız veya alıcı antenin yönünü değiştirmeniz önerilir.

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## ÖNERİLEN PC ÖZELİKLERİ

- CPU : Intel(R) Core(TM) i7 3.4 GHz veya daha üstü
- RAM : 8G veya üstü
- Desteklenen İşletim Sistemi : MS Windows 8.1, 10, Mac OS X 10.13
- Önerilen tarayıcı: Google Chrome
- Desteklenen Tarayıcılar: MS Explorer11, MS Edge, Mozilla Firefox (sadece Window 64bit), Apple Safari (sadece Mac OSX)
- VGA : PCIe 256MB GDDR3 video grafik kart veya daha üstü

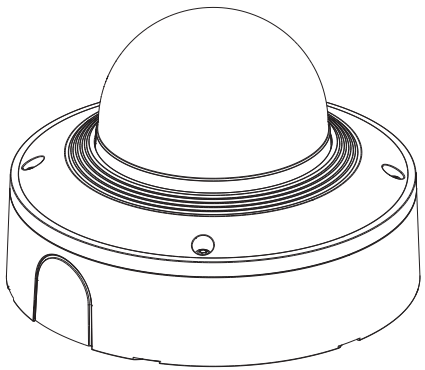
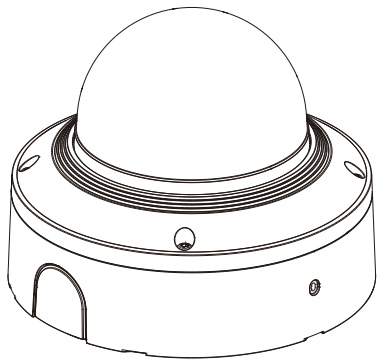
※ Bazı işlevler desteklenen tarayıcılarda bile kısıtlanmış olabilir.

## TAVSİYE EDİLEN MICRO SD/SDHC/SDXC B ELLEK KARTİ ÖZELLİK

- Önerilen kapasite: 16 GB ila 256 GB (MLC tipi gereklidir)
- Önerilen Üreticiler : SanDisk, Transcend
- Ürün Tipi : Yüksek dayanıklılık
- Uyumluluk, kart üreticilerine ve tiplerine bağlı olarak değişir.

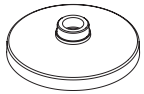
## NAS IÇIN ÖNERILEN TEKNIK ÖZELLIKLER

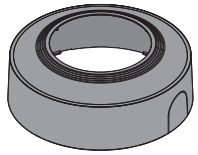
- Önerilen kapasite : 200GB veya üstü önerilir.
- Bu kamera için, aşağıdaki üretici teknik özelliklerine sahip bir NAS kullanmanız önerilir.
  Önerilen ürünler : QNAP NAS, Synology NAS

| Dış Mekan Vandal Dom Kamera<br>XNV-6081RE/XNV-8081RE | İç Mekan Dom Kamera<br>XND-6081REV/XND-8081REV |
|---|---|
|  <br>  |  <br>  |

## KURULUM IÇIN İSTEĞE BAĞLI AKSESUARLAR

Mevcut isteğe bağlı aksesuarları satın alabilirsiniz.

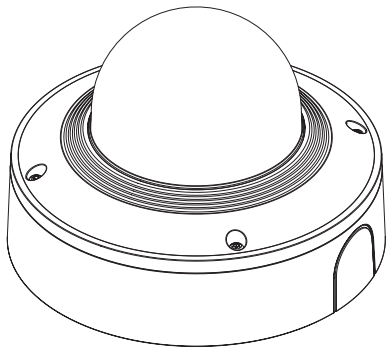




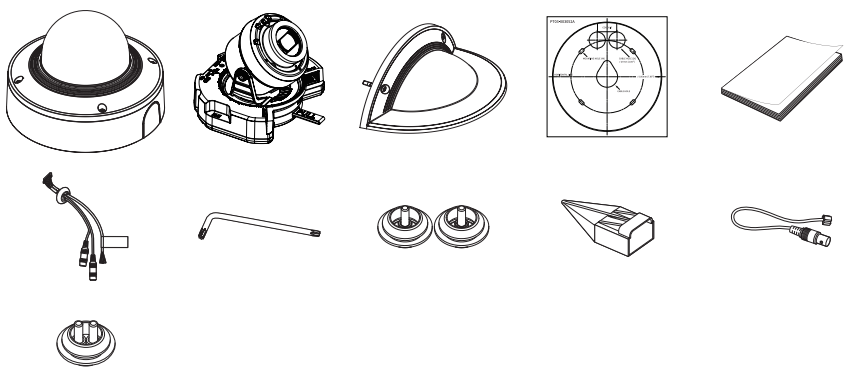
| Model Adı | Montaj askısı | Üst kaplama | Tümü |
|---|---|---|---|
| XNV-6081RE/XNV-8081RE | SBP-187HMW | SBC-180B (Siyah) | SBP-300LMW (Parapet Montajı)<br>SBP-300CMW (Tavana Montaj)<br>SBP-300WMW (Duvara Montaj)<br>SBP-300WMW1 (Duvara Montaj)<br>SBP-300NBW (Montaj Kutusu)<br>SBP-300BW (Duvara Montaj Tabanı)<br>SBP-300PMW (Direğe Montaj)<br>SBP-300KMW (Köşeye Montaj) |
| XND-6081REV/XND-8081REV | SBP-167HMW | SBC-160B (Siyah) | |

## DAHİL OLANLAR

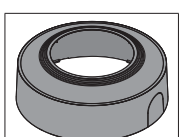
Satış yapılan her ülkede aksesuar aynı değildir.



<XNV-6081RE/XNV-8081RE>

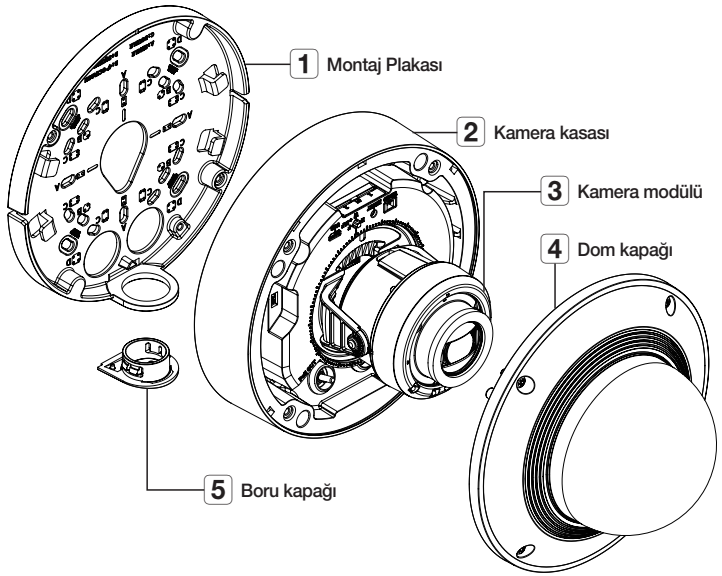


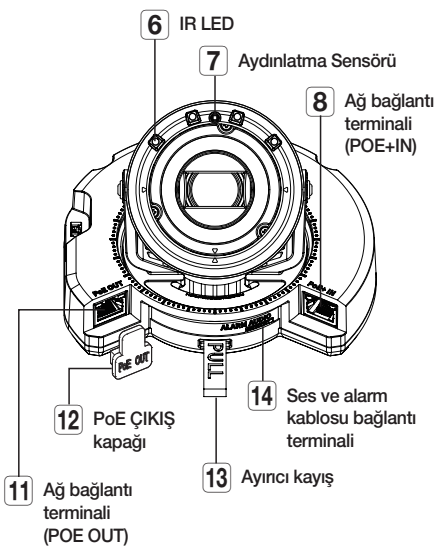
İsteğe bağlı (dahil değil)

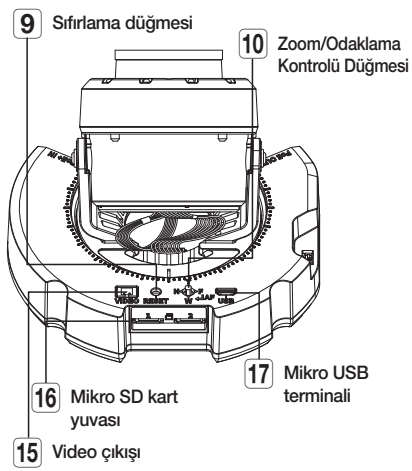


SBC-180B
(Renk: Siyah)

## İLK BAKİŞ



## KURULUM

- Bu fotoğraf makinesi, su geçirmezdir ve IP67 / IP6K9K şartnamesine uygundur, ancak harici kabloya bağlanan jak uygun değildir. Kablonun tamamen açıkta kalmasını önlemek için bu ürünü saçak kenarlarının altına yüklemeniz önerilir.

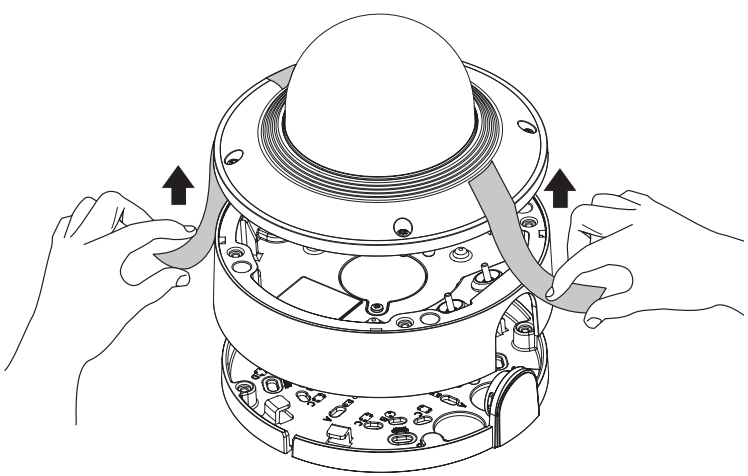
### Kurulumdan Önce Alınması Gereken Önlemler

Kamerayı kurmadan önce aşağıdaki talimatları mutlaka okuyun:

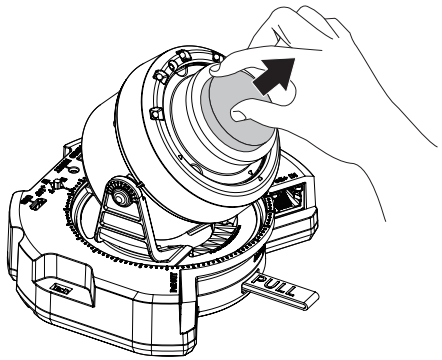
- Kamera ağırlığının en az 5 katını taşıyabilecek bir kurulum yeri seçin.
- Sıkıştırılmış veya soyulmuş kablolar hasara neden olabilir veya yangın çıkarabilir.
- Güvenlik açısından, kurulum alanında kimsenin bulunmamasını sağlayın. Her ihtimale karşı özel eşyalarınızı kurulum alanından uzak tutun.
- Ürün aşırı kuvvet uygulanarak kurulursa parçalar bozulabilir ve bu da kameraya zarar verebilir Montajı, uygun olmayan aletlerle yapmaya çalışmak ürüne zarar verebilir.

### Sökme işlemi

**1.** Kamera kasasını sabitleyen bandı çıkarın.

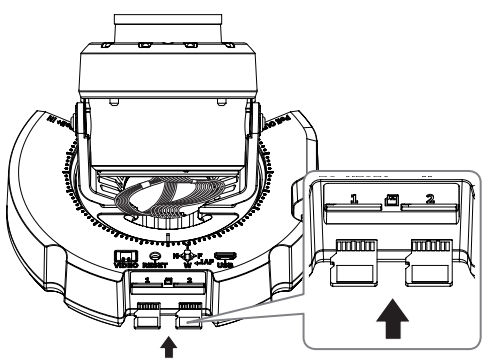


**2.** Kamera lensini koruyan kılıfı çıkarın.




### Micro SD Bellek Kartının Takılması

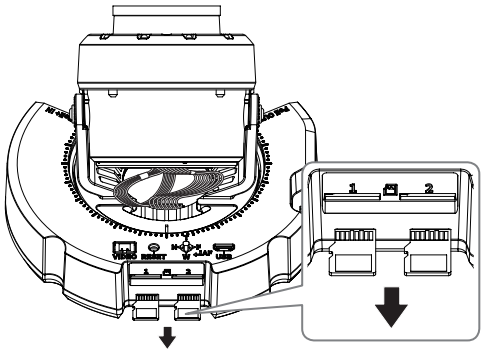
Mikro SD kartı, kamera modülündeki Micro SD yuvasına ok işareti yönünde kaydırarak takın.



- Kamerayı takmadan önce, güç kaynağı ve gövde ayrı durumdayken Micro SD bellek kartı takılmalıdır.
- Zorlayarak ters yönde takmaya çalışmayın. Bu, Micro SD bellek kartınıza ve ürününüze zarar verebilir.
- Micro SD kartın yağmur yağarken ya da nem yüksek olduğunda takılması veya çıkarılması önerilmez.
- Micro SD bellek kartını takarken/sökerken, parçaların kaybolması veya düşmesi nedeniyle meydana gelebilecek kazaları önlemek için, üzerinde çalışmadan önce ürün gövdesini düz bir yere koyduğunuzdan emin olun.

## Micro SD Bellek Kartının Çıkarılması

Hafıza kartını yuvasından çıkartmak için şemada gösterildiği gibi hafıza kartının açık tarafından yavaşça basın.

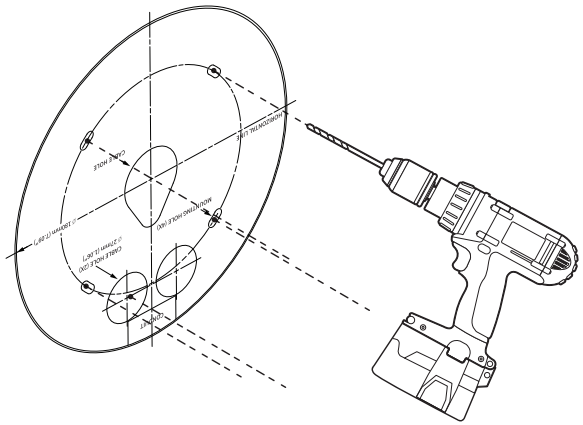


- Micro SD bellek kartını çıkartmadan önce, <**Depolama**> alanında, cihazı <**Kapalı**> duruma getirin ve [**Uygula**] düğmesine basarak kamerayı kapatın.
- Fotoğraf makinesini kapatırsanız veya üründen veriler içeren Micro SD bellek kartını çıkarırsanız, veriler kaybolabilir veya hasar görebilir.

