

# Netzwerkamera NWB6434M/ NWB6435M

## Kurzanleitung

### 1. Einleitung

Lesen Sie diese Hinweise und die Anleitung vollständig durch. Diese Anleitung gehört zu diesen Produkten und enthält wichtige Hinweise zur Inbetriebnahme und Handhabung.

Beachten Sie immer alle Sicherheitshinweise. Sollten Sie Fragen haben oder unsicher in Bezug auf die Handhabung der Geräte sein, dann holen Sie den Rat eines Fachmannes ein. Bewahren Sie diese Anleitungen bitte sorgfältig auf und geben Sie sie ggf. an Dritte weiter.

Die ausführliche Bedienungsanleitung sowie das deutsche Sprachpaket finden Sie auf der beiliegenden CD sowie zum Download auf [www.indexa.de](http://www.indexa.de).

### 2. Lieferumfang

- 1 x Kamera mit Wandarm
- 1 x Montageschrauben
- 1 x DC-Adapter
- 1 x Inbusschlüssel
- 1 x Bohrschablone
- 1 x Anschlusshülse RJ45
- 1 x Kurzanleitung
- 1 x Software-CD

### 3. Technische Daten und Anschlüsse

Sensor:	1/3 Zoll CMOS (4 Megapixel)
Motorzoom-Objektiv:	2,8-12 mm (NWB6434M) 6-22 mm (NWB6435M)
Erfassungswinkel:	82-32° horizontal (NWB6434M) 38-16° horizontal (NWB6435M)
Auflösung:	2592 x 1520 bei 20 bps oder 2560 x 1440 bei 25 bps
Lichtempfindlichkeit:	0,5 Lux (F1.4 Farbe); 0,2 Lux (s/w) 0 Lux (mit IR)
Tag/Nacht-Umschaltung:	automatischer IR-Filter-Austausch
Infrarotausleuchtung:	850 nm Wellenlänge bis zu 40 m (NWB6434M) bis zu 50 m (NWB6435M)
Kompression:	H.265 / H.264 / MJPEG
Spannungsversorgung:	12 V DC (max. 750 mA) oder PoE 802.3af (max. 9 W)
Anschlüsse:	RJ-45 Ethernet; DC Anschluss, BNC
Farbe:	weiß ähnlich RAL 9003

Betriebstemperatur: -10 bis +40° C  
Schutzart: IP66  
Abmessungen: Ø 77 x 127 mm  
ONVIF: 2.61 - 19.78

### 4. Ausstattung



- 1 Infrarot-LEDs
- 2 Helligkeitssensor
- 3 Reset-Taste (unter der Klappe)  
SD-Karten-Einschub (unter der Klappe)
- 4 DC 12 V-Anschluss
- 5 Video-Ausgang (PAL)
- 6 RJ45-Buchse

### 5. Systemanforderungen an einen Computer

Für eine normale Anwendung sollte ein Computersystem über diese minimalen Systemanforderungen verfügen:

- CPU: min. P4 und höher
- Grafikkarte: mehr als 256 MB Grafikkarte
- RAM: min. 1 GB Arbeitsspeicher (Empfehlung: 2 GB oder höher)
- OS: Windows 7 und 8
- Web Browser: Internet Explorer 8 bis 11

## 6. Hardware-Installation

Prüfen Sie vor der Montage der Kamera das Kamerabild. Nehmen Sie hierzu die Kamera in Betrieb und halten Sie die Kamera an die gewünschte Stelle. Verändern Sie bei Bedarf die Kameraposition, bis Sie den optimalen Bildausschnitt haben.

Folgende Punkte sollten bei der Montage berücksichtigt werden:

1. Die Kamera sollte so angebracht werden, dass möglichst kein direktes Licht bzw. Sonneneinstrahlung auf das Objektiv fällt, sonst kann das Bild übersteuert werden. Platzieren Sie die Kamera in Innenräumen so, dass möglichst keine Beleuchtung und kein Fenster im Bild zu sehen sind. Im Außenbereich sollte die Kamera so hoch gesetzt werden, dass sie nach unten schaut und kein Himmel im Bild zu sehen ist. Denken Sie auch daran, dass die Position der Sonne nicht konstant ist. Achten Sie darauf, dass sich keine großen hellen Objekte im Nahbereich befinden, da durch die integrierte Infrarotbeleuchtung die helle Reflexion des Infrarotlichtes durch diese Objekte zur Übersteuerung führt.
2. Schützen Sie die Infrarotfläche möglichst vor Regen, da Regentropfen direkt vor dem Objektiv das Infrarotlicht verstärkt reflektieren und so zur Übersteuerung führen können.
3. Achten Sie darauf, dass der Montageort der Kamera möglichst staub- und vibrationsfrei ist, und dass eine gute Luftzirkulation gegeben ist.
4. Achten Sie darauf, dass sich eine geeignete Durchführungsmöglichkeit für das Stromversorgungs- und das Netzwerkkabel am Montageort befindet.
5. Soll die Kamera im Außenbereich montiert werden, sollte der Montageort nach Möglichkeit vor direktem Regeneinfall geschützt sein. Das Netzgerät muss geschützt werden. Die Stecker-

verbindung zum Netzgerät und die Netzwerkverbindung müssen so geschützt werden, dass keine Nässe in die Verbindung gelangen kann.

