

WISENET

ネットワークカメラ

ユーザーマニュアル

PNM-9000VQ
SLA-2M2400Q/2M2800Q/2M3600Q/
2M6000Q/5M3700Q/5M4600Q/5M7000Q



ネットワークカメラ ユーザーマニュアル

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重要な安全ガイド

1. 本書の説明をよく読んで下さい。
2. 本書の指示を守ってください。
3. 全ての警告を留意してください。
4. 全ての指示に従って下さい。
5. 本機を水の傍で使用しないで下さい。
6. 柔らかく乾いた布か湿った布で製品表面の汚れた部分を拭き取ります。
(アルコール成分、溶剤、界面活性剤や油分を含む洗剤や化粧品を使用しないでください。製品の変形や損傷につながる恐れがあります。)
7. どの換気孔も塞がないようにして下さい。メーカーの指示に従って取り付けして下さい。
8. ラジエーター、熱レジスタ、あるいは熱を発生するその他の装置（アンプを含む）などの熱源の傍に設置しないで下さい。
9. 分極タイプあるいは接地タイプのプラグの安全目的を必ず守ってください。分極プラグには一方が他方より幅広い2本の足が付きます。接地プラグには2本の足とアース（接地）差込み先が付いています。2本の平たい足あるいは3本めの差込み先はユーザーの安全のために付いています。提供されたプラグがお使いのコンセントに合わない場合には、旧式のコンセントの交換について電気技師にご相談下さい。
10. 特にプラグ、ソケット、機器との接点でコードが踏まれたり引っ張られたりしないよう電源コードを保護してください。
11. メーカーが指定する付属品のみを使用してください。
12. カート、スタンド、三脚、ブラケットはメーカー指定のもの、あるいは製品と一緒に販売されたもののみを使用してください。カートを使用する場合、カートと製品を動かす際には転倒による損傷に注意してください。
13. 雷雨のときまたは長期間使用しない場合は、製品の電源プラグを抜いてください。
14. 全ての修理は資格のあるサービス・スタッフに任せて下さい。修理は電源コードあるいはプラグの損傷、液体をこぼした、または物体を機器内に落としてしまった、機器を雨や湿度にさらしてしまった、正常に機能しない、あるいは機能の低下など、様々な原因で機器が損傷した場合に必要となります。
15. この製品は、“クラス2”または“LPS”と表示があり、PoE、0.6A. の記載電源ユニットにより電気供給が行われるものとします。(PNM-9000VQ)
16. 製品取り付け時に力を入れ過ぎると、カメラが損傷し、誤作動を起こす場合があります。適切でないツールを使用して製品を力まかせに取り付けると、カメラが損傷する場合があります。
17. 化学物質やオイルミストが存在する、または生成される可能性のある場所には製品を取り付けしないでください。大豆油のような食用油によって製品が損傷を受けたりゆがんだりするため、キッチンやキッチンテーブル付近には製品を取り付けしないでください。
製品に損傷を与える原因となります。
18. 製品を取り付ける場合、製品表面が化学物質で汚染されないように注意してください。クリーナーや接着剤のような化学溶剤は、製品表面に深刻な損傷を与える原因となります。
19. 推奨されない方法で製品を取り付け/取り外した場合、製品の機能/性能は保証できません。ユーザーマニュアルの“取付けと接続”を参照して製品を取付けます。
20. 水中での製品の取付けや使用は、製品への深刻な損傷の原因となります。



警告

火災または感電防止のため、この装置を雨または湿気にさらさないでください。本製品の換気グリルまたはその他の開口部から金属製物質を差し込まないでください。

製品に液体をこぼしたりかけたりせず、また花瓶のように液体が入った物体を製品の上に載せたりしないでください。

損傷を防止するため、本製品を設置説明に従って壁/天井にしっかりと取り付けてください。

注意

	注意 感電の危険がありますので開けないで下さい	
注意: 感電の危険がありますので裏カバーは開けないで下さい。 如何なる場合にも本品の分解や改造を行わないで下さい。 資格のあるサービス・スタッフにお問い合わせ下さい。		