## Takma işlemi (montaj plakası)

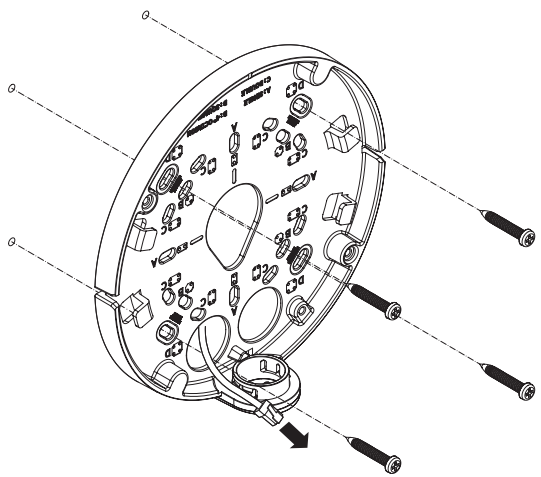
**[Doğrudan duvara/tavana montaj]**

**1-1.** Montaj şablonunu istenilen yüzeye takın ve vidalar ile kablolar için delikler açın.



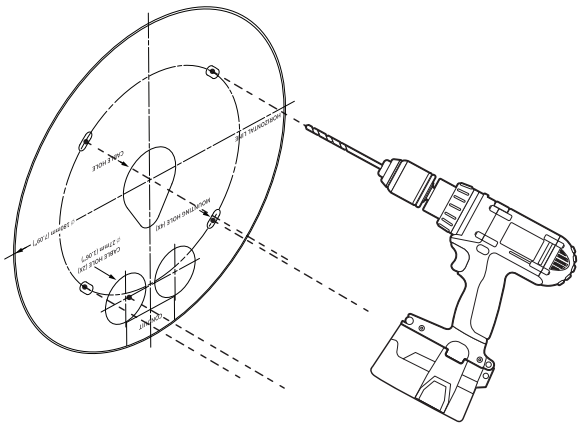
**1-2.** Montaj plakasını uygun vidalar kullanarak sabitleyin.

**1-3.** Montaj plakasındaki delikten LAN/ses ve alarm kabloları arasındaki gerekli kabloları çekerek çıkarın.

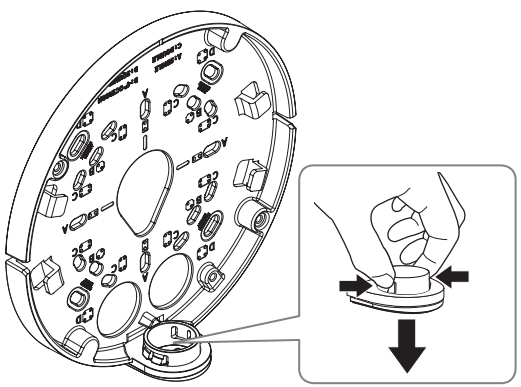


**[Boru aracılığıyla takma]**

**2-1.** Montaj şablonunu takın ve vidalar ile kablolar için delikler açın.



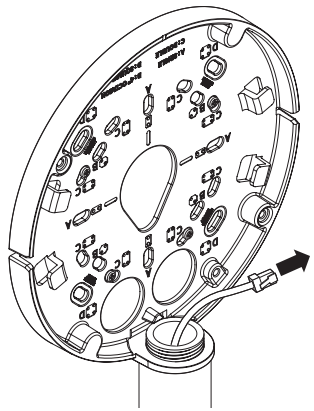
**2-2.** Montaj plakasının boru kapağını yan taraflarına bastırarak ayırın.



**2-3.** Boruyu montaj plakasına yerleştirin.

**2-4.** Montaj plakasını uygun vidalar kullanarak sabitleyin.

**2-5.** Borunun içinden LAN/ses ve alarm kabloları arasındaki gerekli kabloları çekerek çıkarın.



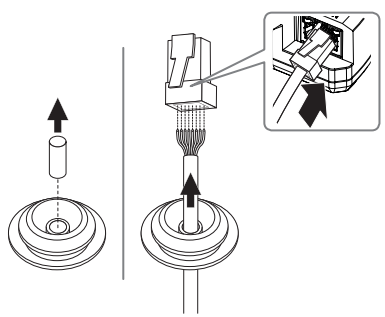
## Takma işlemi (kamera kasası)

- Bağlanmak için, LAN kablosu ile uyumlu bir kablo burcu kullanın.
  - Ana kamera: çapı Ø5 ila 6,5 olan bir kablo kullanın
  - IP66 1 delikli burç: çapı Ø5 ila 8,5 olan bir kablo kullanın
  - 2 delikli burç: çapı Ø4,5 ila 5,5 olan bir kablo kullanın

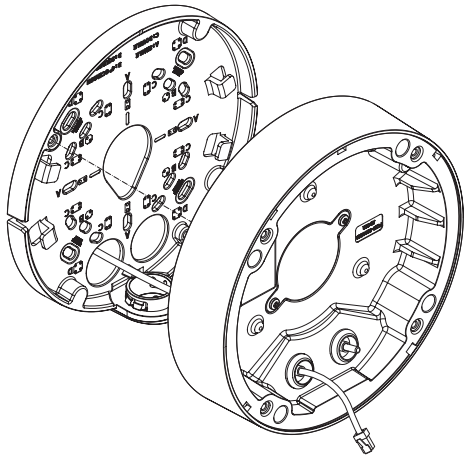
**[LAN kablosunun takılması] (Sadece bir CAM kullanılırken)**

**1-1.** Kullanılacak olan burcun dışarı çıkmış parçalarını çekerek koparın.

**1-2.** LAN kablosunu burcun deliğinden geçirin ve LAN konektörüne bağlayın.



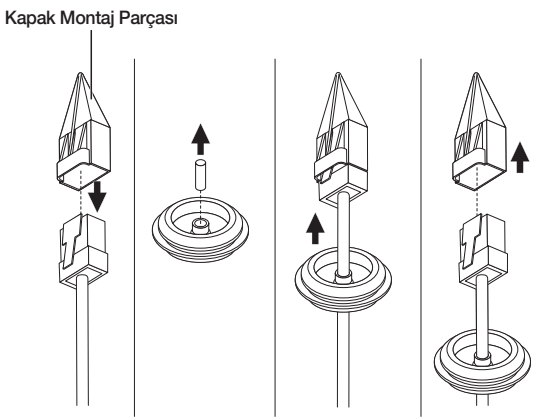
**1-3.** Burcu kamera kasasına monte edin.



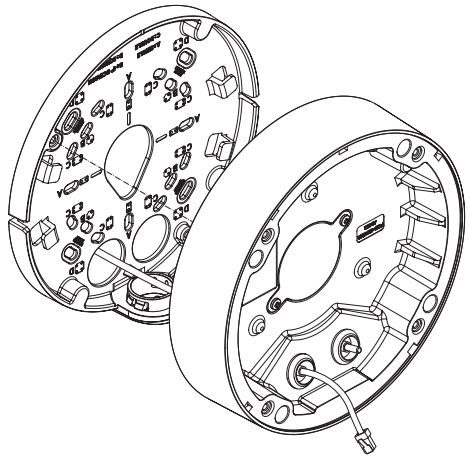
**[LAN kablosunun takılması] (IP66) (Sadece bir CAM kullanılırken)**

**2-1.** Temin edilen 1 delikli burcun dışarı çıkmış parçasını çekerek koparın.

**2-2.** RJ45 kablosundan geçirmek için kapak montaj parçasını kullanın.

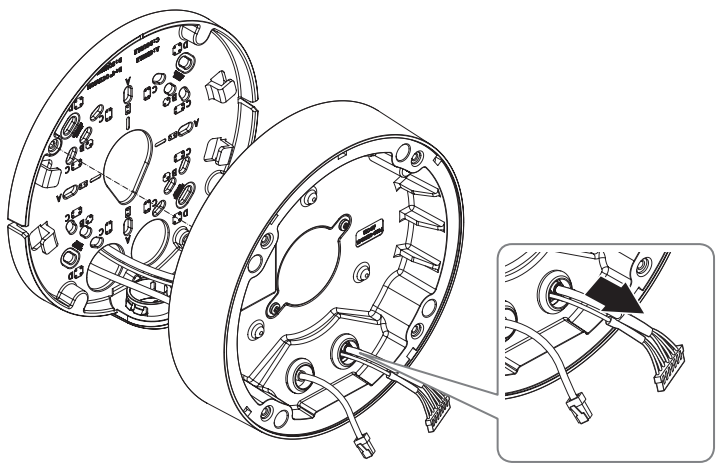



**2-3.** Burcu kamera kasasına monte edin.



**[Ses ve alarm kablolarının takılması] (Sadece bir CAM kullanılırken)**

**3.** Temin edilen ses ve alarm kablolarının burcunu kamera kasasına takın.

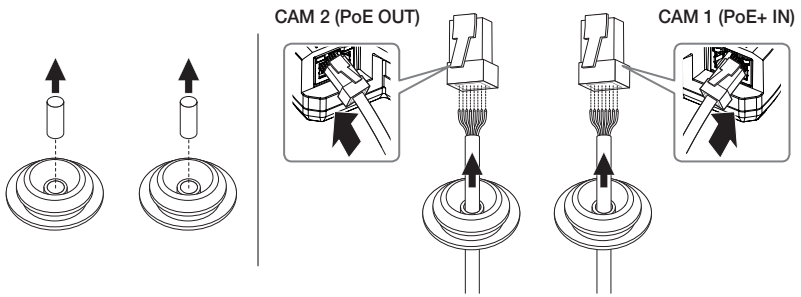


**[LAN kablolarının takılması] (CAM 1 ve CAM 2 kullanılırken)**

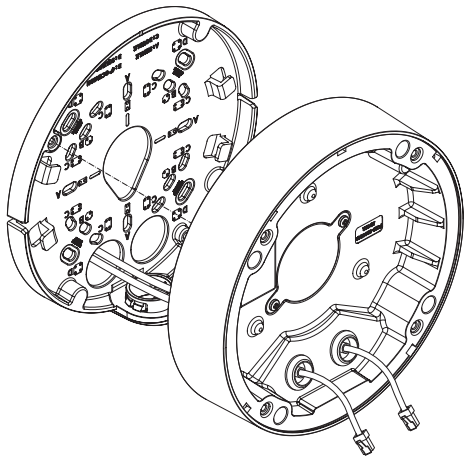
**4-1.** Kullanılacak olan burcun dışarı çıkmış parçalarını çekerek koparın.

**4-2.** CAM 1 için olan LAN kablosunu burcun deliğinden geçirin ve LAN konektörüne bağlayın. (PoE+ IN)

**4-3.** CAM 2 için olan LAN kablosunu burcun deliğinden geçirin ve LAN konektörüne bağlayın. (PoE OUT)



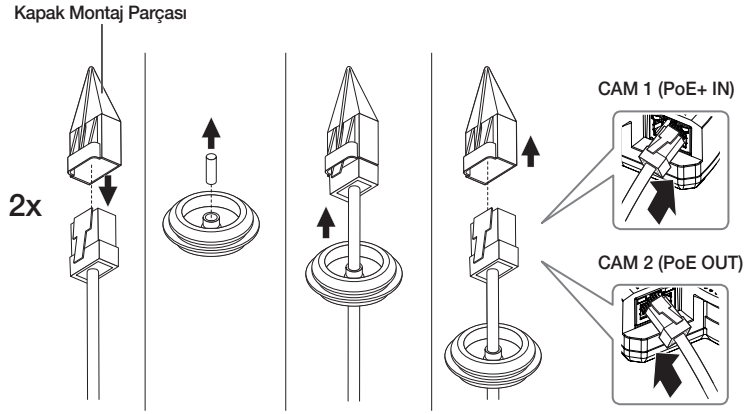

**4-4.** Burcu kamera kasasına monte edin.



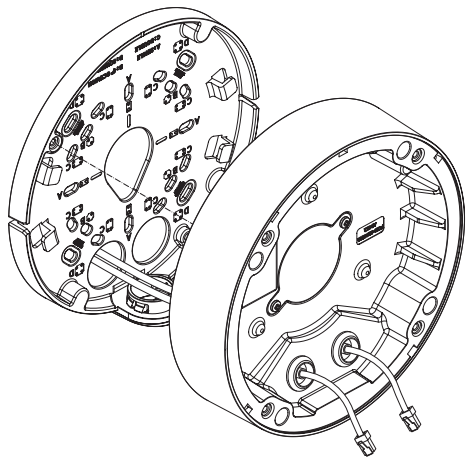
**[LAN kablolarının takılması] (CAM 1 ve CAM 2 kullanılırken)**

**5-1.** Temin edilen 1 delikli burcun dışarı çıkmış parçasını çekerek koparın.

**5-2.** RJ45 kablosundan geçirmek için kapak montaj parçasını kullanın. (CAM 1&2)




**5-3.** Burcu kamera kasasına monte edin.

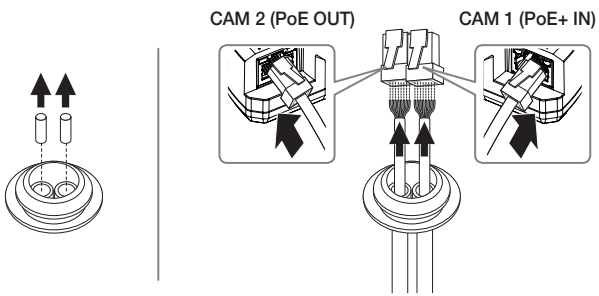


**[Ses ve alarm kablolarının takılması] (CAM 1 ve CAM 2 kullanılırken)**

**6-1.** Temin edilen 2 delikli burcun dışarı çıkmış parçasını çekerek koparın.

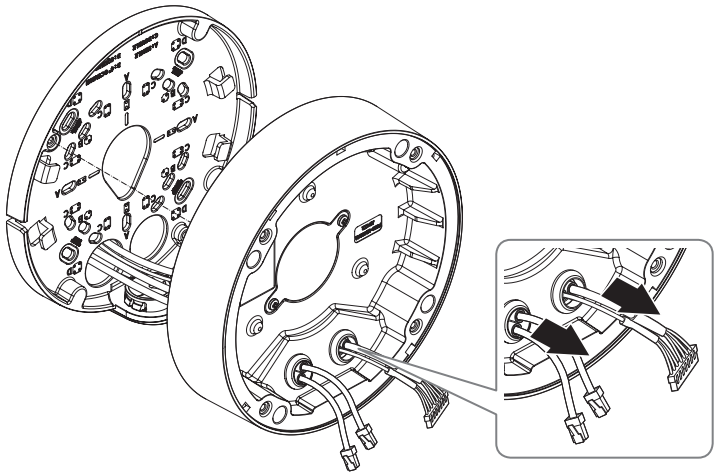
**6-2.** LAN kablolarını burcun iki deliğinden geçirin ve LAN konektörüne bağlayın.

- 2 delikli burçlarda hiçbir kapak takma parçası kullanılamaz.