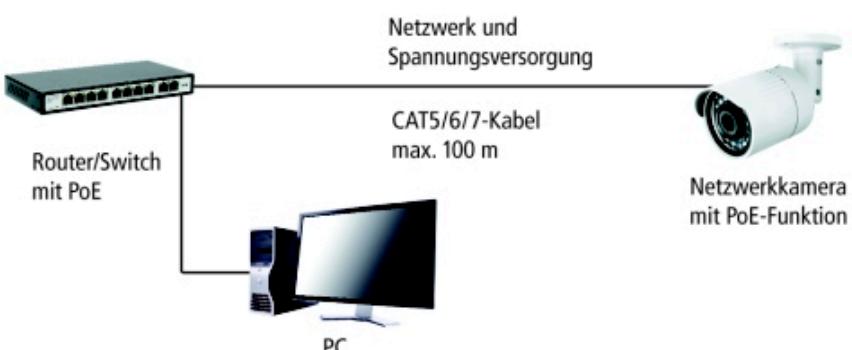
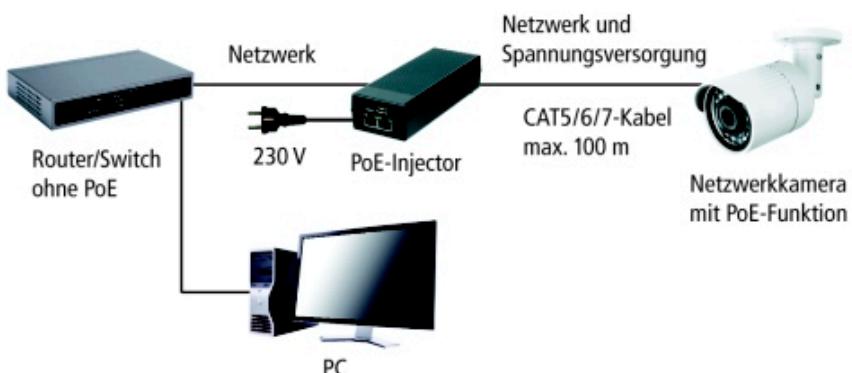
6. Durch die Eigenwärmeentwicklung der Kamera ist in der Regel keine zusätzliche Heizung erforderlich. Um jedoch Kondenswasserbildung im Winter zu vermeiden, muss die Kamera immer mit Strom versorgt werden. Wird die Kamera für eine längere Zeit ohne Spannungsversorgung betrieben, muss die Kamera aus dem Außenbereich entfernt werden, da sonst Luftfeuchtigkeit in die Kamera eindringen kann.

Wenn die Kamera zur Montage / zum Einrichten geöffnet werden muss, sollte dies nur bei niedriger Luftfeuchtigkeit durchgeführt werden, da sich ansonsten Kondenswasser in der Kamera bildet und dies zum Beschlagen der Scheibe/Kuppel führen kann. Zur Beseitigung dieser Feuchtigkeit muss die Kamera in einem trockenen Raum mehrere Stunden geöffnet laufen. Evt. können zur Feuchtigkeitsbindung Silikatpäckchen in die Kamera eingesetzt werden, die nach einer gewissen Zeit ausgetauscht werden sollten, damit die gesammelte Feuchtigkeit nicht wieder abgegeben wird (abhängig vom Material).

### Kabelverbindungen:

1. Die Kamera kann mit einem separaten Netzgerät versorgt werden. Die Netzwerkleitung muss mit einem Router/Switch verbunden werden.
2. Alternativ kann die Kamera mit PoE verbunden werden. Hierzu muss die Netzwerkleitung mit einem Router/Switch mit PoE Funktion oder einem PoE-Injektor verbunden werden. Ein Netzgerät ist hier für die Kamera nicht erforderlich.

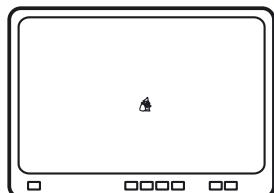
#### Einsatz von PoE (Power over Ethernet):



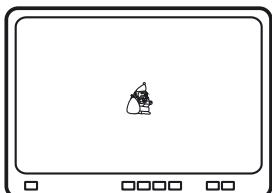
## 7. Gewünschter Blickwinkel / Detailerkennung festlegen

Entsprechend dem Zweck der Überwachung muss der Blickwinkel festgelegt werden. Je größer der Bildausschnitt, desto weniger Details sind erkennbar.

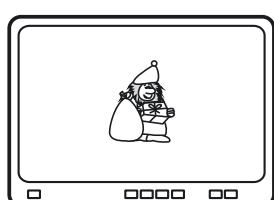
Beispiele der Detailerkennung einer Person:



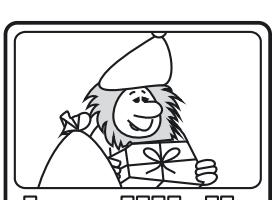
Wahrnehmen



Detektieren

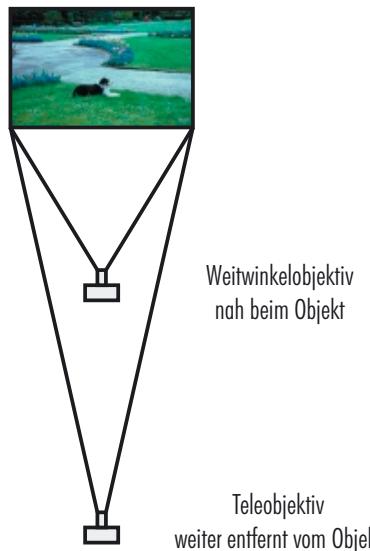


Erkennen

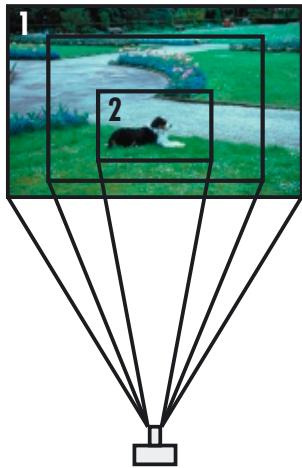


Identifizieren

Das von der Kamera erfasste Bild ergibt sich aus der Entfernung zwischen Kamera und Objekt und dem Objektivwinkel:



Das Objekt erscheint bei beiden Objektiven gleich groß und deswegen genauso detailliert.



Der Weitwinkel zeigt einen größeren Bildausschnitt



Der Telewinkel zeigt mehr Details

Ein kleiner Verlust der Detailerkennung durch Bildbearbeitung und Komprimierung muss berücksichtigt werden. Verluste entstehen durch Bearbeitung von Digitalrecordern, durch Aufzeichnung und Wiedergabe und durch Netzwerkübertragung oder Internetübertragung.

## 8. Platzierung

Überprüfen Sie am Besten vor der Montage das Kamerabild. Nehmen Sie hierzu das Gerät in Betrieb und halten Sie die Kamera an die gewünschte Stelle. Verändern Sie bei Bedarf die Kameraposition oder stellen Sie das Objektiv ein, bis Sie den optimalen Bildausschnitt gefunden haben.