グラフィック記号の説明



正三角形内の稲妻型の矢印は、本製品の筐体に人が感電する恐れのある“高圧電流”が存在することを、ユーザーに警告するものです。



正三角形内の感嘆符は、製品の操作およびメンテナンス(修理)に関する重要な付属説明書があることをユーザーに知らせるものです。

概要

クラス I 構造

クラス I 構造を持つ装置は保護接地接続のある本線ソケットに接続してください。

バッテリー

電源(バッテリーパックまたは取り付けた状態のバッテリー)は直射日光の当たる場所や、熱器具の近くには置かないでください。

デバイスの切断

問題がある場合は、装置からメインプラグを抜きます。次にお住まいの地域の修理会社に電話してください。

米国外では、認証機関が採用している取付け金具用のHARコードが使用される場合があります。

注意

電池を間違ったタイプと交換すると爆発の危険性があります。指示に従って使用済み電池を処分してください。

これらの保守説明書は、資格のあるサービススタッフのみが使用するものです。感電の危険性を低減するために、資格がある場合を除き操作説明書に含まれていない修理は行わないでください。

本製品のCVBSアウト端子は、簡単なインストールのために提供されており、監視目的にはお勧めできません。

入力電源は1台のカメラにのみ使用し、他のデバイスを接続しないでください。

ITEは、外部の施設ヘルーティングなしで、PoEネットワークのみに接続することになっています。

次に示す安全のための推奨注意事項を熟読してください。

- 本製品は平らな場所に置いてください。
- 直射日光の当たる場所、暖房設備または低温区域の近くには取付けしないでください。
- 本製品を導電性の高い物体の近くに置かないでください。
- 本製品は自分で修理しないでください。
- 本製品の上に水の入ったコップを置かないでください。
- 磁気源のそばに取付けしないでください。
- 換気口は塞がないようにしてください。
- 本製品の上に重いものを置かないでください。
- カメラを取り付ける/取り外すときは、保護手袋を着用してください。製品表面は高温になるため、やけどの原因となる場合があります。

ユーザーマニュアルは、本製品の使用方法に関するガイドブックです。

このマニュアルで使用する用語の意味を次に示します。

- 参照: 製品の使用方法についてのヘルプ情報を示す場合。
 - 注意: 指示に従わないことで、ものや人に損害が発生する可能性がある場合。
- ※ 製品を使用する前に安全のためこのマニュアルを読み、大切に保管しておいてください。

特定なインストール環境で無線通信に干渉が発生する場合があります。製品と周囲の無線通信デバイスの間に電磁波干渉が発生する場合、無線通信デバイスとの間隔を拡張したり、通信用のアンテナ方向を調整することをお勧めします。

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お奨めする PC 仕様

- CPU :Intel(R) Core(TM) i7 3.4 GH以降
- 対応OS : MS Windows, Mac OS X
- **プラグインフリーのWeb Viewer**
サポートするウェブブラウザ : Google Chrome, MS Edge, Mozilla Firefox (Windows 64ビットのみ), Apple Safari (Mac OS Xでのみサポート)
検証されたOSおよびブラウザ詳細バージョン情報は、付録をご参考ください。
対応ブラウザで一部の機能は制限があります。

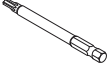
推奨マイクロSD/SDHC/SDXCメモ리카ード仕様

- 推奨容量 : 推奨容量:16GB～256GB (MLCタイプ)
- 以下の製造業者および種類のメモリーカードをこのカメラで使用することを推奨します。
 - 製造業者 : SanDisk, Transcend
 - 製品グループ: 高耐久
- UHS-3クラス(MLCタイプ)の仕様に適合する16GB以上のメモリーカードを使用することを推奨します。

キット内容 (PNM-9000VQ)

製品パッケージに、カメラと付属品がすべて同梱されていることをご確認ください。
(販売国ごとに付属品が異なるため。)