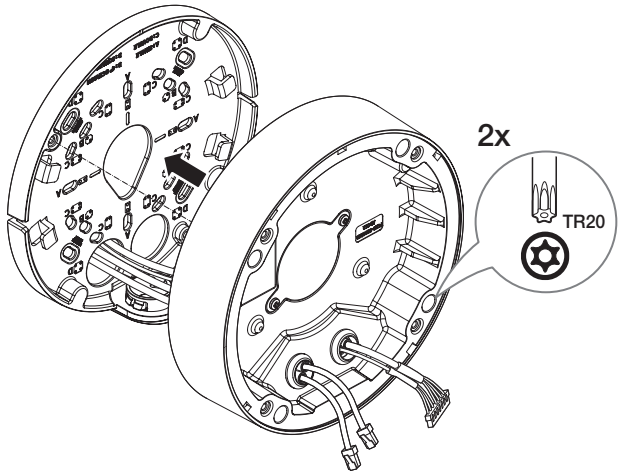



**6-3.** 2 Delikli burcu kamera kasasına monte edin.

**6-4.** Temin edilen ses ve alarm kablolarının burcunu kamera kasasına takın.



**7.** Montaj plakasını kamera kasası ile birleştirin.

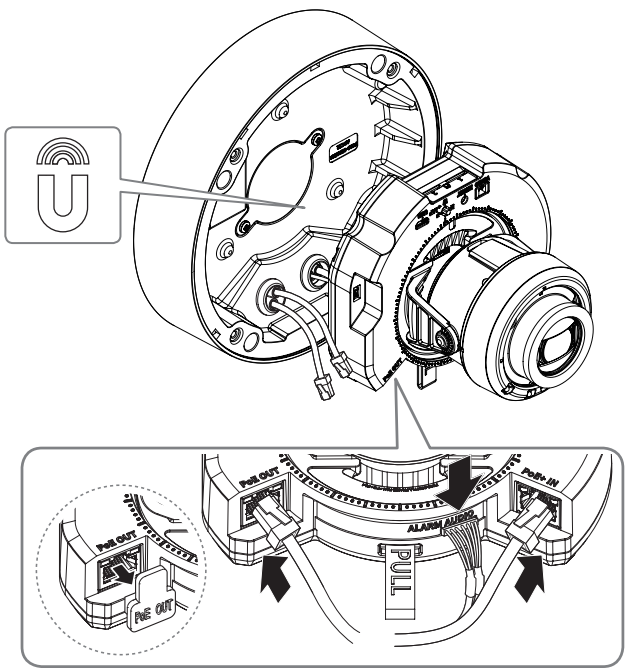


## Kamera modülünün takılması

- CAM 1 ve 2'nin kullanılması için, ilk önce CAM 1'in LAN kablosu bağlanmalıdır.

1. CAM 2'yi bağlamak için, ilk önce PoE ÇIKIŞ kapağını çıkarın.
2. LAN/ses ve alarm kablolarını kamera modülü terminaline bağlayın.
3. Kamera modülünü kasaya takın.

- Bunu takarken, parmaklarınızın kamera modülü ile kasa arasına sıkışmasından kaçının.
- Modülün altında gömülü bir mıknatıs bulunmaktadır.
- Montaj yüzeyleri arasında yabancı cisimlerin bulunmamasına dikkat edin.



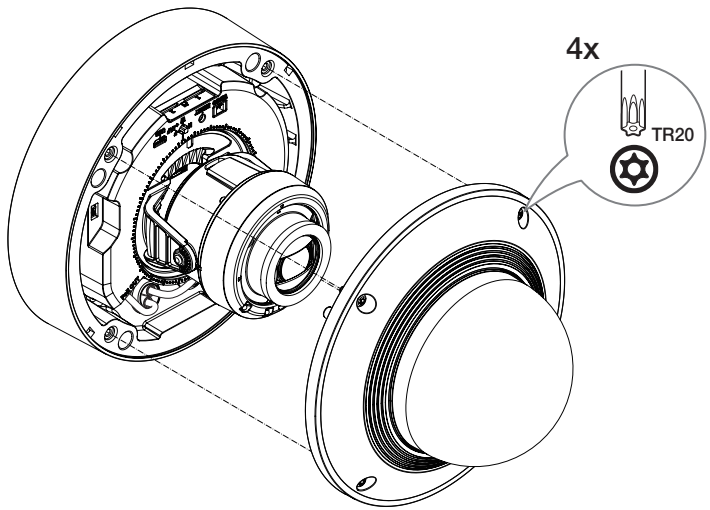

4. "**Kameranın izleme yönünün ayarlanması**" bölümüne bakarak lensi istenen yöne ayarlayın. (sayfa 26)

## Dom kapağının montajı

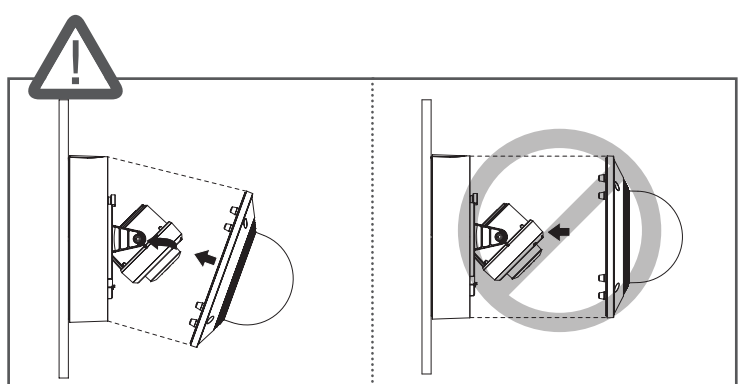
**[Doğrudan duvara/tavana montaj]**

1. Dom kapağını monte edin.

- Su hasarı sorunu çıkmaması için, sabitleme cıvatalarını iyice sıktığınızdan emin olun.

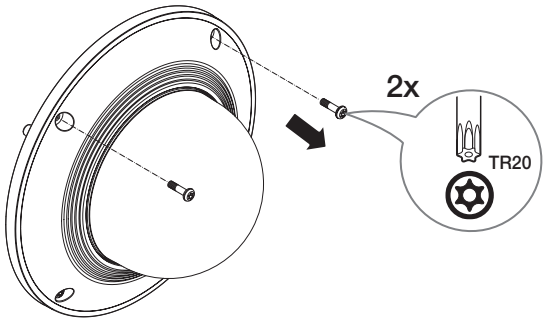



- Kameranızın izleme yönünü değiştirmemeye dikkat edin.



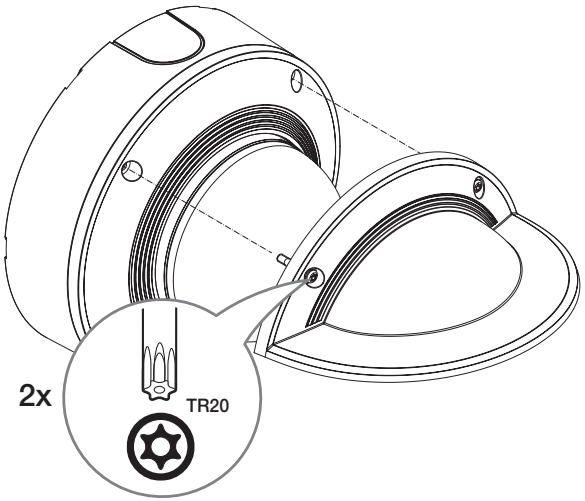
**[Yağmur başlığının kullanımı]**

1. Dom kapağındaki vidaları sökün.




2. Dom kapağını monte edin.
3. Yağmur başlığını dom kapağına takın ve vidaları sıkın.

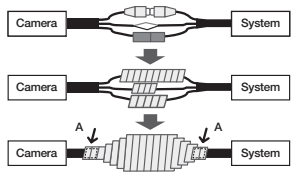
- Su hasarı sorunu çıkmaması için, sabitleme cıvatalarını iyice sıktığınızdan emin olun.




## Dış mekan montajı

Cihazı binanın dışına monte ettiğinizde, lütfen butil plastik bantla (mağazalardan alınabilir) su yalıtımı sağlayın, böylece dışarıya bağlanan kablo açıklığından sıvı sızıntısı olmaz.

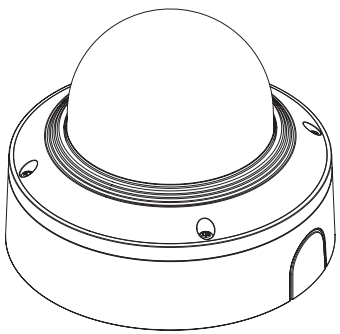
1. G/Ç ve LAN kablolarını bağlayın.
2. Siyah kablo kaplamasını (Alan A) ve kablo bağlantı alanını butil plastik bandın yarısından fazlası üst üste gelecek şekilde su geçirmez (butil plastik) bantla sarın.



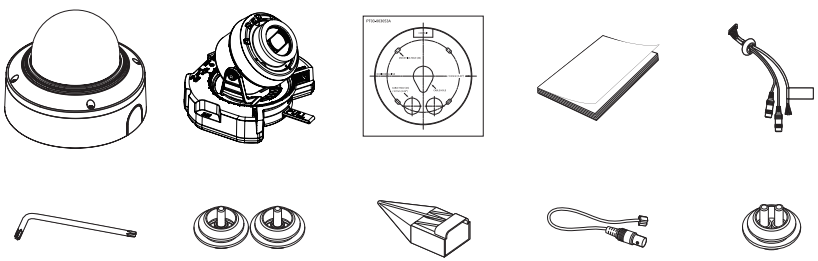

- Kablo kaplamasının su geçirmezliği düzgün sağlanmadığında bu durum doğrudan sızıntıya neden olabilir. Kabloyu yoğun bir bant katmanıyla koruduğunuzdan emin olun.
- Su geçirmez butil bant, normal uzunluğunun iki katına kadar esnetilebilen butil plastikten yapılmıştır.

## DAHİL OLANLAR

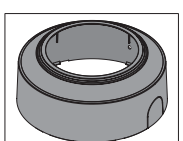
Satış yapılan her ülkede aksesuar aynı değildir.



<XND-6081REV/XND-8081REV>

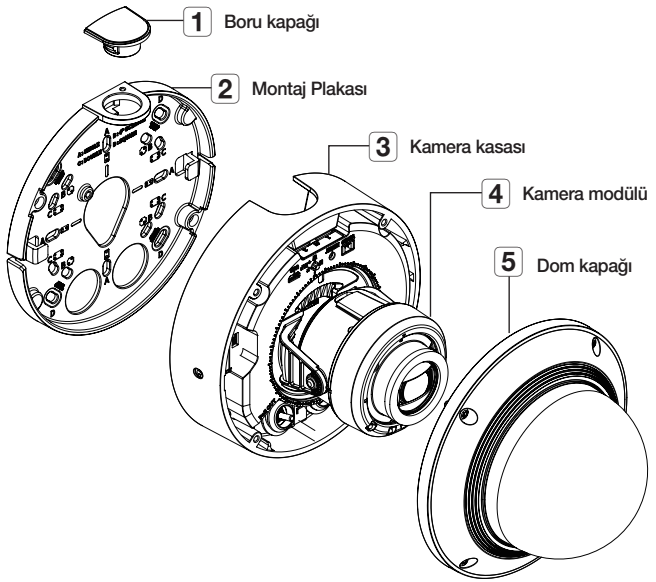


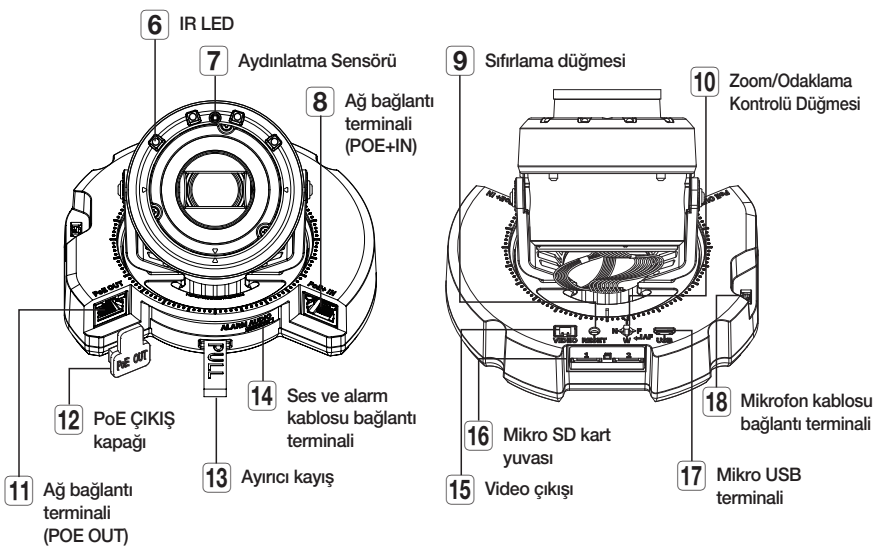
İsteğe bağlı (dahil değil)



SBC-160B
(Renk: Siyah)

## İLK BAKİŞ



# KURULUM

- Bu fotoğraf makinesi, su geçirmezdir ve IP52 şartnamesine uygundur, ancak harici kabloya bağlanan jak uygun değildir. Kablonun tamamen açıkta kalmasını önlemek için bu ürünü saçak kenarlarının altına yüklemeniz önerilir.

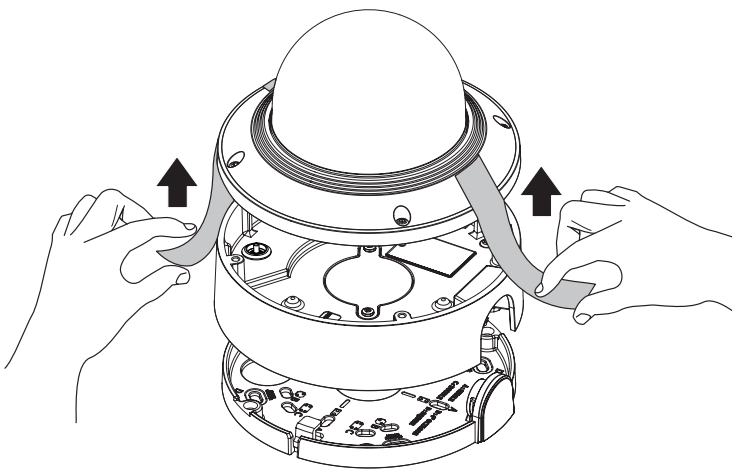
## Kurulumdan Önce Alınması Gereken Önlemler

Kamerayı kurmadan önce aşağıdaki talimatları mutlaka okuyun:

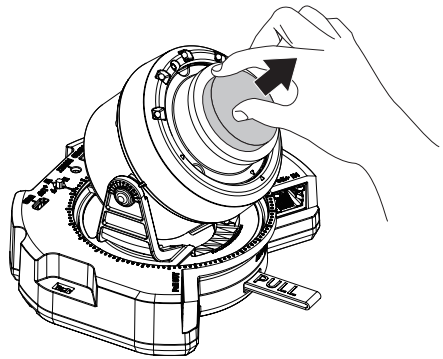
- Kamera ağırlığının en az 5 katını taşıyabilecek bir kurulum yeri seçin.
- Sıkıştırılmış veya soyulmuş kablolar hasara neden olabilir veya yangın çıkarabilir.
- Güvenlik açısından, kurulum alanında kimsenin bulunmamasını sağlayın. Her ihtimale karşı özel eşyalarınızı kurulum alanından uzak tutun.
- Ürün aşırı kuvvet uygulanarak kurulursa parçalar bozulabilir ve bu da kameraya zarar verebilir Montajı, uygun olmayan aletlerle yapmaya çalışmak ürüne zarar verebilir.