Achten Sie auf folgende Punkte:

- Die Kamera sollte so angebracht werden, dass möglichst kein direktes Licht oder Sonneneinstrahlung auf das Objektiv fällt, ansonsten kann das Bild übersteuert werden. Platzieren Sie die Kamera in Innenräumen so, dass möglichst keine Beleuchtung und kein Fenster im Bild zu sehen sind. Im Außenbereich sollte die Kamera so hoch angebracht werden, dass sie nach unten schaut und kein Himmel im Bild zu sehen ist. Denken Sie auch daran, dass die Position der Sonne nicht konstant ist.



falsch



richtig

- Bei Kameras mit integrierter Infrarotbeleuchtung achten Sie darauf, dass sich keine großen hellen Objekte im Nahbereich befinden, da die helle Reflexion des Infrarotlichtes durch diese Objekte zur Übersteuerung führt und der Hintergrund dadurch dunkler erscheint.
- Schützen Sie Kameras mit integrierter Infrarotausleuchtung möglichst vor Regen, da Regentropfen direkt vor dem Objektiv das Infrarotlicht verstärkt reflektieren.
- Achten Sie darauf, dass der Montageort der Kamera möglichst Staub- und vibrationsfrei ist, und dass eine gute Luftzirkulation gegeben ist.
- Achten Sie darauf, dass sich eine geeignete Durchführungsmöglichkeit für das Stromversorgungs- und das Videoausgangskabel am Montageort befindet.
- Wollen Sie die Kamera im Außenbereich montieren, sollte der Montageort nach Möglichkeit vor direktem Regeneinfall geschützt sein. Das Netzgerät muss geschützt sein. Die Steckerverbindung zum Netzgerätkabel muss so geschützt werden, dass keine Nässe in die Verbindung gelangen kann.

- Durch die Eigenwärmeentwicklung der Kamera ist in der Regel keine zusätzliche Heizung nötig. Um Kondenswasserbildung im Winter zu vermeiden, muss die Kamera immer mit Strom versorgt werden.

## 9. Einstellung des Objektivs

Die Kamera ist mit einem Motorzoom-Objektiv mit Autofokus ausgestattet. Der gewünschte Bildausschnitt ist wie in Kapitel 7 beschrieben einzustellen. Die Einstellung wird über das Menü der Kamera vorgenommen (siehe Kapitel 11, Punkt 6.).

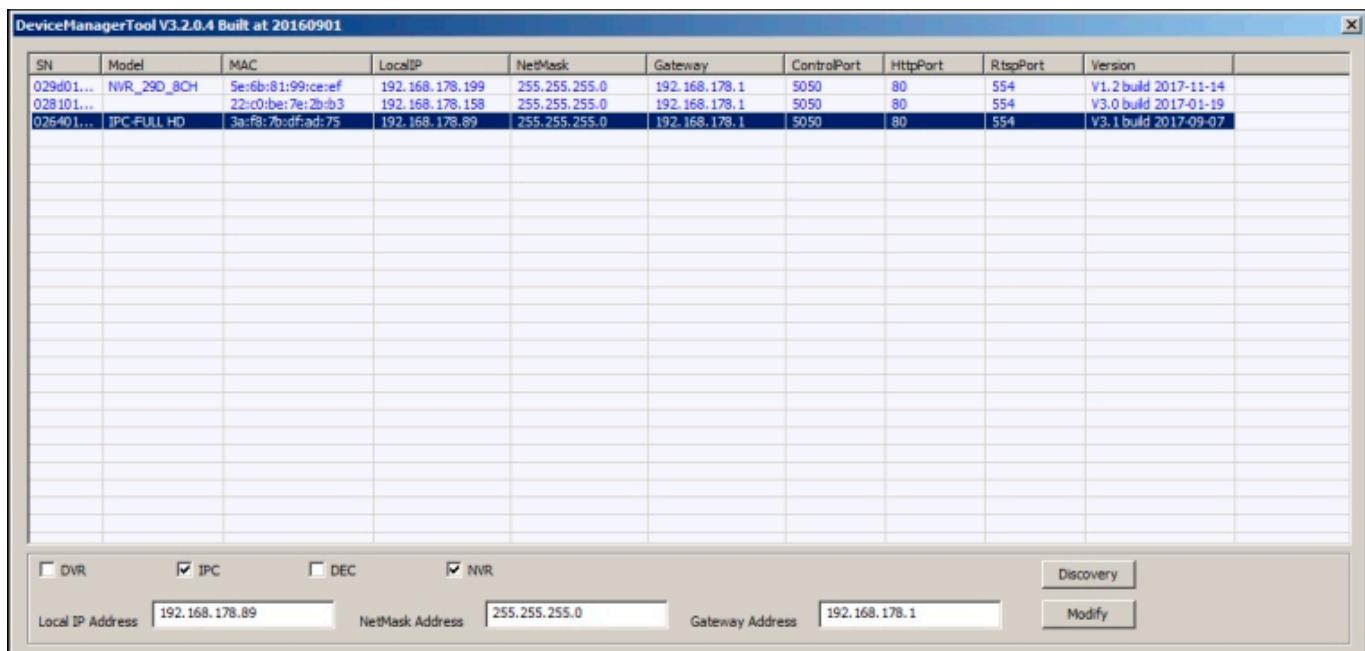
Der horizontale Erfassungswinkel beträgt 82-32°. Der vertikale Erfassungswinkel ergibt sich aus dem Format 16:9 bzw. 4:3.

Der Bildausschnitt ergibt sich aus der Entfernung zwischen Kamera und Objekt.

## 10. Erste Inbetriebnahme

Lesen Sie diese Hinweise und die Anleitung vollständig durch, bevor Sie das Produkt in Betrieb nehmen. Sind alle Anschlüsse korrekt angeschlossen, können Sie die Kamera starten. Ein Startvorgang dauert zirka 3-4 Minuten.

- Starten Sie die Software "Device Manager Tool" von der CD (Such Tool).
- Setzen Sie in der Software den Haken bei IPC (Kamera Suche), und klicken Sie auf „DISCOVERY“. Die Software durchsucht das Netzwerk nach angeschlossenen Geräten.
- In einem Netzwerk mit DHCP-Server wird die IP-Adresse vom DHCP-Server vergeben. Ohne einen DHCP-Server werden die Kameras eine unbestimme IP-Adresse annehmen. Es wird empfohlen, den Kameras eine feste IP-Adresse zu geben, um zu gewährleisten, dass die Kamera immer die gleiche IP-Adresse hat. Klären Sie vor der IP-Vergabe die Adresse mit dem Netzwerkverantwortlichen ab.
- Um eine Verbindung mit einer Kamera aufzubauen, müssen sich der PC/NVR und die Kamera im gleichen Netzwerk befinden (z.B. 192.168.000.xxx).
- Alle gefundenen Geräte werden in der Software angezeigt.
- Möchten Sie eine IP-Adresse ändern, wählen Sie die Kamera aus, so dass sie blau hinterlegt ist. Dann ändern Sie die Daten unten ab und schließen die Änderung mit „MODIFY“ ab.
- Öffnen Sie den Internet Explorer, und geben Sie die IP-Adresse der Kamera ein.