外観	品目名	数量	説明
	カメラ	1	
	クイックガイド (オプション)	1	
	保証書 (オプション)	1	
	テストモニターケーブル	1	ポータブルディスプレイデバイスとカメラとの接続をテストするために使用します
	テンプレート	1	製品設置ガイド
	L型レンチ	1	ドーム型カバーを取り外し、交換するために使用

外観	品目名	数量	説明
	タッピングネジ	4	壁または天井に取付けるために使用します
	プラスチックアンカー	4	ネジを固定するために穴に挿入します (固定力を強化)
	十字穴付きネジ	4	本製品をパイプ、壁面などに取り付ける場合または穴をふさぐときに、ドームケースを組み立てるために使用します。
	キャップインストラー	1	RJ45ケーブル接続時使用
	カード型吸湿剤	1	取り付け時に貼りつけます。
	ドリルビット	1	ドームカバーの取外し、組立て、カメラの取付けに使用

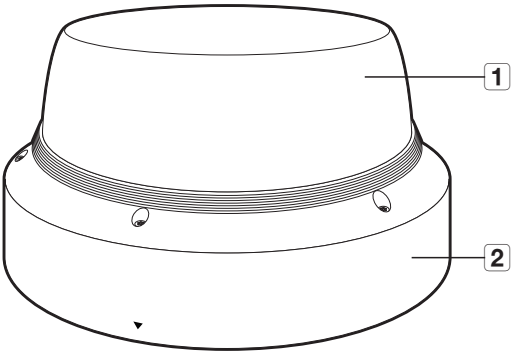
外観	品目名	数量	説明
	ケーブルブッシュ	1	直径7～8.5mm規格LANケーブル接続時に使用
	フェライトコア	1	電源及び信号端に含まれる高周波成分が外部に放出されるのを遮断する用途 ■ 電源線及びLANケーブルを2回巻きつけて使用することを推奨します。

キット内容 (レンズモジュール-オプション)

外観	品目名	数量	説明	モデル名
	レンズモジュール	1	PNM-9000VQに取り付けます。	SLA-2M2400Q
		1		SLA-2M2800Q
		1		SLA-2M3600Q
		1		SLA-2M6000Q
		1		SLA-5M3700Q
		1		SLA-5M4600Q
		1		SLA-5M7000Q

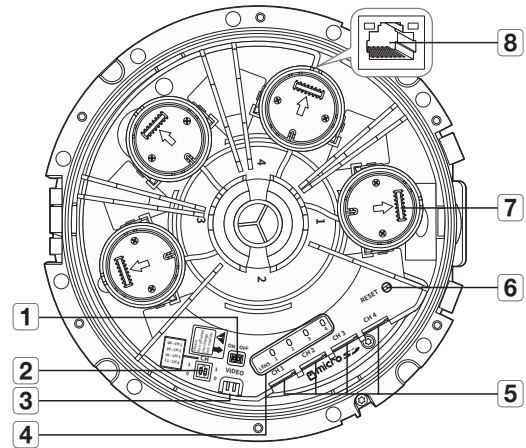
概観 (PNM-9000VQ)