## Sökme işlemi

**1.** Kamera kasasını sabitleyen bandı çıkarın.

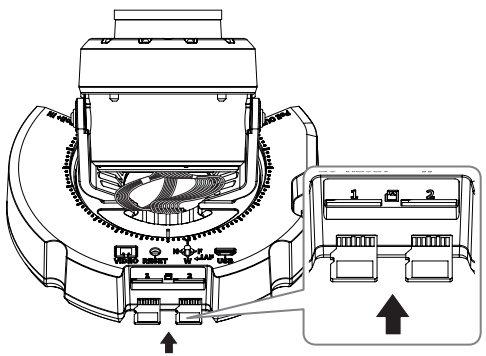


**2.** Kamera lensini koruyan kılıfı çıkarın.




## Micro SD Bellek Kartının Takılması

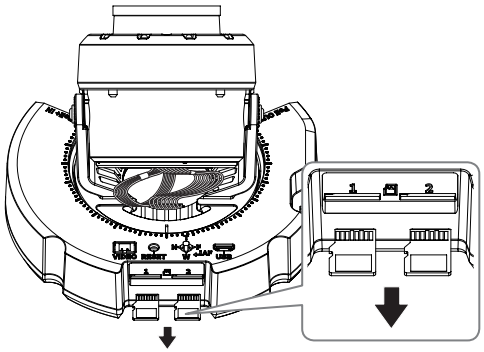
Mikro SD kartı, kamera modülündeki Micro SD yuvasına ok işareti yönünde kaydırarak takın.



- Kamerayı takmadan önce, güç kaynağı ve gövde ayrı durumdayken Micro SD bellek kartı takılmalıdır.
- Zorlayarak ters yönde takmaya çalışmayın. Bu, Micro SD bellek kartınıza ve ürününüze zarar verebilir.
- Micro SD kartın yağmur yağarken ya da nem yüksek olduğunda takılması veya çıkarılması önerilmez.
- Micro SD bellek kartını takarken/sökerken, parçaların kaybolması veya düşmesi nedeniyle meydana gelebilecek kazaları önlemek için, üzerinde çalışmadan önce ürün gövdesini düz bir yere koyduğunuzdan emin olun.

### Micro SD Bellek Kartının Çıkarılması

Hafıza kartını yuvasından çıkartmak için şemada gösterildiği gibi hafıza kartının açık tarafından yavaşça basın.

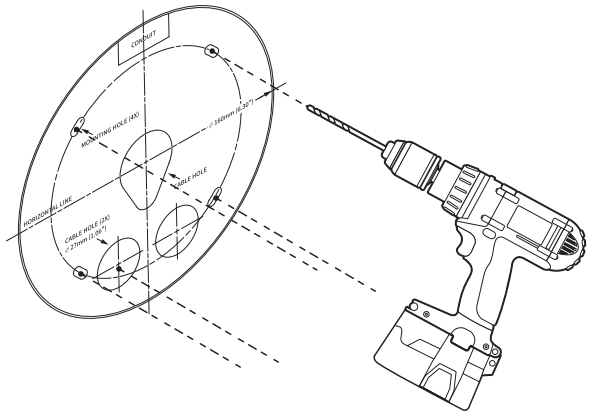


- Micro SD bellek kartını çıkartmadan önce, <**Depolama**> alanında, cihazı <**Kapalı**> duruma getirin ve [**Uygula**] düğmesine basarak kamerayı kapatın.
- Fotoğraf makinesini kapatırsanız veya üründen veriler içeren Micro SD bellek kartını çıkarırsanız, veriler kaybolabilir veya hasar görebilir.

### Takma işlemi (montaj plakası)

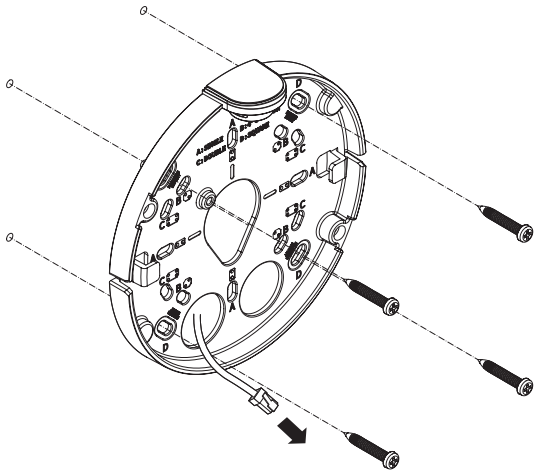
**[Doğrudan duvara/tavana montaj]**

**1-1.** Montaj şablonunu istenilen yüzeye takın ve vidalar ile kablolar için delikler açın.



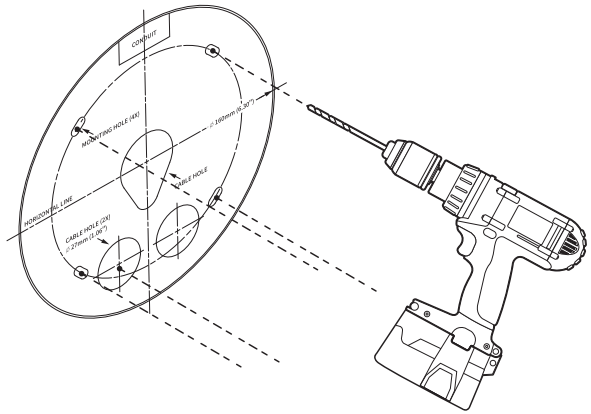

**1-2.** Montaj plakasını uygun vidalar kullanarak sabitleyin.

**1-3.** Montaj plakasındaki delikten LAN/ses ve alarm kabloları arasındaki gerekli kabloları çekerek çıkarın.

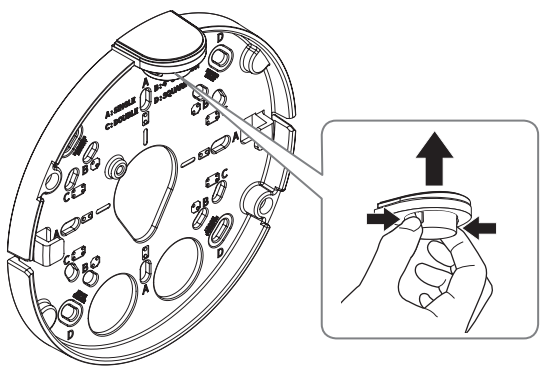


**[Boru aracılığıyla takma]**

**2-1.** Montaj şablonunu takın ve vidalar ile kablolar için delikler açın.



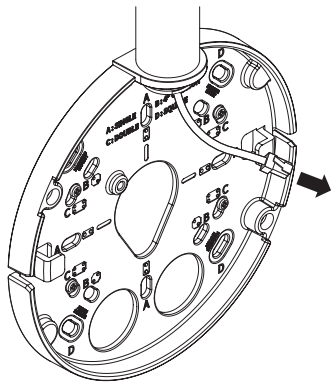

**2-2.** Montaj plakasının boru kapağını yan taraflarına bastırarak ayırın.



**2-3.** Boruyu montaj plakasına yerleştirin.

**2-4.** Montaj plakasını uygun vidalar kullanarak sabitleyin.

**2-5.** Borunun içinden LAN/ses ve alarm kabloları arasındaki gerekli kabloları çekerek çıkarın.



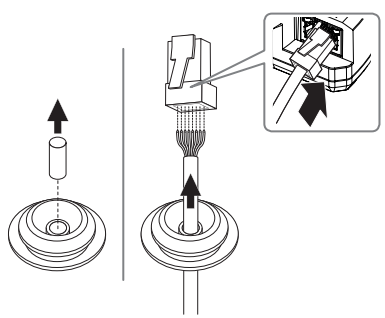
## Takma işlemi (kamera kasası)

- Bağlanmak için, LAN kablosu ile uyumlu bir kablo burcu kullanın.
  - Ana kamera: çapı Ø5 ila 6,5 olan bir kablo kullanın
  - IP66 1 delikli burç: çapı Ø5 ila 8,5 olan bir kablo kullanın
  - 2 delikli burç: çapı Ø4,5 ila 5,5 olan bir kablo kullanın

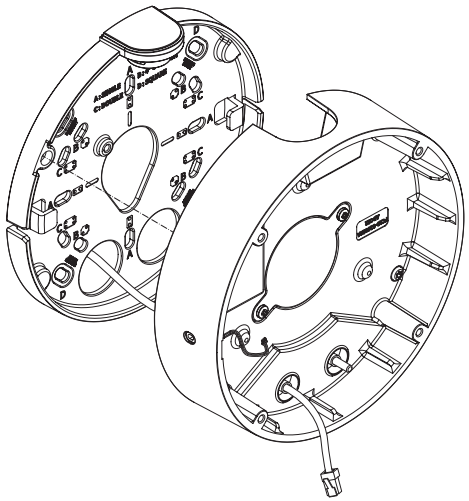
**[LAN kablosunun takılması] (Sadece bir CAM kullanılırken)**

**1-1.** Kullanılacak olan burcun dışarı çıkmış parçalarını çekerek koparın.

**1-2.** LAN kablosunu burcun deliğinden geçirin ve LAN konektörüne bağlayın.



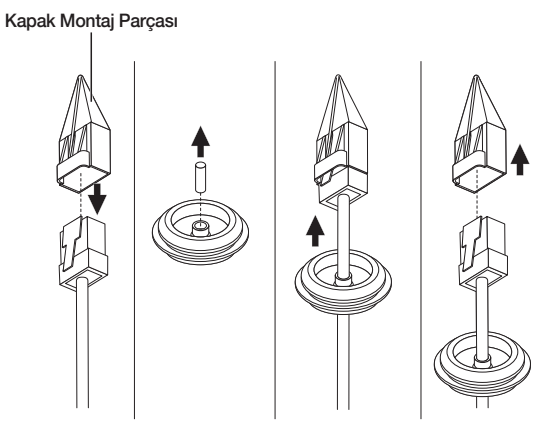
**1-3.** Burcu kamera kasasına monte edin.



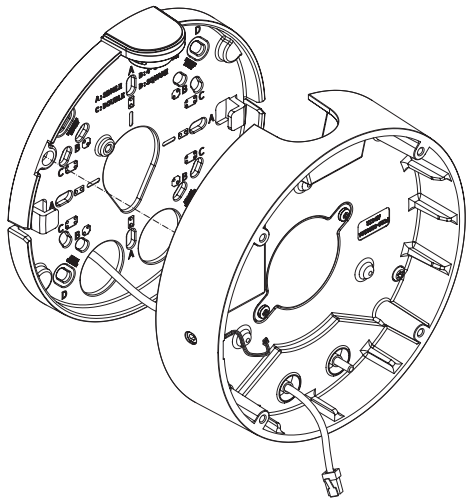
**[LAN kablosunun takılması] (Sadece bir CAM kullanılırken)**

**2-1.** Temin edilen 1 delikli burcun dışarı çıkmış parçasını çekerek koparın.

**2-2.** RJ45 kablosundan geçirmek için kapak montaj parçasını kullanın.

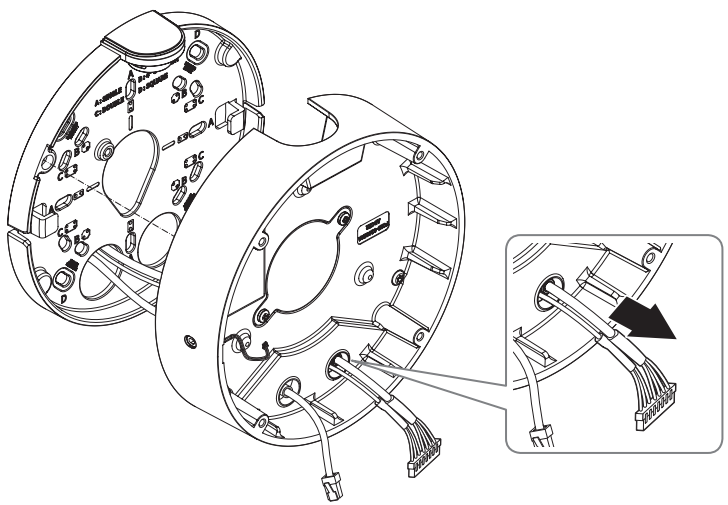



**2-3.** Burcu kamera kasasına monte edin.



**[Ses ve alarm kablolarının takılması] (Sadece bir CAM kullanılırken)**

**3.** Temin edilen ses ve alarm kablolarının burcunu kamera kasasına takın.

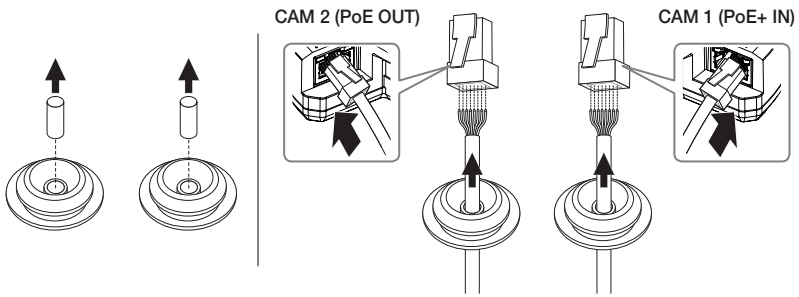


**[LAN kablolarının takılması] (CAM 1 ve CAM 2 kullanılırken)**

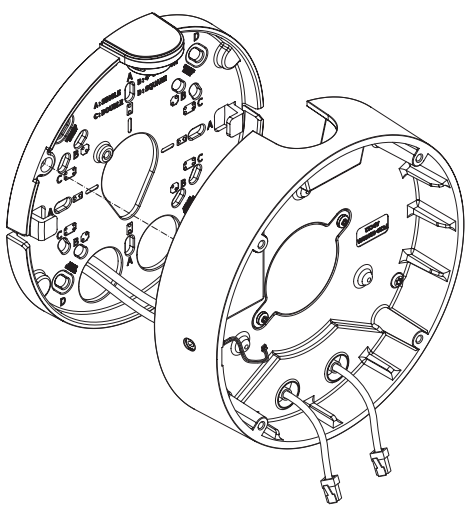
**4-1.** Kullanılacak olan burcun dışarı çıkmış parçalarını çekerek koparın.