- Sie werden aufgefordert ein Passwort einzugeben. Da es sich um eine neue Kamera handelt, ist noch kein Admin-Passwort vergeben. Klicken Sie auf „SUBMIT“.



10. Sie werden aufgefordert, ein Admin-Passwort anzulegen, bestätigen Sie dies mit „OK“.



11. Geben Sie ein Admin-Passwort ein und bestätigen Sie dies. Schließen Sie die Erstellung mit „SAVE“ ab.

Add/Modify User

User Name:	admin
Password:	*****
Confirm pwd:	*****

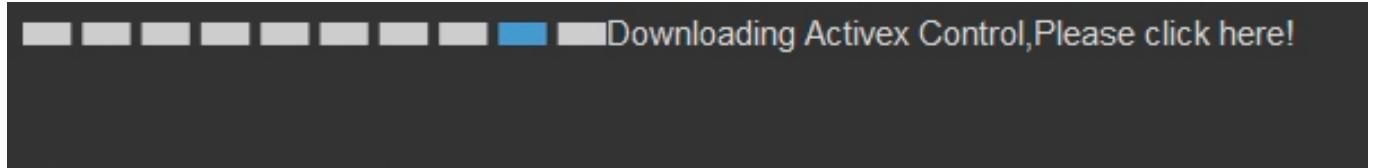
**pwdstrength:weak**

Save      Return

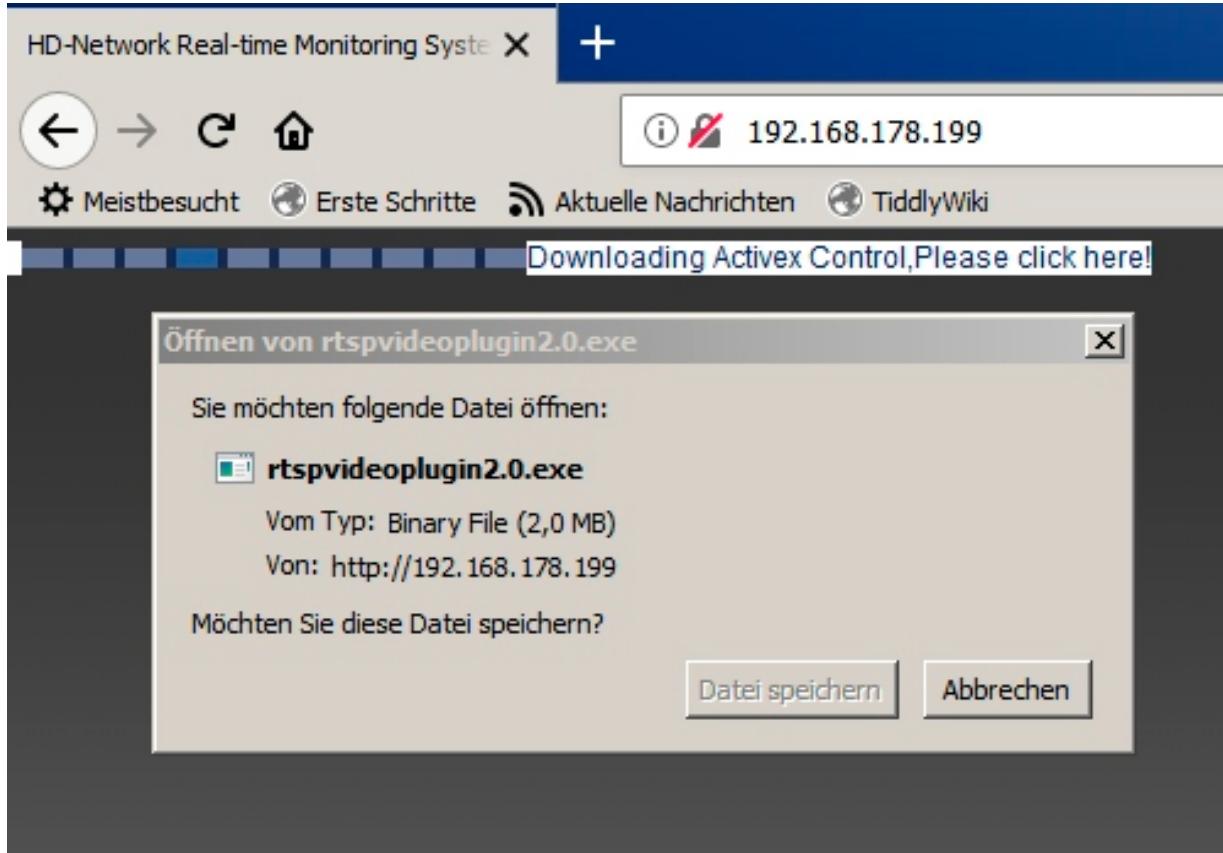
12. Geben Sie nun das Passwort für den Admin ein und melden Sie sich an.