外観



項目	説明
1 ドームカバー	レンズとメインユニットの保護に使用するケースカバー。
2 カメラケース	カメラ本体を保護するハウジング部分。

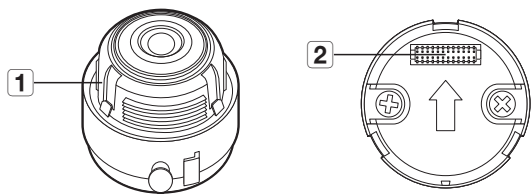
部品



項目	説明
1 電源オン/オフスイッチ	製品の電源をオン/オフにするときに使用するスイッチ ■ レンズモジュールを取り替えるときのみ使用してください。
2 チャンネル変更用DIPスイッチ	DIPスイッチを変更してインストールビデオを視聴する際に使用するチャンネルを指定します。
3 テストモニター出力	ビデオ出力のテスト監視用出力ポートです。テストモニターケーブルを使用して、モバイルディスプレイに接続し、テストビデオをチェックします。
4 レンズモジュール表示ライト(正常:緑、異常:赤)	レンズモジュールが正しく取り付けられていると、緑色のLEDが点灯し、およそ40秒後にオフになります。(不要な反射を防ぐため)
5 マイクロSDメモ리카ードの区画	マイクロSDメモ리카ードの区画。
6 リセット・ボタン	すべてのカメラ設定を工場出荷時のデフォルトに復元します。 約5秒間押し続けてシステムを再起動します。 ■ カメラをリセットすると、DHCPを有効化されるようにネットワーク設定が調整されます。ネットワーク内にDHCPサーバーがない場合、ネットワークに接続する前に、IPインストールプログラムを実行して、IPアドレス、サブネットマスク、ゲートウェイなどの基本的なネットワーク設定を変更する必要があります。
7 レンズモジュール取付け部	これはレンズモジュールに取り付ける端子です。
8 PoE+接続端子	PoE+ケーブルで電源とネットワークを接続させる端子です。

概観 (レンズモジュール)

外観



項目	説明
1 レンズモジュール	ビデオを録画するレンズモジュールです。
2 カメラコネクター	カメラと接続する端子です。

取付けおよび接続

取付け

- 本カメラは防水であり、IP66仕様に準拠していますが、外部ケーブルに接続されるジャックはそうではありません。ケーブルが外部に突出するのを防止するために軒先の下に本製品をインストールすることをお勧めします。

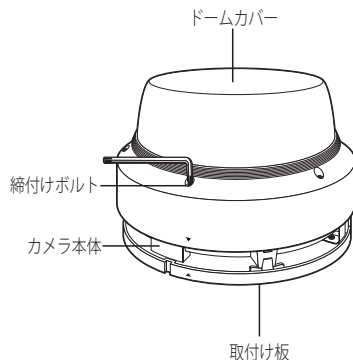
取付けに関する注意事項

カメラを取り付ける前に、以下の指示をよく読んでください。

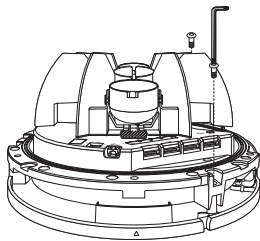
- カメラの重量の5倍以上の重さを固定できる取付け場所を選んでください。
- 引っかかっていたり、はがれたケーブルは製品の損傷または火災の原因となります。
- 安全のため、設置場所に人を近づけないでください。
また、万が一のため持ち物は取付け場所には置かないでください。
- 過剰な力で製品を取り付けると、故障によりカメラが損傷する場合があります。不適切なツールを使用して無理やり組み立てると、製品が損傷する場合があります。
- 電源がオンになっているときに、レンズモジュールを取り外さないでください。

取外し

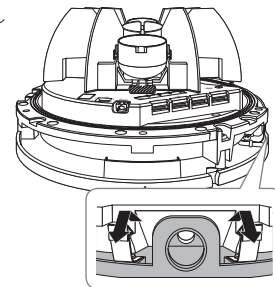
1. ドームカバーの締付けボルトを緩めてドームカバーを取り外します。アレンキーが付属のドリルビットを使用して反時計回りに回せば完了です。