**4-2.** CAM 1 için olan LAN kablosunu burcun deliğinden geçirin ve LAN konektörüne bağlayın. (PoE+ IN)

**4-3.** CAM 2 için olan LAN kablosunu burcun deliğinden geçirin ve LAN konektörüne bağlayın. (PoE OUT)



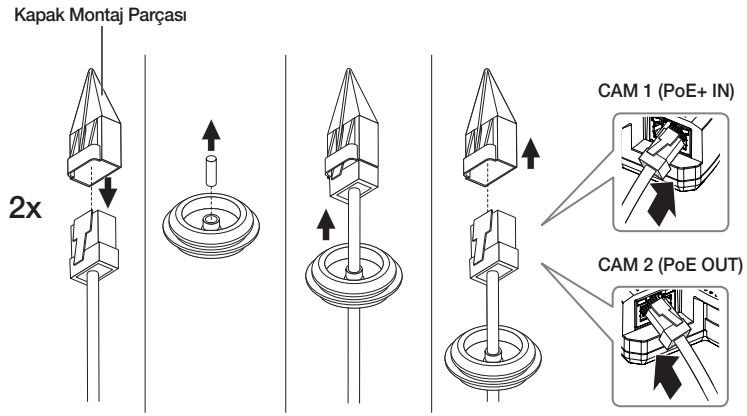

**4-4.** Burcu kamera kasasına monte edin.



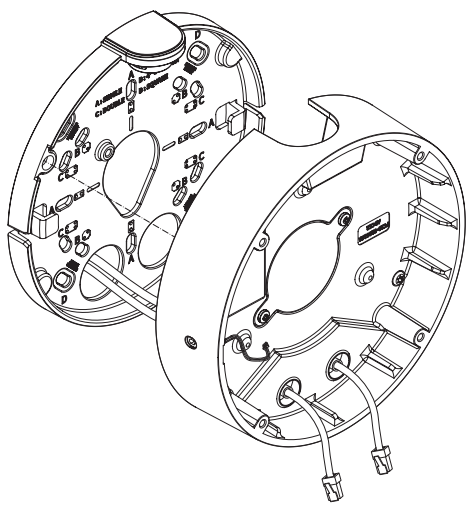
**[LAN kablolarının takılması] (CAM 1 ve CAM 2 kullanılırken)**

**5-1.** Temin edilen 1 delikli burcun dışarı çıkmış parçasını çekerek koparın.

**5-2.** RJ45 kablosundan geçirmek için kapak montaj parçasını kullanın. (CAM 1&2)




**5-3.** Burcu kamera kasasına monte edin.

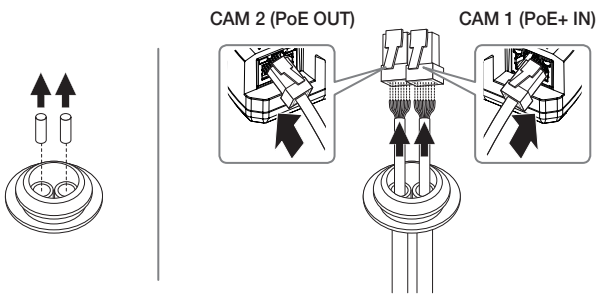


**[Ses ve alarm kablolarının takılması] (CAM 1 ve CAM 2 kullanılırken)**

**6-1.** Temin edilen 2 delikli burcun dışarı çıkmış parçasını çekerek koparın.

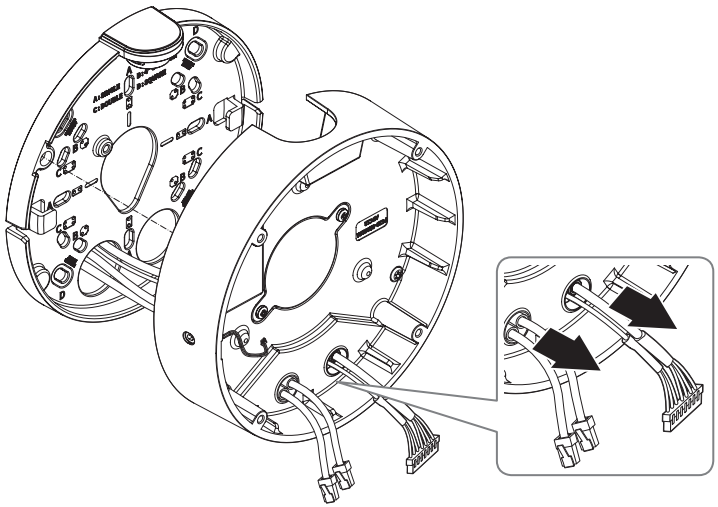
**6-2.** LAN kablolarını burcun iki deliğinden geçirin ve LAN konektörüne bağlayın.

▪ 2 delikli burçlarda hiçbir kapak takma parçası kullanılamaz.

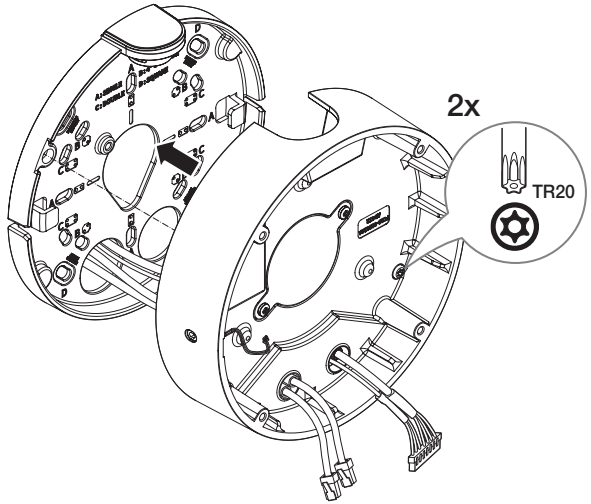



**6-3.** 2 Delikli burcu kamera kasasına monte edin.

**6-4.** Temin edilen ses ve alarm kablolarının burcunu kamera kasasına takın.



**7.** Montaj plakasını kamera kasası ile birleştirin.



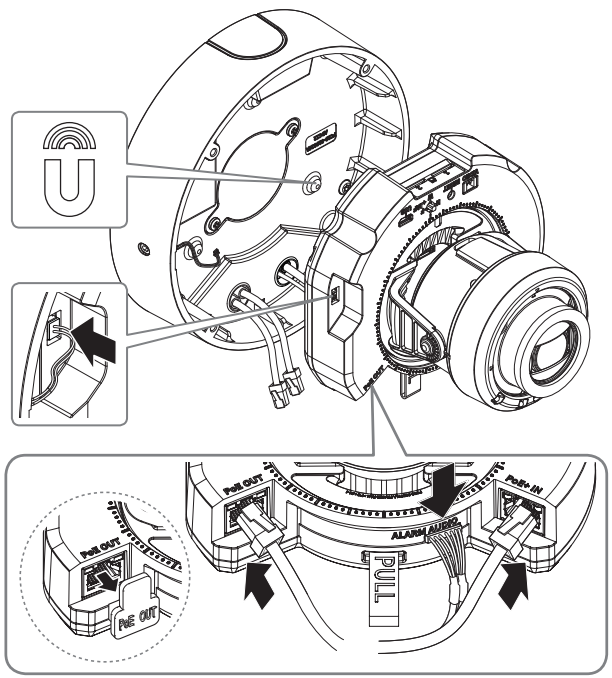
## Kamera modülünün takılması

- CAM 1 ve 2'nin kullanılması için, ilk önce CAM 1'in LAN kablosu bağlanmalıdır.

1. CAM 2'yi bağlamak için, ilk önce PoE ÇIKIŞ kapağını çıkarın.
2. LAN/ses ve alarm kablolarını kamera modülü terminaline bağlayın.
3. Kamera modülünü kasaya takın.

- Bunu takarken, parmaklarınızın kamera modülü ile kasa arasına sıkışmasından kaçının.
- Modülün altında gömülü bir mıknatıs bulunmaktadır.
- Montaj yüzeyleri arasında yabancı cisimlerin bulunmamasına dikkat edin.

4. Mikrofon kablosunu kamera modülüne bağlayın.



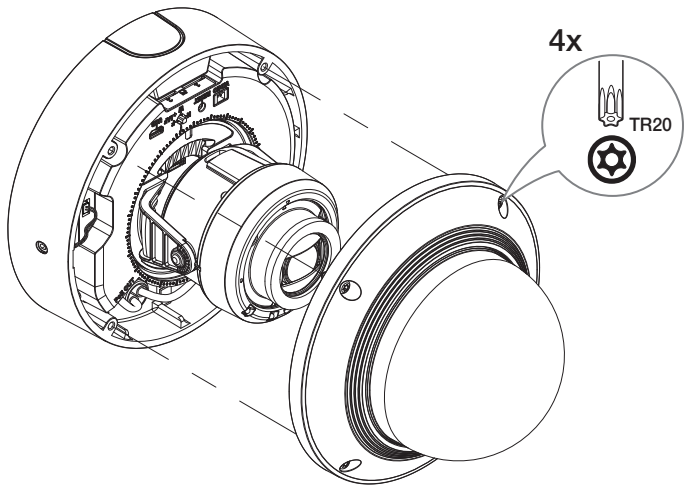

5. "**Kameranın izleme yönünün ayarlanması**" bölümüne bakarak lensi istenen yöne ayarlayın. (sayfa 26)

## Dom kapağının montajı

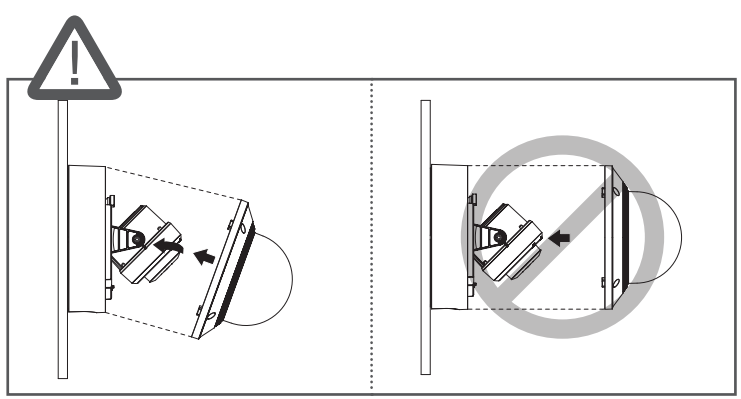
**[Doğrudan duvara/tavana montaj]**

1. Dom kapağını monte edin.

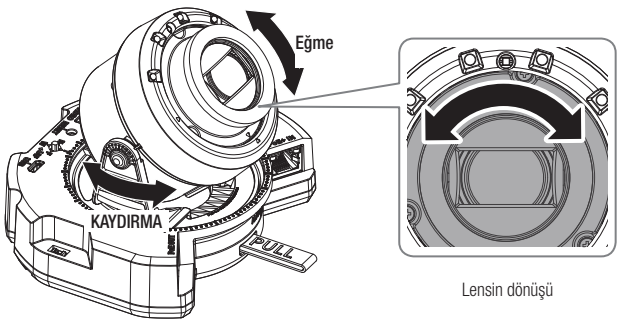
- Su hasarı sorunu çıkmaması için, sabitleme cıvatalarını iyice sıktığınızdan emin olun.




- Kameranızın izleme yönünü değiştirmemeye dikkat edin.



## KAMERANIN İZLEME YÖNÜNÜN AYARLANMASI




Lensin dönüşü

### ▪ İzleme yönünün ayarlanması

Kamera yönünü sadece kamera tavanda sabitken ayarlayabilirsiniz.
Bu anda, kameranın ana gövdesini sola veya sağa doğru döndürmeye KAYDIRMA ve kameranın açısını ayarlamaya da EĞME denir.

- Kaydırma açısı: 0˚ – 360˚.
- Dikey hareket açısı: -45˚ – 85˚.
- Döndürme açısı: 0˚ – 355˚.

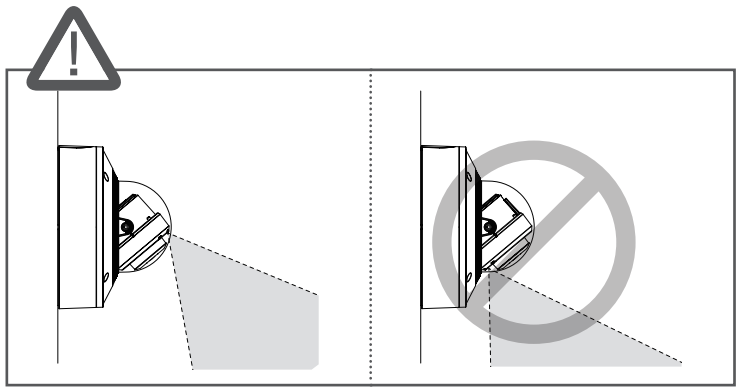
▪ 75˚ veya daha fazla dikey hareket açısında, yakınlaştırma büyütme oranına bağlı olarak ekranın bazı kısımlarında görüntü engellenebilir veya bulanık bir görüntü ortaya çıkabilir.

▪ Odaklama/yakınlaştırma lensini zorlayarak döndürmeyin veya bastırmayın. Aksi takdirde, motor arızası nedeniyle odaklama düzgün çalışmayabilir.

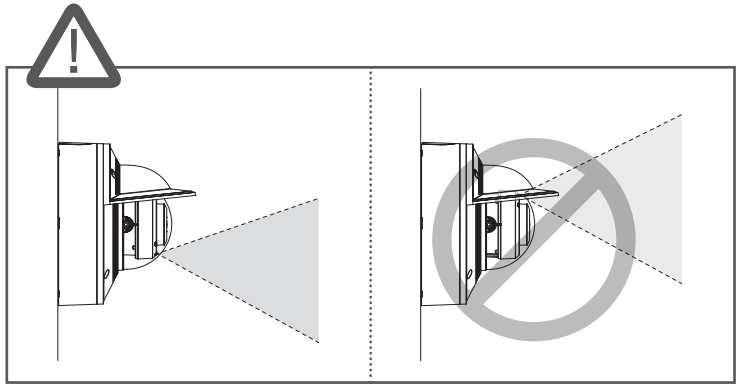
### ▪ Ayarlama yöntemleri

**1.** İzlenecek yönü dikkate alarak kaydırma açısını ayarlayın.
**2.** Yatay açıyı, videonun döndürülürken çevrilmeyeceği şekilde ayarlayın.
**3.** İzlenecek yöne doğru dikey hareket açısını ayarlayın.