13. Sollte das ActiveX Plug In noch nicht installiert sein, klicken Sie auf diese Mitteilung:



14. Installieren Sie das „ActiveX Plug In“.



15. Melden Sie sich nun bei der Kamera an.



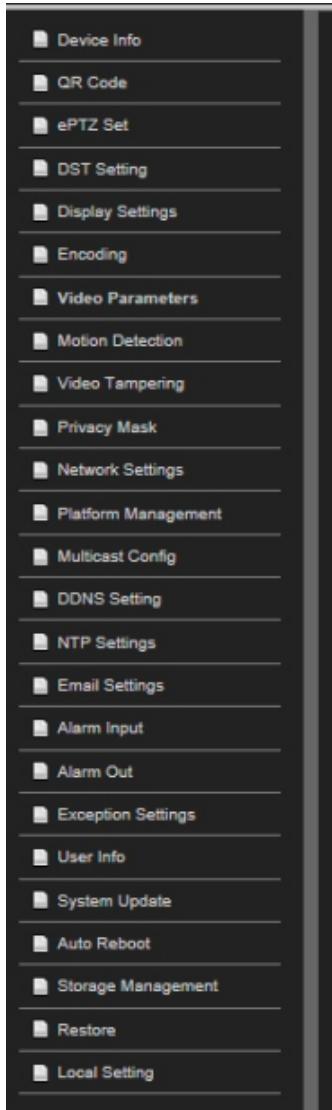
## 11. Hauptfenster



1. Einstellung des Stream-Typs
2. Live-Ansicht: Live-Bild anzeigen
3. Setup: Einstellungen der Kameras
4. File: Zugriff auf gespeicherte Daten (modellabhängig)
5. Log: Abfrage der Log-Dateien
6. Steuerung von PTZ-Kameras (modellabhängig NWxxxM Serie)

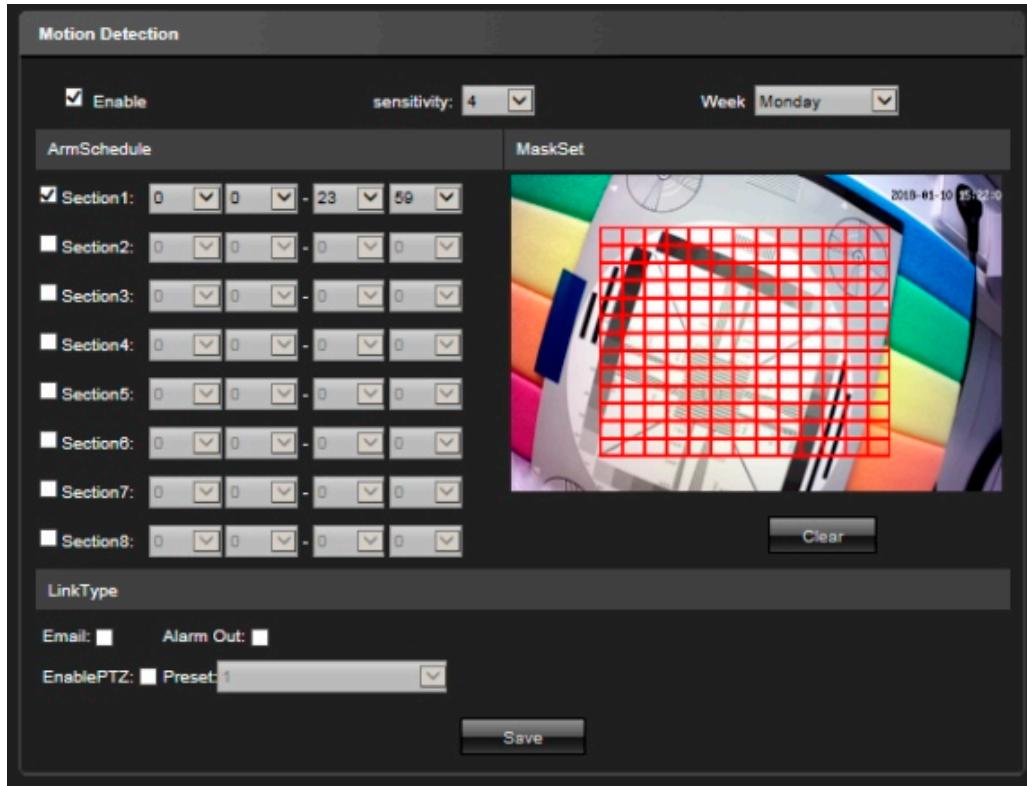
Modelle mit der Endung "M" verfügen über ein Objektiv mit Motorzoom. Durch - und + kann das Objektiv angepasst werden. Nach einer kurzen Pause stellt die Kamera die Schärfe automatisch ein. Eine Fernsteuerung ist über "Focus" und "Iris" möglich.

## 12. Einstellungen (Setup)



Hier können die verschiedenen Einstellungen der Kamera durchgeführt werden. Weitere Informationen zu den Einstellungen finden Sie in der Hauptanleitung auf der CD.

## Motion Detection



ENABLE: Bewegungserkennung aktivieren

SENSITIVITY: Einstellung der Empfindlichkeit

ARMSCHEDULE: Einstellung des Aktivierungszeitplans

LINKTYPE: Einstellung der möglichen Aktionen (modellabhängig)