2. カメラ本体の締付けボルトを緩めます。

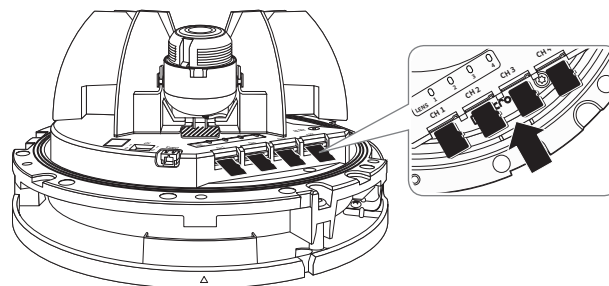


3. 図に示すように、板ばねを引っ張ってカメラ本体と取付け板を取り外します。



マイクロSDメモ리카ードの挿入

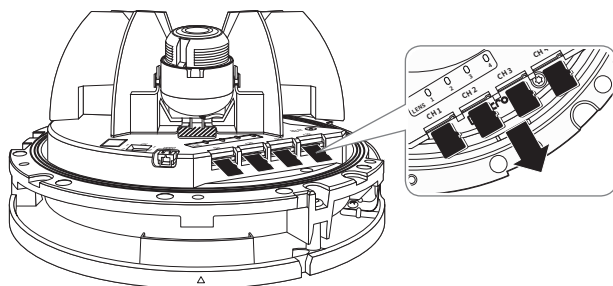
1. カメラのドームカバーを分離させてください。
2. 図のように、MicroSDカードを矢印方向へ挿入します。



- マイクロSDメモ리카ードを挿入する前に、カメラの電源ケーブルを抜いてください。
- 逆方向で無理に挿入しないでください。Micro SDメモ리카ードと製品が破損するおそれがあります。
- 雨あるいは高湿度の状態でもicroSDカードを挿入したり取り出したりすることは推奨されません。
- 取り外した製品カバーは5分以内に戻す必要があります。そうしなかった場合、内部結露が起るリスクがあります。

マイクロ SDメモ리카ードの取出し

図に示されているように、メモ리카ードの露出部分を慎重に押して、スロットからメモ리카ードを取り出します。

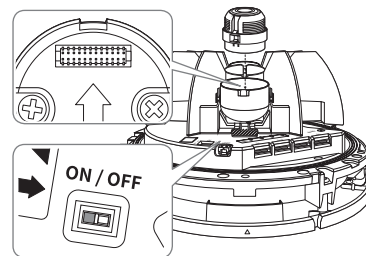


- チャンネル別にSDカードを保存してください。
- マイクロSDカードを取り出すときに、しっかりと押してから離すと、飛び出る場合がありますので注意してください。
- Micro SDメモリーカードを取り外す前に、<ストレージ>でデバイスを<Off>に設定し、[適用] ボタンを押してカメラをオフにします。
- カメラのスイッチを切るか、データの入っているマイクロSDメモリーカードを製品から抜くと、データが失われるか、または損傷を受ける場合があります。

レンズモジュールの取付け

1. レンズモジュールのコネクターと、カメラ本体のコネクターを揃えて締めます。

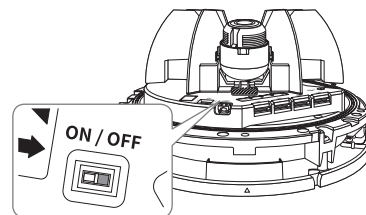
- ! ■ レンズモジュールは電源接続(PoE+)しない状態で装着してください。
- レンズモジュールを装着させる前に電源スイッチが『OFF』になっているかご確認ください。
- 製造検査時にフォーカスが調整された状態で工場から出荷されるため、別々にレンズに触れないようにすることをお勧めします。



2. レンズ取付けプロセスが完了しました。

3. 製品に電源接続(PoE+)してください。

- ! ■ 製品の電源接続(PoE+)中にレンズモジュールを取り替える場合には、電源スイッチを『OFF』に変更してレンズモジュールを取り替えてから、電源スイッチを『ON』に変更してください。
- 先が鋭い道具でスイッチを操作する場合、スイッチが破損するおそれがあるためご注意ください。
- 無理してスイッチを操作する場合、スイッチが破損するおそれがあるためご注意ください。