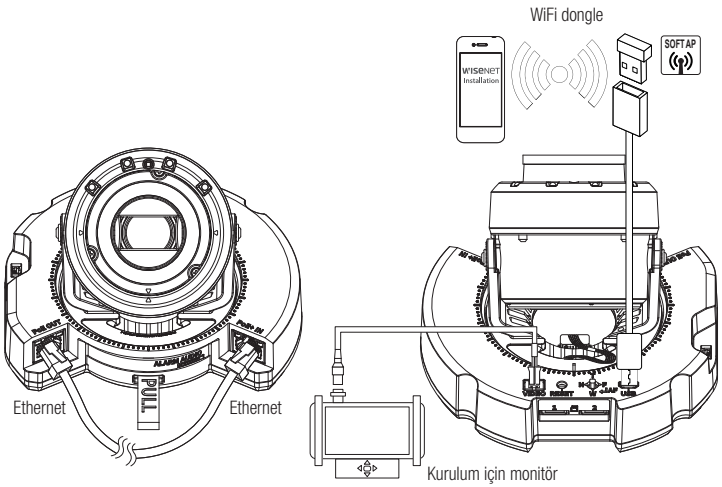
▪ IR LED'lerin yönünü, görünümleri bir cihaz tarafından engellenmeyecek şekilde ayarlayın.



▪ IR LED'lerin yönünü, görünümleri bir yağmur siperi (varsa) tarafından engellenmeyecek şekilde ayarlayın.



## DİĞER CİHAZLARLA BAĞLANTI



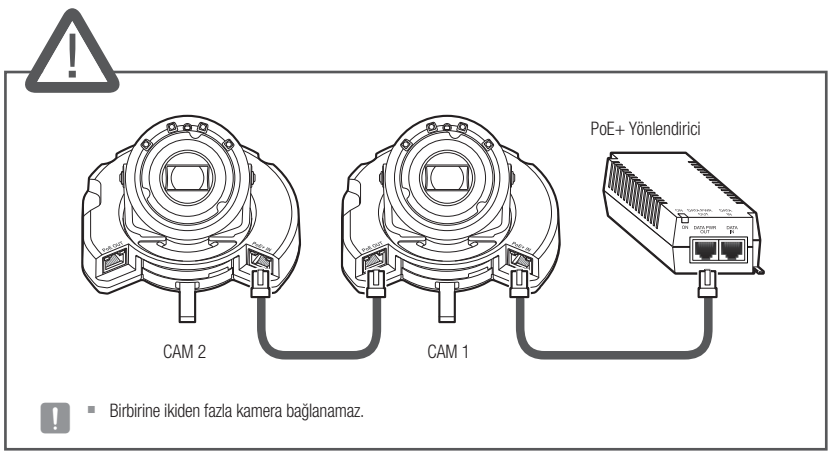

- Daha kolay kurulum için ürüne bir VIDEO çıkış terminali konulmuştur ve izleme amaçlarıyla kullanılması tavsiye edilmemektedir.
- Kolay kurulum için üründe Micro USB çıkış terminali bulunur ve izleme amacı için önerilmez.

### Çalıştırma ve ağ bağlantısı

PoE+ yönlendiricisini kameranın PoE+ IN(PoE+ GİRİŞ) terminaline bağlayın.

İlave bir PoE kamera kurmak için PoE OUT(PoE ÇIKIŞ) terminalini kullanabilirsiniz.

- Bir PoE (Ethernet üzerinden Güç) özellikli yönlendiricinin PoE konektörüne bağlayın.
- IEEE 802.3at protokolü ile uyumlu bir PoE+ kullanın.
- PoE ÇIKIŞ terminali için desteklenen özelliklere uygun bir PoE kamera bağlamanızı öneririz. Sadece bir ilave kamera kurulabileceğini lütfen unutmayın.




- Birbirine ikiden fazla kamera bağlanamaz.

### Ağ Kablosu Özellikleri

| Öğe | PoE+IN (CAM 1) | PoE OUT (CAM 2) |
|---|---|---|
| Konektör | RJ-45(10/100BASE-T) | RJ-45(10/100BASE-T) |
| Ethernet | 10/100BASE-T | 10/100BASE-T |
| Kablo | 5e Kategori | 5e Kategori |
| Maks Mesafe | 100 m | 80 m |
| PoE Desteği | IEEE 802.3at | Maks. 12,95 W |

## WiFi Bağlantısı

### Kamera Ayarı

1. OTG adaptörünü (5 pimli) ve WiFi dongle'ını mikro USB terminaline bağlayın.

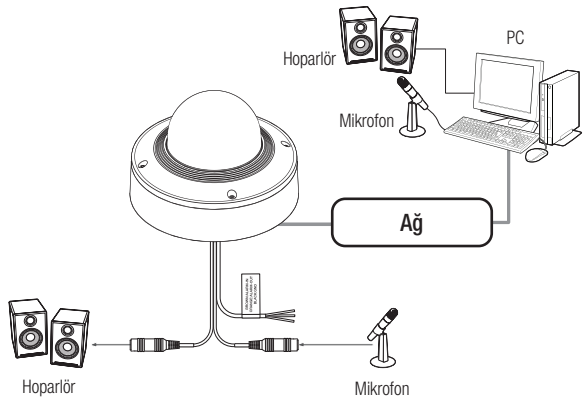
### Akıllı Telefon Kurulumu

1. Wisenet kurulum uygulamasını yükleyin.
2. WiFi'yi açtıktan sonra kamera SSID'sini seçin.
3. Wisenet kurulum uygulamasını çalıştırın.
4. Kameraya oturum açtığınızda görüntü bağlantısı kurulur.
   - Başlangıç bağlantısı esnasında, görüntüler oturum açılmadan oynatılır.
5. Akıllı telefonunuz üzerinden görüntüleri izlerken görş açısını ayarlayabilirsiniz.

### Önerilen dongle üreticisi

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

## Ses Giriş/Çıkışa Bağlamak




1. Kameranın AUDIO IN bağlantı noktasını mikrofona veya mikrofonun bağlı olduğu amplifikatörün LINE OUT bağlantı noktasına bağlayın.

   - Kameranın dahili mikrofonunu, harici mikrofon bağlantısı olmadan kullanabilirsiniz (sadece XND-6081REV/XND-8081REV için geçerlidir).

2. Kameranın AUDIO OUT bağlantı noktasını hoparlöre veya hoparlörün bağlı olduğu amplifikatörün LINE IN bağlantı no ktasına bağlayın.
3. Ses girişi için teknik özellikleri kontrol edin.

- **Ses Kodeğ**
  - Ses Girişi : G.711 PCM (Bit Hızı: 64kbps / Örnekleme Frekansı: 8kHz), G.726 ADPCM (Bit Hızı: 16Kbps, 24Kbps, 32Kbps, 40Kbps / Örnekleme Frekansı: 8kHz), AAC (Bit Hızı: 48Kbps / Örnekleme Frekansı: 16kHz)
  - Ses Çıkışı : G.711 PCM (Bit Hızı: 64kbps / Örnekleme Frekansı: 8kHz)
- **Tam ÇiftYönlü Ses**
- **Audio in (XND-6081REV/XND-8081REV)** : Seçilebilir (mikrofon/Hat girişi/Tümleşik), Desteklenen voltaj: 2.5VDC (4 mA), Giriş impedansı: 2K Ohm
- **Audio in (XNV-6081RE/XNV-8081RE)** : Seçilebilir (mikrofon/Hat girişi), Desteklenen voltaj: 2.5VDC (4 mA), Giriş impedansı: 2K Ohm
- **Audio out** : Çıkış hattı (3.5mm mono jak), Maksimum çıkış: 1Vms
- **Çıkış hattı özdirenci** : 600ohm

■ Web görüntüleyiciye erişecekseniz ve <**Video ve Ses**> - <**Ses ayarları**> seçeneğinde ses giriş kaynağı olarak harici bir mikrofon seçecekseniz, aşağıdaki teknik özellikler önerilir:

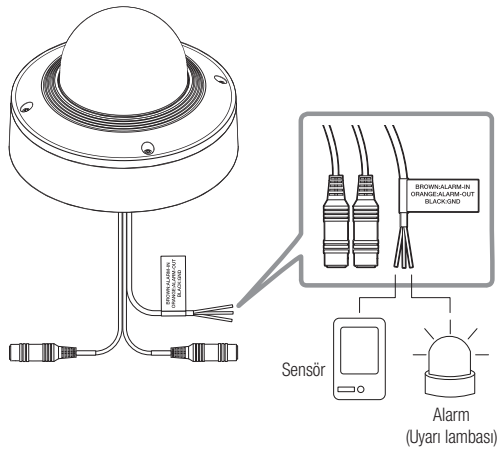
- Frekans aralığı: 40-16.000 Hz
- Empedans: 1.500 Ω
- Hassasiyet: -40±3 dB (7,1-14,1 mV)

■ Aşağıdaki durumlardan herhangi birinde, ses sınıflandırma performansı düşebilir veya bozulabilir:

- Tek seferlik ateşli silah sesi yerine kısa bir zaman aralığında sürekli olarak ateşli silah sesleri duyulursa (örn. makineli tüfek sesi)
- Gürültü, gürültü ve hedef sesin ayırt edilmesi için çok fazlaysa
- Aynı anda iki veya daha fazla farklı ses kaydediliyorsa
- Ses sınıflandırması, gürültü giderme işlevi sessiz bir yerde kullanılırken uygulanıyorsa
- Alkış veya çığlık seslerinin kaynağı kameraya yakınsa (1 metre dahilinde)
- Ses sınıflandırması kategorilerinden herhangi birine ait olmayan bir ses (uçak sesleri, siren sesleri vb.) aniden yüksek sesle duyulursa
- Harici mikrofon önerilen teknik özellikleri karşılamıyorsa"

## I/O bağlantı kutusuna bağlama

Alarm G/Ç kablosunu yuva kutusunun ilgili yuvasına bağlayın.



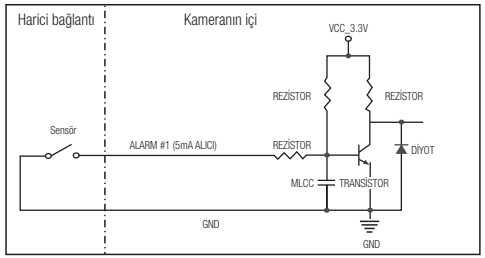

- ALARM #1 : Alarm giriş sensörünü veya harici gündüz/gece sensörünü bağlamak için kullanılır.
- ALARM #2 : Alarm çıkış sinyalini bağlamak için kullanılır.
- GND : Alarm giriş/çıkış sinyali için ortak bağlantı noktası.

■ Gerilim ve akım özelliklerini aşan cihazlar (örn. Yanıp sönen ışık ve siren) açık kolektör yöntemi kullanılarak bağlanırsa, arızaya neden olabilir.
Voltaj ve akım özelliklerini aşan cihazları bağlarken "**Alarm Çıkışı Kablo Şeması**" bölümüne bakın. (sayfa 30)

## Harici sensörü bağlamak için

Her bir sinyal hattının (2 telli) bir telini [**ALARM #1**] portuna, diğer telini ise [**GND**] portuna bağlayın.

### Alarm Girişi Kablo Şeması



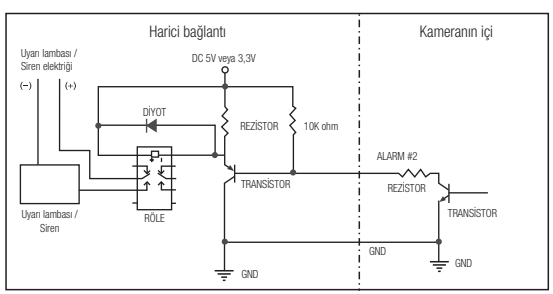

### Alarmı dışarıya bağlamak için

Gerilim ve akım özelliklerini aşan cihazlar (örn. Yanıp sönen ışık ve siren) açık kolektör yöntemi kullanılarak bağlanırsa, arızaya neden olabilir.

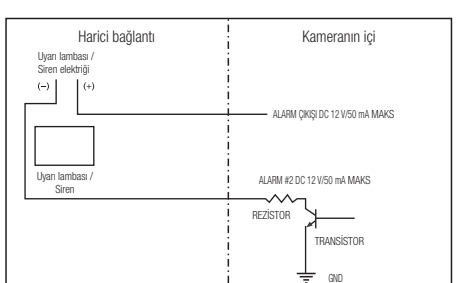
Gerilim ve akım şartnamelerini aşan cihazları bağlarken aşağıdaki alarm çıkışı şemasına bakın.

### Alarm Çıkışı Kablo Şeması

Uyarı ışığı/sireni DC 12 V/50 mA değerini aştığı zaman




Uyarı ışığı/sireni DC 12 V/50 mA değerini aşmadığı zaman

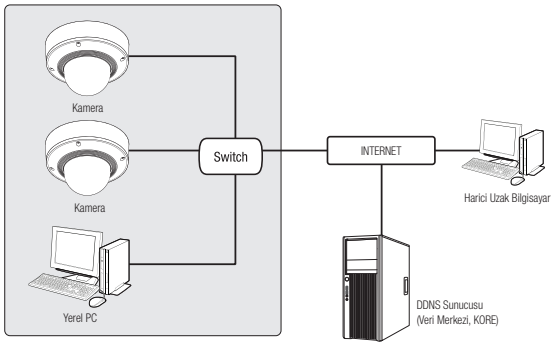


Ağ ayarlarınızı ağ yapılandırmanıza göre ayarlayabilirsiniz.

## KAMERAYI DOĞRUDAN YEREL ALAN AĞINA BAĞLAMAK

### Kameraya Lan Üzerinde Yerel Bir Pc'den Bağlanmak

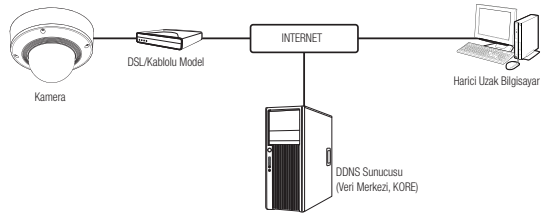
1. Yerel Pc'de Bir Internet Tarayıcı Çalıştırın.
2. Tarayıcının Adres Çubuğuna Kameranın Ip Adresini Girin.