MASKSET: Einstellen der auszuwerteten Fläche

EMAIL: Mailversand bei Bewegung

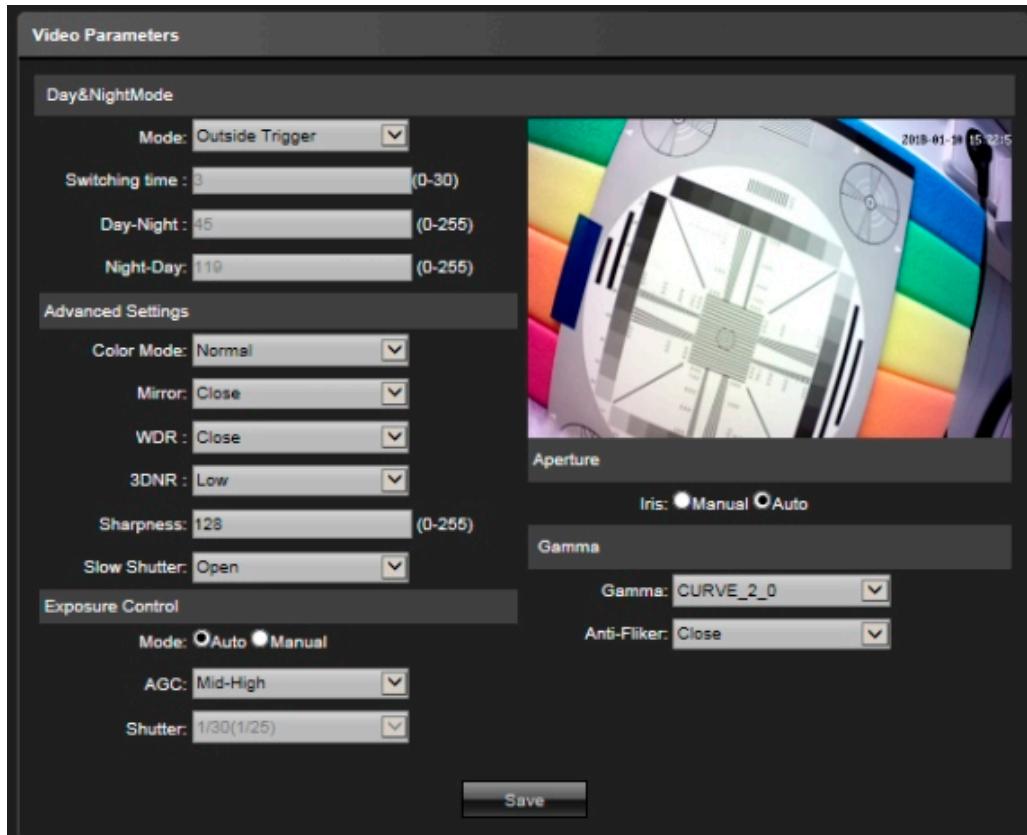
SNAP: Schnappschuss auf SD-Karte

RECORD: Videoaufnahme auf SD-Karte

ALARM OUT: Alarmausgang

Weitere Informationen zu den Einstellungen finden Sie in der Hauptanleitung auf der CD.

## Video Parameters



Mode: Einstellen des Arbeitsmodus (Farbe/s-w/Auto)

Mirror: Bild spiegeln und/oder drehen

AGC: Gain Kontrolle (empfohlen: MidHigh oder High)

WDR: Empfindlichkeit der WDR

3DNR: Einstellung für die Digital Noise Reduction

Weitere Informationen zu den Einstellungen finden Sie in der Hauptanleitung auf der CD

## QR-Code

Den benötigten QR-Code für eine P2P-Verbindung in der APP finden Sie hier:

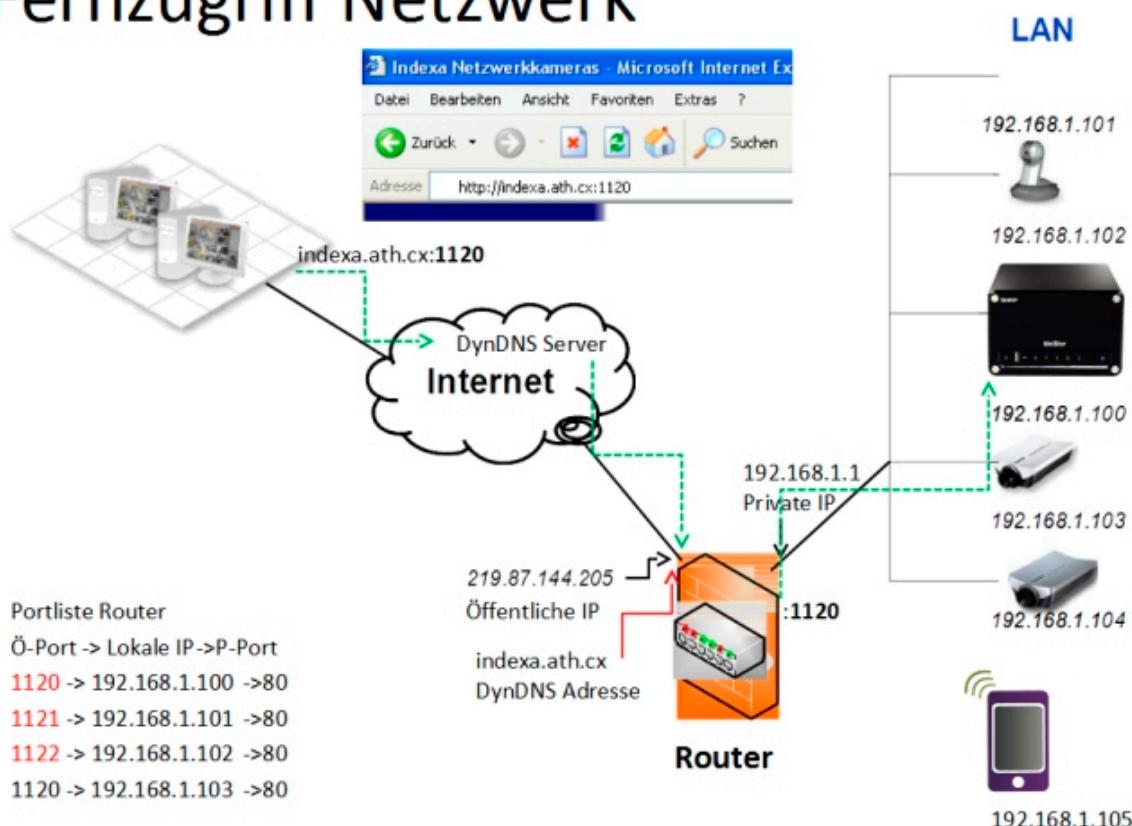


## 13. Fernzugriff

### 13.1 Allgemein

1. Die Geschwindigkeit eines Fernzugsgriffs hängt von vielen Faktoren ab. Am Netzwerk der Kamera wird eine hohe "Upload"-Geschwindigkeit benötigt (über 10Mbit/s empfohlen) und am Endgerät (PC oder Smartphone) eine hohe "Download"-Geschwindigkeit. Insbesondere bei Smartphones ist auf eine ausreichende Geschwindigkeit (Netz) zu achten.
2. Ein Fernzugriff im lokalen Netzwerk kann einfach mit der lokalen IP-Adresse erfolgen. Eine weitere Programmierung ist nicht erforderlich.
3. Ein Fernzugriff über das Internet mit einem PC oder Smartphone ist über eine "Fest-IP" (vom Provider erhalten) oder über einen DynDNS-Dienst möglich.
4. Fernzugriff über einen DynDNS-Dienst:
  - a) Der lokale Router stellt die Verbindung vom lokalen Netzwerk zum Internet dar. Der Router bekommt eine öffentliche IP-Adresse, die in der Regel täglich neu vom Provider vergeben wird. Um eine feste IP-Adresse zu erlangen, kann ein DynDNS-Dienst genutzt werden. Dieser Dienst ist in der Regel kostenlos. Welcher Dienst nutzbar ist, hängt vom verwendeten Router ab.
  - b) Mit einer DynDNS-Adresse (im Beispiel: indexa.ath.cx) erreicht man den Router. Durch eine erforderliche "Portweiterleitung" im Router, wird die Anfrage vom Router zur gewünschten Kamera gesendet. Um nicht für jede Kamera eine DynDNS-Adresse anzulegen zu müssen, können über die Ports (bzw. Portweiterleitung) mit einer DynDNS-Adresse mehrere Kameras angesprochen werden (Programmierung im Router erforderlich).