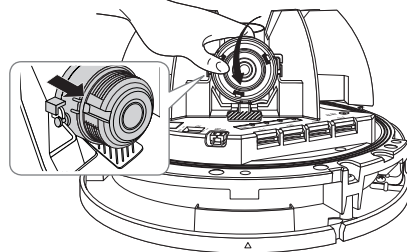


取付けおよび接続

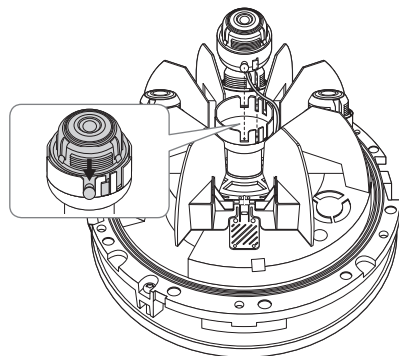
垂直落下法を使用した取り付け方法

直下式で設置して映像を見るためには一つのチャンネルのみレンズを移動することができます。この場合、移動したチャンネルのレンズ方向は90度チルトのみできます。

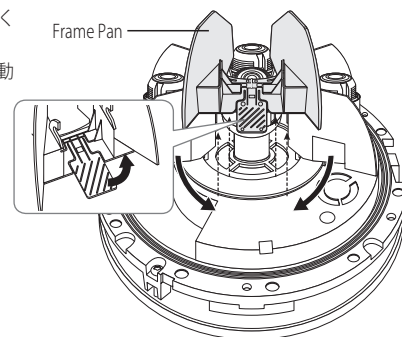
1. レンズのモジュール部を正面向きに傾けた後、引っ張ってください。



2. 溝を回転部品の中央と合わせます。



3. 斜線部分を手で持ち上げてFrame Panを分離させてください。
4. 床面のレールに沿って三つのチャンネルレンズを移動させてください。

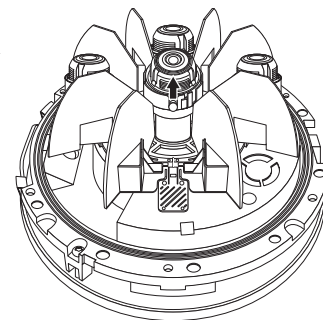


傾斜法を使用した取り付け方法

底レールに沿ってCH1～CH4のレンズを動かし、傾斜法を使用してレンズを取り付けるとビデオを視聴することができます。

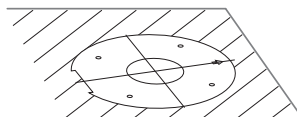
この場合、レンズの方向を90度傾けることはできません。

1. Frame Panをはめてください。
2. 直下式で設置されているレンズを回転部中心から分離させてください。
3. 床面のレールに沿って四つのチャンネルレンズを移動させてください。

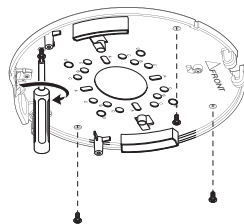


天井または壁への取付け

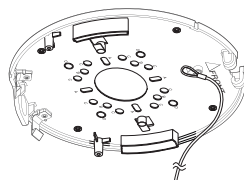
1. 付属のテンプレートを使用して取付け用の穴を開け(直径6mm、最小奥行45mm)、付属のプラスチックアンカーを奥まで挿入します。



2. プラスチックアンカーが挿入された穴にマウントプレートの設置用の穴に合わせた後、タッピングねじを締結してください。



3. 安全ケーブルを接続してください。



4. カメラ本体をマウントプレートにはめてください。
■ 図に示すようにヒンジに合わせはめてください。

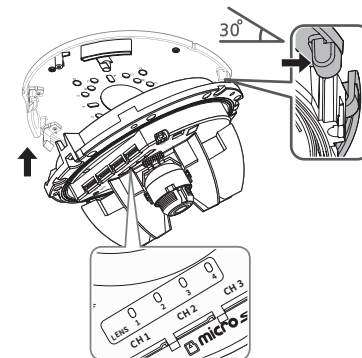
5. カメラ内部の端子と必要なケーブルを接続してください。

- ! ■ レンズモジュールが正しく取り付けられていないと、図に示すようにレンズモジュールステータスライトが赤色に点灯します。この場合は、電源スイッチをオフにして、レンズモジュールを取り付け直します。
正常に取り付けられていると、緑色に点灯して、およそ40秒後にオフになります。

6. スプリングピンを押し込んでください。

7. 「カメラのモニタリング方向を調整する」を参照して任意の方向にレンズを調整します。(17ページ)