<Yerel Ağ>

- Eğer Port Yönlendirme Doğru Ayarlanmamışsa Ya Da Bir Güvenlik Duvarı Ayarlıysa, Lan Ağı Dışından Harici Bir Pc Internet Üzerinden Kameraya Bağlanamayabilir.
  Bu Durumda, Sorunu Çözmek Için, Ağ Yöneticisi Ile Temas Kurun.
- IP adresi fabrika ayarlarına göre otomatik olarak DHCP sunucusundan atanır.
  Kullanılabilen DHCP sunucusu yoksa, IP adresi 192.168.1.100 olarak ayarlanır.
  IP adresini değiştirmek için Device Manager'ı kullanın.
  Device Manager'ın kullanımı hakkında daha fazla bilgi için, "**Device Manager'ı Kullanma**" kısmına bakın. (Sayfa 32)

## KAMERANIN DOĞRUDAN BIR DHCP TABANLI DSL/KABLOLU MODEME BAĞLANMASI




1. Kullanıcı bilgisayarını doğrudan ağ kamerasıyla bağlayın.
2. Device Manager'ı çalıştırın ve İnternet'e bağlanmak için masaüstünüzdeki web tarayıcısını kullanabilmek amacıyla kameranın IP adresini değiştirin.
3. İnternet tarayıcısını kullanarak web görüntüleyiciye bağlanın.
4. [**Ayarları**] sayfasına gidin.
5. [**Ağ**] – [**DDNS**] sayfasına gidin ve DDNS ayarlarını yapılandırın.
6. [**Basic**] – [**IP & Bağlantı Noktası**] öğesine gidin ve IP türünü [**DHCP**] olarak ayarlayın.
7. Bilgisayarınızdan kaldırılan kamerayı doğrudan modeme bağlayın.
8. Kamerayı yeniden başlatın.

- DDNS ayarı hakkında bilgi almak için Web Viewer'ın çevrimiçi yardım bölümüne bakın.
- IP biçimi ayarlama hakkında bilgi için, Web Viewer'ın çevrimiçi yardım bölümüne bakın.

## DEVICE MANAGER'I KULLANMA

- Device Manager programı, Hanwha Vision web sitesindeki <**Support**> – <**Online Tool**> menüsünden indirilebilir (https://www.HanwhaVision.com).
- Device Manager hakkında daha fazla talimatı, ana sayfanın <**Yardım**> menüsünde bulabilirsiniz.

## KAMERAYI OTOMATIK OLARAK ARAMA

Kamera, Device Manager'ın kurulu olduğu PC ile aynı ağa bağlıysa, arama fonksiyonunu kullanarak ağ kamerasını bulabilirsiniz.

1. Device Manager'ın ana sayfasındaki <**Ara**> seçeneğine tıklayın.
2. Listeden kamerayı kontrol edin.
   - Kameraya yapıştırılmış etiketteki MAC adresini kontrol edin.

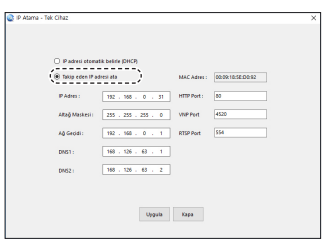
## IP ADRESINI YAPILANDIRMA

Kamera ağ ayarını değiştirmek istiyorsanız, <**Durum**> kısmında <**Oturum Açma Tamam**> işareti gösteriliyor olmalıdır. Oturum açmak için ana sayfadaki <**Kimlik Doğrulama**> seçeneğine tıklayın.

### Statik IP'yi yapılandırma

IP adresi ve port bilgilerini manuel olarak ekleyin ve yapılandırın.

1. Listeden IP ayarını değiştirmek istediğiniz kameraya tıklayın.
2. Device Manager'ın ana sayfasındaki <**IP Assign (IP Atama)**> seçeneğine tıklayın.
3. <**Takip eden IP adresi ata**> seçimini yapın.
   - Kameranın IP bilgileri önceden ayarlandığı gibi görüntülenecektir.
4. IP ve Port ile ilgili kategorileri doldurun.



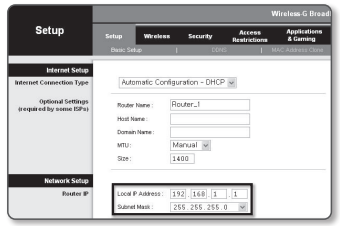

#### Bir Geniş Bant yönlendirici kullanılmıyorsa

Ağ yöneticisinden <**IP Adres**>, <**Altağ Maskesi**>, <**Ağ Geçidi**> değerlerini ayarlamasını isteyin.

- HTTP Port : Kameraya İnternet tarayıcı kullanılarak erişmek için kullanılır; varsayılan değer 80'dir.
- RTSP Port : Gerçek zamanlı akışı kontrol eden bir porttur. İlk değeri 554'tür.

#### Bir Geniş Bant yönlendirici kullanılıyorsa

- IP Address : IP aralığında kalan ve Geniş Bant yönlendirici tarafından verilen bir adres girin.
  örn) 192.168.1.2~254, 192.168.0.2~254, 192.168.XXX.2~254
- Subnet Mask : Geniş Bant yönlendiricinin <**Subnet Mask**>'i, kameranın <**Subnet Mask**>'i olacaktır.
- Gateway : Geniş Bant yönlendiricinin <**Local IP Address**>'i, kameranın <**Gateway**>'i olacaktır.




- Ayarlar, bağlı Geniş Bant yönlendiricisinin modeline göre farklılık gösterebilir. Daha ayrıntılı bilgi için, geçerli yönlendiricinin kullanım kılavuzuna bakın.
- Geniş bant yönlendiricinin bağlantı noktası iletimi hakkında daha fazla bilgi için bkz. "**Bağlantı Noktası Aralığı Aktarım (Bağlantı Noktası Eşleme) Ayarı**". (sayfa 34)

#### Geniş Bant yönlendiriciye bağlı birden fazla kamera varsa

IP ile ilgili ayarları ve Bağlantı Noktası ile ilgili ayarları birbirinden ayrı şekilde yapılandırın.

örn)

| Kategori | | Kamera No. 1 | Kamera No. 2 |
|---|---|---|---|
| **IP ile ilgili ayarlar** | IP Address<br>Subnet Mask<br>Gateway | 192.168.1.100<br>255.255.255.0<br>192.168.1.1 | 192.168.1.101<br>255.255.255.0<br>192.168.1.1 |
| **Bağlantı noktası ile ilgili ayarlar** | HTTP Port<br>RTSP Port | 8080<br>554 | 8081<br>555 |

- <**HTTP Port**> 80 dışında bir değere ayarlanmışsa, kameraya erişebilmek için öncelikle İnternet tarayıcısının adres çubuğuna <**Port**> numarasını girmeniz gerekir.
  örn) http://IP adresi : HTTP bağlantı noktası
  http://192.168.1.100:8080

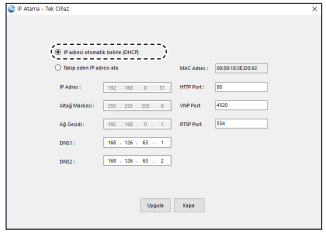
5. [**Uygula**] Düğmesine tıklayın.
6. Başarılı mesajı görüntülenirse, [**Tamam**] seçeneğine tıklayın.

### Dinamik IP'yi Yapılandırma

DHCP'den IP adresini alın

- Dinamik IP ortamı örneği
  - Kameraların bağlı olduğu bir Geniş Bant yönlendiricisine DHCP sunucusu tarafından bir IP adresi atanmışsa
  - Kamera, DHCP protokolleri kullanılarak doğrudan modeme bağlanıyorsa
  - IP'ler LAN aracılığıyla dahili DHCP sunucusu tarafından atanmışsa

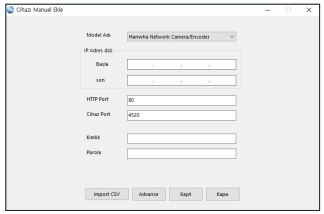
1. Listeden IP ayarını değiştirmek istediğiniz kameraya tıklayın.
2. Device Manager'in ana sayfasındaki <**IP Assign (IP Atama)**> seçeneğine tıklayın.
3. <**IP adresi otomatik olarak belirle (DHCP)**> seçimini yapın.
4. [**Uygula**] düğmesine tıklayın.
5. Başarılı mesajı görüntülenirse, [**Tamam**] seçeneğine tıklayın.




## KAMERAYI MANUEL OLARAK KAYDETME

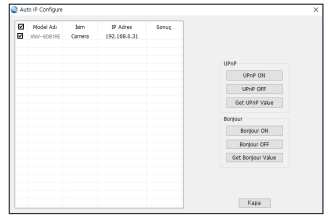
Kameranın arama fonksiyonu kullanılarak bulunamaması durumunda, kamera harici ağa bağlıysa, IP bilgileri manuel şekilde eklenerek kamera uzaktan kaydedilebilir.

1. Device Manager'ın ana sayfasındaki <**Cihaz Ekle**> – <**Cihazı Manuel Ekle**> seçeneğine tıklayın.
2. Aradığınız IP adresi aralığını ekleyin.
3. Kaydettiğiniz kameranın <**Model adı**> seçin ve HTTP portu, kimlik ve şifre bilgilerini ekleyin.
4. [**Kayıt**] düğmesine tıklayın.
5. Kameranın kayıtlı olup olmadığını kontrol edin.
   - Kameraya yapıştırılmış etiketteki MAC adresini kontrol edin.




## IP'YI OTOMATIK OLARAK YAPILANDIRMA

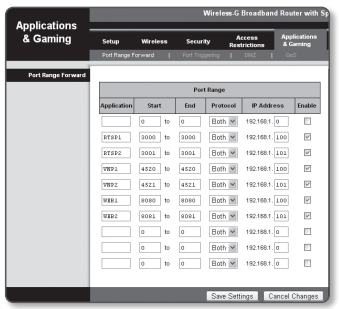
1. Listeden IP'sini otomatik olarak yapılandırmak istediğiniz kameraya tıklayın.
2. Device Manager'ın ana sayfasındaki < **+** > seçeneğine tıklayın.
   - Ekipman Ayarı menüsü görünür.
3. Menüde <**Auto IP Configre (Oto IP Yapılandır)**> seçeneğine tıklayın.
4. [**Kapa**] düğmesine tıklayın.



## BAĞLANTI NOKTASI ARALIĞI AKTARIM (BAĞLANTI NOKTASI EŞLEME) AYARI

Bir kameranın bağlı olduğu bir Geniş Bant yönlendiriciyi kurarken, uzak bir bilgisayarın yönlendiricideki kameraya erişebilmesi için, Geniş Bant yönlendiricide bağlantı noktası aralığı aktarımını ayarlamanız gerekir.

### Manuel Bağlantı Noktası Aralığı Aktarımı



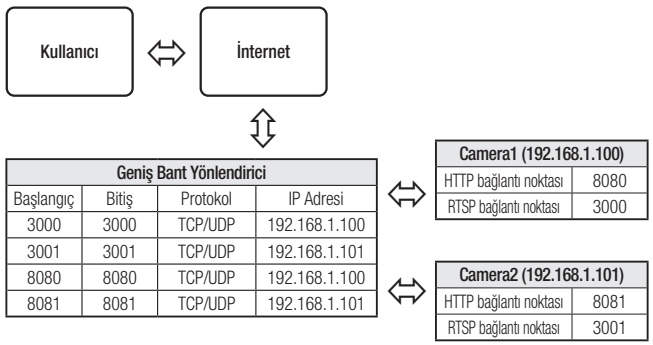

1. Geniş Bant yönlendiricinin Ayarlar menüsünden, <**Applications & Gaming**> - <**Port Range Forward**> öğelerini seçin.
   Bir üçüncü şahıs Geniş Bant yönlendiricisi için bağlantı noktası aralığı aktarımını ayarlamak için, ilgili Geniş Bant yönlendiricinin kullanıcı kılavuzuna başvurun.
2. Geniş Bant yönlendiriciye bağlı her bir kamera için <**TCP**> ve <**UDP Port**> ayarlarını yapın.
   IP yönlendirici ile yapılandırılacak her bir bağlantı noktasının sayısı, kamera web görüntüleyicisinde <**Ayarları**> - <**Basic**> - <**IP & Bağlantı Noktası**> bölümünde belirlenen port sayısına göre ayarlanmalıdır.
3. İşlem tamamlandığında [**Save Settings**] düğmesini tıklatın.
   Ayarlarınız kaydedilir.

- Port yönlendirme ayarı, CISCO IP yönlendirici ayarına bir örnektir.
- Ayarlar, bağlı Geniş Bant yönlendiricisinin modeline göre farklılık gösterebilir. Daha ayrıntılı bilgi için, geçerli yönlendiricinin kullanım kılavuzuna bakın.

### Faklı Ağ Kameraları için Bağlantı Noktası Aralığı Aktarım Ayarı

- Geniş Bant yönlendirici cihazda, yapılandırma web sayfası ile Bağlantı Noktası İletme kuralı belirleyebilirsiniz.
- Kullanıcı kamera ayar ekranını kullanarak herhangi bir portu değiştirebilir.

Kamera 1 ve Kamera 2 bir yönlendiriciye bağlandığında :




| Geniş Bant Yönlendirici | | | |
|---|---|---|---|
| Başlangıç | Bitiş | Protokol | IP Adresi |
| 3000 | 3000 | TCP/UDP | 192.168.1.100 |
| 3001 | 3001 | TCP/UDP | 192.168.1.101 |
| 8080 | 8080 | TCP/UDP | 192.168.1.100 |
| 8081 | 8081 | TCP/UDP | 192.168.1.101 |

| Camera1 (192.168.1.100) | |
|---|---|
| HTTP bağlantı noktası | 8080 |
| RTSP bağlantı noktası | 3000 |

| Camera2 (192.168.1.101) | |
|---|---|
| HTTP bağlantı noktası | 8081 |
| RTSP bağlantı noktası | 3001 |

- Yönlendiricinin UPnP (Evrensel Tak ve Çalıştır) özelliğini desteklemesi galinde, port yönlendirme ek yönlendirici kurulumu olmadan yapılabilir.
  Ağ kablosunu bağladıktan sonra, "**Ayarlar** -> **Ağ** -> **DDNS**" içinde <**DDNS**> altında <**Hızlı Bağlantı**> menüsündeki onay kutusunu işaretleyin.

## KAMERAYA PAYLAŞILAN BIR YEREL BILGISAYARDAN BAĞLANMA

1. Device Manager'ı çalıştırın.
   Bağlı kameralar taranır ve kameraların bir listesi görüntülenir.
2. Bir kameraya erişmek için üzerine çift tıklatın.
   İnternet tarayıcı başlatılır ve kameraya bağlanır.

▪ Kameraya, bulunan kameranın IP adresini İnternet tarayıcının adres çubuğuna yazarak da erişebilirsiniz.

## KAMERAYA İNTERNET ARACILIĞIYLA UZAK BIR BILGISAYARDAN BAĞLANMA

Kullanıcılar, Geniş Bant Yönlendiricisinin ağ kümesinde bulunmayan bir uzak bilgisayarda, kameranın DDNS URL'sini kullanarak bir Geniş Bant Yönlendiricisi ağı içindeki kameralara erişebilirler.