## Fernzugriff Netzwerk



Router 1:	indexa.ath.cx	192.168.1.1 (lokal)
Kamera 1:	indexa.ath.cx:1120	192.168.1.103 (lokal)
Kamera 2:	indexa.ath.cx:1130	192.168.1.104 (lokal)

c) Ein Zugriff kann nun direkt über den Internet-Explorer oder die App erfolgen.

### 13.2 Portweiterleitung

Folgende Ports sind im Router freizugeben (Werkseinstellung):

Http Port: 80

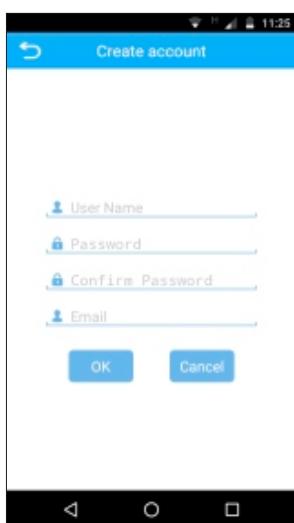
RTSP Port: 554

Device Port 5050

### 13.3 APP-Zugriff

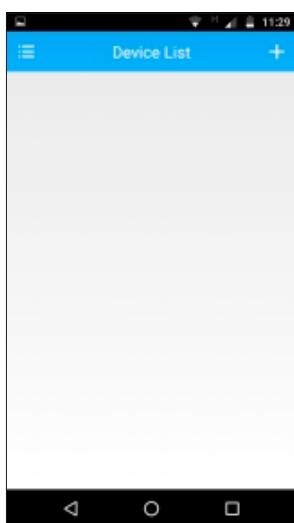
Starten Sie die kostenlose App „Fseye“. Die App ist kostenlos erhältlich für iOS und Android (durch Google lizenzierte Version).

1. Starten Sie die App und legen Sie einen Benutzer-Account an.

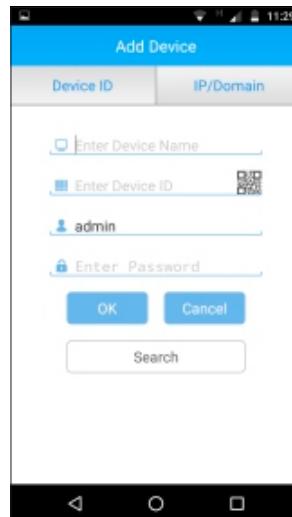


2. Melden Sie sich mit Ihren Benutzerdaten an.

3. Fügen Sie weitere Geräte mit „+“ hinzu.

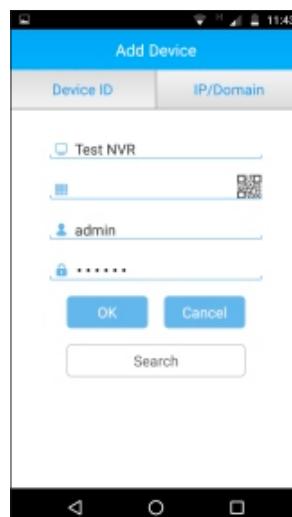


4. Sie können nun aus zwei Optionen wählen.



#### Device ID

- Mit der Device-ID können Sie einen P2P-Zugriff über den Fseye Server herstellen. Hierzu werden keine Einstellungen an einen Standard Router (mit Standardeinstellungen) benötigt. Bei Firmennetzwerken kann dieser Dienst durch Firewalls oder ähnliches geblockt werden.



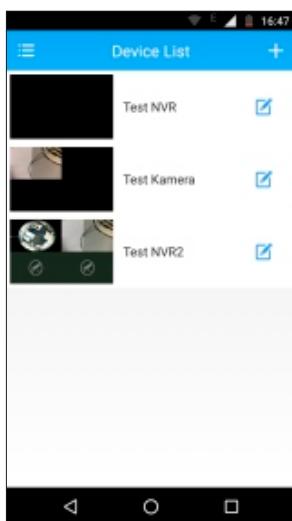
- Befinden Sie sich im gleichen Netzwerk wie die Kamera, kann die lokale Suche genutzt werden.



- Die Device ID kann auch mittels QR-Code von der Web-Oberfläche gescannt werden.

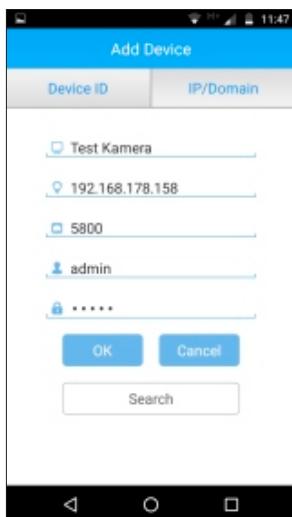


- Die geladenen Geräte (NVR/Kamera) finden Sie nun in der Übersicht (Device List).

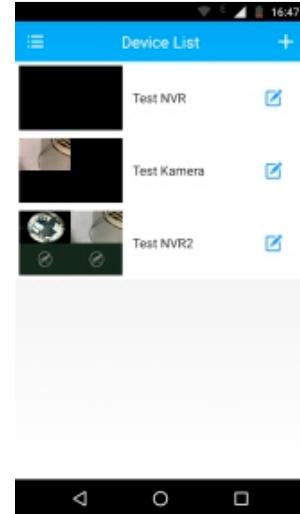


## IP/Domain

- Hier werden die Daten direkt eingeben. Entweder lokale Adressen (für eine schnellere Verbindung) oder die Daten vom DynDNS-Dienst.