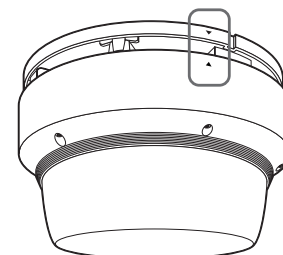
- レンズを傾ける場合は画面が遮られる場合がありますため、レンズを調整する必要があります。



8. ドームカバーを組み付けます。

- ドームカバーを組み付ける際は矢印を合わせます。

- 防水性が損なわれないよう、アレンキーまたはドリルビットを使用して締め付けねじをしっかりと締め付けます。

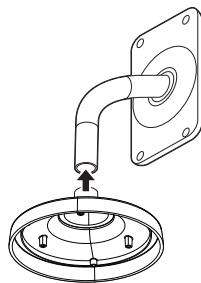


取付けおよび接続

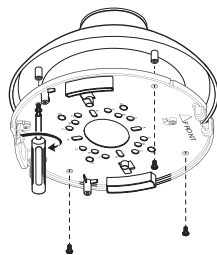
別売りのアダプタへの取付け

次のオプション（別売り）のうち必要なものを、設置場所に合わせてまたは必要に応じて選択および購入してください。

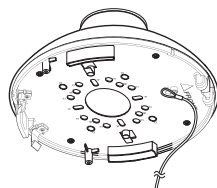
1. 壁型マウントアダプターにハンギングマウントを設置してください。
 - 壁型マウントアダプターとハンギングマウントは別売品です。



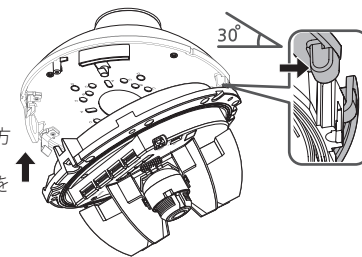
2. 取付け板とハンギングマウントをつなぎます。



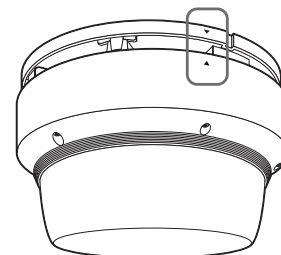
3. 安全ケーブルを接続してください。



4. カメラ本体をマウントプレートにはめてください。
 - 図に示すようにヒンジに合わせてはめてください。
5. カメラ内部の端子と必要なケーブルを接続してください。
6. スプリングピンを押し込んでください。
7. 「カメラのモニタリング方向を調整する」を参照して任意の方向にレンズを調整します。(17ページ)
 - レンズを傾ける場合は画面が遮られる場合があるため、レンズを調整する必要があります。



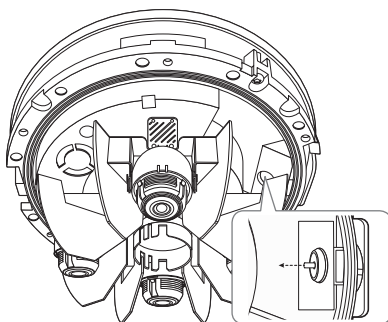
8. ドームカバーを組み付けます。
 - ドームカバーを組み付ける際は矢印を合わせます。
 - 防水性が損なわれないよう、アレンキーまたはドリルビットを使用して締付けねじをしっかりと締め付けます。



その1. LANケーブルの接続

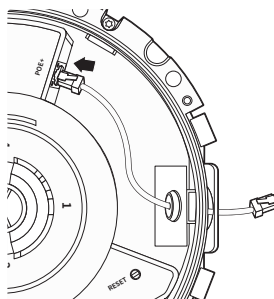
1. ドーム型カバー及びケースを取り外してください。
2. 底部のラバープラグの長く突き出た部分を引き、図に表示されているように取り外してください。

- LANケーブルと接続するのに適切なケーブルブッシュを使用してください。
- 基本のカメラ: 直径5.0~6.5mmのケーブルを使用してください。
 - 同梱のコンポーネント: 直径7.0~8.5mmのケーブルを使用してください。