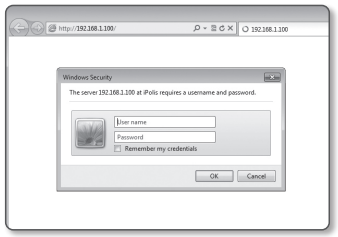
1. Geniş Bant yönlendirici ağındaki bir kameraya erişebilmek için, öncelikle Geniş Bant yönlendirici için bağlantı noktası aralığı aktarımını ayarlamış olmanız gerekir.
2. Uzak bilgisayardan İnternet tarayıcıyı başlatın ve kameranın DDNS URL adresini veya Geniş Bant yönlendiricinin IP adresini adres çubuğuna yazın.
   örn) http://ddns.hanwha-security.com/ID

▪ DDNS kullanmak için, DDNS ana sayfasında (http://ddns.hanwha-security.com) kaydolun ve ürünü [**DDNS Ayarlarım**]> [**Ürün Kaydı**] seçeneği altında kaydedin.

## KAMERAYA BAĞLAMA

### Normal koşullar altında aşağıdakileri yapmanız gerekir

1. İnternet tarayıcıyı başlatın.
2. Kameranın IP adresini adres çubuğuna yazın.
   örn) • IP adresi (IPv4) : 192.168.1.100 → http://192.168.1.100
   - Oturum Açma iletişim kutusu açılır.
   • IP adresi (IPv6) : 2001:230:abcd: ffff:0000:0000:ffff:1111
   → http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - Oturum Açma iletişim kutusu açılır.




### HTTP bağlantı noktası 80 dışında bir değer ise

1. İnternet tarayıcıyı başlatın.
2. Kameranın IP adresini ve HTTP bağlantı noktası numarasını adres çubuğuna yazın.
   örn) IP adresi: 192.168.1.100: HTTP bağlantı noktası numarası (8080)
   → http://192.168.1.100:8080 - Oturum Açma iletişim kutusu açılır.

### URL adresinin kullanılması

1. İnternet tarayıcıyı başlatın.
2. Kameranın DDNS URL adresini adres çubuğuna yazın.
   örn) URL adresi : http://ddns.hanwha-security.com/ID
   - Oturum Açma iletişim kutusu açılır

■ Yalnızca LAN ortamında ağ bağlantısı devre dışı bırakılır.

### UPnP üzerinden bağlanma

1. UPnP protokolünü destekleyen istemciyi veya işletim sistemini çalıştırın.
2. Arama yapmak için kamera adına tıklayın.
   Windows işletim sisteminde, ağ menüsünden aranan kamera adına tıklayın.
   - Oturum açma penceresi görüntülenir.

### Bonjour üzerinden Bağlanma

1. Bonjour protokolünü destekleyen istemciyi veya işletim sistemini çalıştırın.
2. Arama yapmak için kamera adına tıklayın.
   Mac işletim sisteminde, Safari'nin Bonjour sekmesinden aranan kamera adına tıklayın.
   - Oturum açma penceresi görüntülenir.

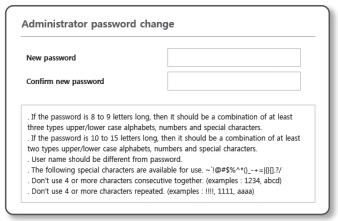
### DDNS adresinin kontrol edilmesi

Kamera doğrudan DHCP tabanlı bir kablo modem veya DSL modemine bağlıysa, ISP'ye (abone olduğunuz internet sağlayıcı şirket) her bağlanma denemesinde IP adresi değişir.
Böyle bir durumda DDNS tarafından değiştirilen IP adresi size bildirilmez.

DDNS sunucusuyla dinamik IP bazlı bir aygıt kaydettiğinizde aygıta erişmeye çalıştığınızda değişen IP'yi kolayca kontrol edebilirsiniz.
Cihazınızı <**DDNS**> sunucusuna kaydetmek için http://ddns.hanwha-security.com adresini ziyaret edin ve öncelikle cihazınızın kaydını yapın ve sonra Ağ Görüntüleyici'yi <**Ağ**> - <**DDNS**> <**DDNS**> olarak ayarlayın ve DDNS kaydı için kullanılan <**Ürün Kimliği**> girin.

## ŞIFRE AYARI

Ürüne ilk kez erişim sağladığınızda, oturum açma şifresini yaratmanız gerekir.

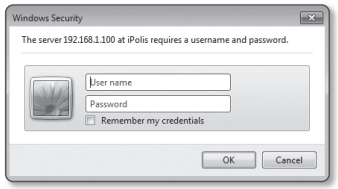



- 8 ile 9 haneli yeni bir şifrede, şunlardan en az üçünü kullanmanız gerekir: büyük/küçük harfler, sayılar ve özel karakterler. 10 ile 15 haneli bir şifrede, yukarıda belirtilen türlerden en az ikisini kullanmanız gerekir.
  - İzin verilen özel karakterler. : ~`!@#$%^*()_-+=|{}[].?/
- Daha üst seviyede güvenlik için şifrelerinizde aynı karakterlerin veya ardışık klavye girişlerinin tekrarlanmaması önerilir.
- Şifrenizi kaybettiyseniz, ürünü sıfırlamak için [**RESET**] düğmesine basabilirsiniz. Bir deftere not ederek ya da ezberleyerek şifrenizi kaybetmeyin.

## OTURUM AÇMA

Kameraya her erişiminiz sırasında oturum açma penceresi görünür.
Kameraya erişmek için Kullanıcı Kimliği'ni ve şifrenizi girin.

1. <**User name**> giriş kutusuna "**admin**" yazın.
   Yönetici kimliği olan "**admin**" sabittir ve değiştirilemez.
2. Şifreyi <**Password**> giriş alanına girin.
3. [**OK**] öğesine tıklayın.
   Oturum Açma başarılı olduğunda, Live Viewer ekranı açılır.




- Kameranın web görüntüleyicisine eriştiğinizde, görüntü verilerinin şifrelenip şifrelenmediğini kontrol ederek güvenliğe çok dikkat edin.

- Giriş işleminiz tamamlandığında "**Remember my credentials**" seçeneğini işaretlediğinizde, bir sonraki girişinizde oturum açma bilgilerini girmenize gerek kalmadan, otomatik olarak oturum açabilirsiniz.
- Ekran boyutu %100 olduğunda en iyi video kalitesine sahip olursunuz. Oran düşürüldüğünde, görüntü kenarlardan kesilebilir.

## KAMERA WEB GÖRÜNTÜLEYICISI KURULUMU

1. [**Kurulum ( )**] simgesine tıklayın.
2. Ayarlar penceresi görüntülenir.
3. Kameranın temel bilgi, video, ses, ağ, olay, analiz ve sistem ayarlarını ağ üzerinden yapılandırabilirsiniz.
4. Her işlevin detaylı tanımına bakmak için <**Yardım ( )**> düğmesine tıklayın.

## SORUN GİDERME

| SORUN | ÇÖZÜM |
|---|---|
| **Bir Windows 10 kullanıcısı Chrome veya Firefox aracılığıyla web görüntüleyiciye eriştiğinde, mikrofonun ses düzeyi periyodik olarak değişir.** | • Mikrofon sürücüsü Realtek sürücüsüne ayarlandığında ne olur. Mikrofon sürücüsü olarak Yüksek Çözünürlüklü Ses aygıtını (Windows Varsayılan Sürücü) veya üçüncü taraf sürücüyü yükleyin. |
| **Bir olay sırasında ses oynatmak için gerekli WAVE dosyalarının teknik özellikleri nelerdir?** | • 48.000 KHz veya daha düşük örnekleme hızı önerilir.<br>• Örnek başına bit sayısı (bps) için, en fazla 8/16 bit önerilir.<br>• Sadece PCM kodlama biçimi desteklenmektedir. |
| **Safari tarayıcıda eklentisiz web görüntüleyiciye HTTPS aracılığıyla erişildiğinde hiçbir video görüntülenmez.** | • HTTPS'e ilk olarak erişildiğinde, görüntülenen kimlik doğrulama açılır penceresinde, "Kimlik Doğrulama Sertifikasını Görüntüle" seçeneğine ve "Belirlenen webviewer IP adresine bağlanırken daima güven" seçim kutusuna tıklayın.<br>• Aşağıdaki mesaj penceresinde "İleri" seçeneğini seçtikten sonra web görüntüleyici halen video görüntülememeye devam ederse, Safari tarayıcıdan çıkmak için komut tuşu + Q tuşuna basın, sayfaya yeniden erişin ve yukarıda belirtilen işlemleri uygulayın. |
| **Kameraya ağ tarayıcısından erişemiyorum.** | • Kameranın Ağ ayarlarının uygun olduğuna emin olmak için kontrol edin.<br>• Bütün ağ kablolarının düzgün olarak bağlandığına emin olmak için kontrol edin.<br>• Eğer DHCP ile bağlanılmışsa, kameranın problemsiz olarak dinamik IP adresi alabildiğini kontrol edin.<br>• Eğer kamera bir Geniş Bant yönlendiriciye bağlıysa, port yönlendirmenin doğru yapılandırıldığını kontrol edin. |
| **İzleme sırasında İzleyici bağlantısı kopuyor.** | • Bağlı İzleyicilerin bağlantısı, kamerada ya da ağ yapılandırmasında yapılan değişikliklerle kopar.<br>• Bütün ağ bağlantılarını kontrol ediniz. |
| **Ağa bağlı kamera, Device Manager programında algılanmaz.** | • PC'nizdeki güvenlik duvarını kapatın ve kamerayı tekrar aratın. |
| **Görüntüler üstüste biniyor.** | • İki ya da daha fazla kameranın farklı adresler yerine tek bir multicast adrese ayarlanıp ayarlanmadığını kontrol edin. Eğer birden çok kamera için tek bir adres kullanılmışsa, görüntüler üstüste binebilir. |
| **Görüntü belirmiyor.** | • Eğer iletim yöntemi multicast olarak ayarlanmışsa, kameranın bağlandığı LAN üzerinde multicast destekleyen yönlendirici olup olmadığını kontrol edin. |

| SORUN | ÇÖZÜM |
|---|---|
| **Ses girişi ayarları yapılandırılmış olsa bile ses kaydedilmez.** | • <Basic> - <Video Profili> bölümündeki <Ses Girişi> onay kutusunu işaretlemeniz gerekir. |
| **<Analiz> öğesinde <Hareket Algılama> seçeneği <Etkinleştirin> olarak ayarlandı ancak bir analiz olayı meydana geldiğinde bile bana e-posta bildirimi ulaşmıyor.** | • Ayarları şu sırayla doğrulayın:<br>A. <Tarih ve Saat> ayarlarını kontrol edin.<br>B. <Hareket Algılama> öğesi <Etkinleştir> seçeneğine ayarlanmalıdır.<br>C. <Olay Ayarı> menüsünün <E-posta> seçeneğinin kullanım için işaretlenip işaretlenmediğini kontrol edin. |
| **Bir akıllı video analizi olayı üretildiğinde bile Alarm Çıkışı bağlantı noktasında sinyal bulunmaz.** | • Alarm çıkışı bağlantı noktası ayarlarını kontrol edin. |
| **Micro SD bellek kartına kayıt yapılamıyor.** | • Bellek kartının hasarlı olup olduğunu kontrol edin. |
| **Micro SD bellek kartı takılı ama kamera düzgün çalışmıyor.** | • Bellek kartının doğru yönde takılıp takılmadığını kontrol edin. Başka cihazlarda biçimlendirilen bir bellek kartı bu kamera biriminde çalışmayabilir<br>• <Ayarları> → <Olay> → <Depolama> menüsünde bellek kartını tekrar biçimlendirin. |
| **NAS'a kaydedilemiyor.** | • NAS'a kaydedilen bilginin doğru olduğunu doğrulayın. |
| **NAS ayarının başarısız olduğu bildiriliyor.** | • NAS IP adresinin geçerli olduğunu doğrulayın.<br>• NAS kimlik/şifre bilgilerinin geçerli olduğunu doğrulayın.<br>• NAS kimliğini kullanarak temel klasör olarak atanan klasöre erişebildiğinizi doğrulayın.<br>• NAS SMB/CIFS öğelerinin işaretli olmadığını doğrulayın.<br>• NAS IP adresi ile kamera IP adresi biçiminin aynı olduğunu doğrulayın. Örn.) NAS ve kamera alt ağ maskesi varsayılan değeri 255.255.255.0'dır. IP adresi 192.168.20.32 olduğunda NAS IP adresinin 192.168.20.1~192.168.20.255 aralığında olması gerekir.<br>• Kaydedilen veya kullanılan temel klasörü biçimlendirmeden başka bir kullanıcı olarak erişim sağlamaya çalışarak kontrol edin.<br>• Önerilen NAS ekipmanını kullandığınızı doğrulayın. |
| **Kameralarımı NVR üzerinde kaydederken, çoğu zaman CAM1 ve CAM2 kurulumunun düzgün şekilde yapılmadığını görüyorum. Bu durumda ne yapmalıyım?** | • Bu kamera için NVR'de kayıt işlemi yaparken manuel giriş önerilir.<br>• Kameranızı NVR PnP modunda kaydetmek istiyorsanız, ilk önce CAM1'i (PoE Genişletme kamerası) NVR'ye bağlayın ve ardından CAM2'yi (diğer Hanwha ağı kamerası) CAM1'in PoE ÇIKIŞ portuna bağlayın. Bu işlemden sonra, CAM2'yi otomatik arayın veya kaydetmek için manuel girişi kullanın. |

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|---|---|---|
| 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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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.

We are required to state that

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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.

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

1. to transmit a work to a large number of specific persons through the Internet communication, broadcasting, and the like;

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.

**3.** In accordance with the license granted under Article 4.1 above, the Source Code User may perform the following acts:

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.

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**1.** Neither T-Engine Forum nor the copyright holder of the Source Code shall be liable for any damages (including, but not limited to, damages resulting from loss of profit, business interruption, loss of business information or any other pecuniary damage) arising out of use or impossibility of use of the Source Code, even if T-Engine Forum and the copyright holder have been informed of the possibility of such damages.

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**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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Julian Seward, jseward@bzip.org

bzip2/libbzip2 version 1.0.5 of 10 December 2007

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Iperf performance test

Mark Gates

Ajay Tirumala

Jim Ferguson

Jon Dugan

Feng Qin

Kevin Gibbs

John Estabrook

National Laboratory for Applied Network Research

National Center for Supercomputing Applications

University of Illinois at Urbana-Champaign

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Jean-loup Gailly Mark Adler

jloup@gzip.org madler@alumni.caltech.edu

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

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Hanwha Vision üretimin tüm aşamalarında çevreye özen gösterir ve müşterilerine daha çevre dostu ürünler sağlayabilmek için gerekli tedbirleri alır.
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