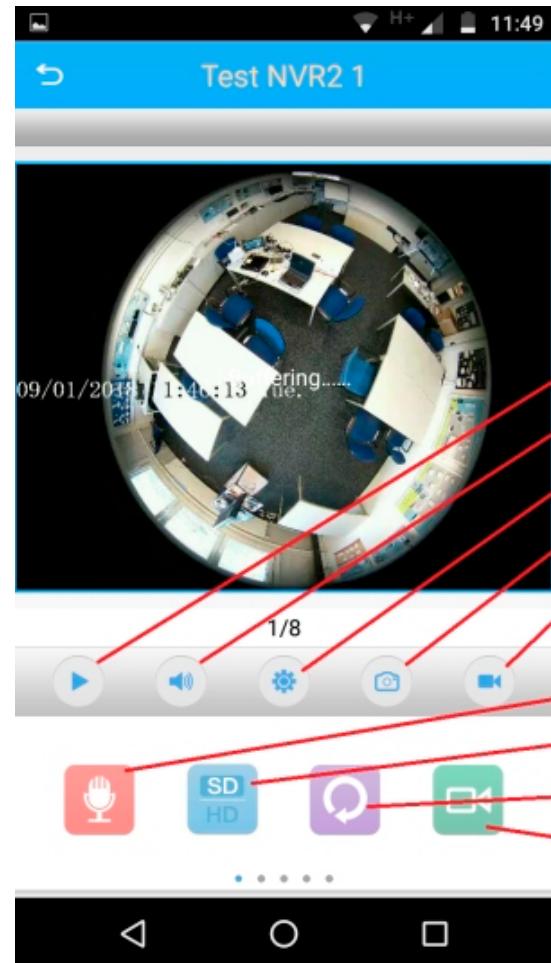


- Soll eine Verbindung aus der Ferne erfolgen, sind ein DynDNS-Dienst und die Portweiterleitung im Router erforderlich. Beachten Sie hierzu den Punkt „Fernzugriff“.
- Die geladenen Geräte (NVR/Kamera) finden Sie nun in der Übersicht (Device List).



Durch Klicken auf das entsprechende Gerät wird versucht, die Verbindung zum Gerät aufzubauen.

## Übersicht Steuerleiste



- 1 Liveansicht starten
- 2 Audio aktivieren (falls vorhanden)
- 3 Einstellung
- 4 Screenshot
- 5 Videoaufnahme
- 6 Sprechen zum NVR
- 7 Auflösung SD oder HD
- 8 Verbindung erneut aufbauen
- 9 Zugriff auf gespeicherte Daten vom NVR

## 14. Wartung und Reinigung

- Das Gerät ist wartungsfrei: Öffnen Sie niemals das geschlossene Gehäuse.
- Überprüfen Sie regelmäßig die technische Sicherheit und die Funktion.
- Ziehen Sie vor der Reinigung das Netzgerät aus der Steckdose.
- Äußerlich darf das Gerät nur mit einem weichen, nebelfeuchten Tuch oder Pinsel gereinigt werden.
- Verwenden Sie zur Reinigung keine carbonhaltigen Reinigungsmittel, Benzine, Alkohole oder ähnliches. Dadurch wird die Oberfläche des Gerätes angegriffen. Außerdem sind die Dämpfe gesundheitsschädlich und explosiv. Verwenden Sie zur Reinigung auch keine scharfkantigen Werkzeuge, Schraubendreher, Metallbürsten o.ä.

## 15. Entsorgung



Die durchgestrichene Mülltonne bedeutet, dass Sie gesetzlich verpflichtet sind, diese Geräte einer vom unsortierten Siedlungsabfall getrennten Erfassung zuzuführen.

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## 16. FAQ

### Das UpdateTool findet keine Kamera.

Die Kameras sind standardmäßig auf DHCP eingestellt, d.h. die Kameras empfangen Ihre IP-Adresse wie der Computer auch vom lokalen DHCP-Server. Ist kein DHCP-Server im Netzwerk vorhanden, werden Computer und Kameras ihre IP-Adressen selbst bestimmen (Unterschiedliche IP-Bereiche). Es können jedoch nur Kameras vom Tool gefunden werden, die im gleichen Netzwerkbereich wie der Computer liegen. Hierzu muss eventuell die IP-Adresse des Computers manuell auf die IP-Adresse der Kameras geändert werden (z.B. 192.168.12.xxx).

### Wozu dient das Plug-In?

Das Plug-In wird vom Computer für die Anzeige des Videostreams benötigt. In diesem Plug-In sind Informationen, wie z.B. Video-Codec, enthalten. Ohne dieses Plug-In kann kein Videobild im Browser dargestellt werden.

### Muss das Plug-In jedes mal bei einer Verbindung installiert werden?

Nein, das Plug-In wird nur einmal beim erstmaligen Verbinden des Computers benötigt. Allerdings muss das Plug-In für jeden Computer mit Zugriff installiert werden.

### Das Plug-In kann nicht installiert werden.

Stellen Sie Ihren Pop-up Blocker kurzzeitig aus, und stellen Sie die Sicherheitseinstellungen des Internet Explorers auf "Mittel".

### Welcher Kamera-Typ muss beim Verbinden mit einem NVR308/316 eingestellt werden?

Für Hersteller und Modell wählen Sie "ONVIF". Sie können auch nur IP-Adresse und Port angeben und "Auto Erkennung" wählen.

### Welches Kamera-Protokoll muss beim Verbinden mit einem NVR408/416 eingestellt werden?

Wählen Sie bitte "I8". Das Protokoll "ONVIF" kann mit Einschränkungen ebenfalls verwendet werden.

### Eine Verbindung mit dem P2P-Service in der App ist nicht möglich.

Dies kann mehrere Ursachen haben. Prüfen Sie die Verbindungsgeschwindigkeit der Kamera (Upload, nicht Download) und am Endgerät (Download). Weiterhin können bestimmte Sicherheitsregeln am Router (Firewall) den Verbindungsaufbau blockieren. Hier muss dann mit der Standard-Verbindung mit einem DynDNS-Dienst und entsprechender Portfreigabe programmiert werden.

### Wie lautet die URL für einen RTSP Stream?

Main Stream rtsp://<IP-Adresse>:554/ch01.264

Sub Stream rtsp://<IP-Adresse>:554/ch01\_sub.264

Eine Verbindung mit einem Stream erfordert die Eingabe von Nutzernamen und Passwort. Eine Abfrage kann deaktiviert werden (Setup / Network Settings / RTSP validation / Http-Base64).

### Gibt es eine Möglichkeit, ein Bild über einen Http-Befehl abzufragen?

Zur Zeit ist keine Abfrage über eine URL mit Http-Befehl möglich.



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74229 Oedheim,  
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