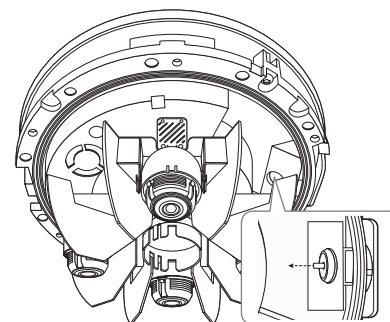
3. 2番で突出した部分を取り外してできたホールでLANケーブルを入れてください。
4. 覆いをケーブルカッターで取り外し、ケーブルを調整してください。
5. LANケーブルをLANコネクタで接続し、LANツールに挿入してください。

6. 完成したケーブルをEthernetポートに接続してください。

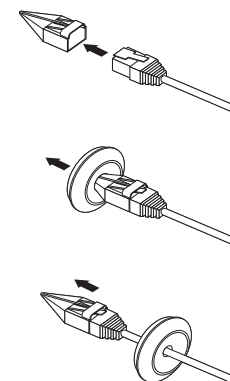


その2. LANケーブルの接続

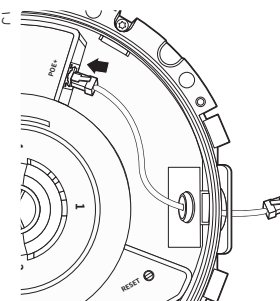
1. ドーム型カバー及びケースを取り外してください。
2. 底部のラバープラグの長く突き出た部分を引き、図に表示されているように取り外してください。
3. 穴の上のゴム製カバーを引っ張り、取り外します。



4. キャップインストーラーを使用して、RJ45ケーブルが通り抜けられるようにします。



5. 再度ゴム製ストッパを挿入し、LANケーブルをイーサネット端子に接続します。



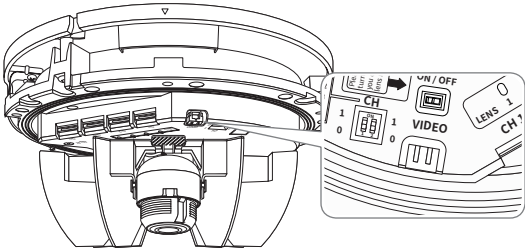
取付けおよび接続

取付けをモニタリングするチャンネルの設定方法

図に示すように、カメラ本体にはチャンネルDIPスイッチがあります。
チャンネルDIPスイッチを使用してカメラのチャンネルを変更することができます。

CH1	CH2	CH3	CH4
00	01	10	11

- 
- DIPスイッチが完全にオン/オフになっていない場合、製品に誤作動が生じる場合があります。取付け後、背面にあるDIPスイッチを確認してください。
 - 先端の尖ったツールを使用して操作するとDIPスイッチにダメージを与えるおそれがあるため、ご注意ください。
 - 過剰な力を加えて操作するとDIPスイッチにダメージを与える場合があるため、ご注意ください。



屋外設置

建物の外に本製品を取り付ける際、屋外に接続されたケーブルとの隙間から水が漏入しないように、防水ブチルゴムテープ(店舗で購入することができます)を使って防水してください。

1. PoEケーブルを接続させてください。
2. 防水ブチルゴムテープの半分以上が重なるようにして黒のケーブルジャケット（エリアA）とケーブル接続箇所を巻きつけます。

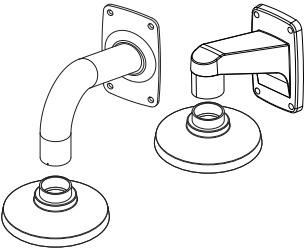


- 
- ケーブルジャケットが適切に防水加工されていない場合、それが直接漏れを引き起こす可能性があります。ケーブルをテープで何度も巻くことで保護するようにしてください。
 - 防水ブチルテープはブチルゴムで作られており、通常の2倍の長さに伸ばすことができます。

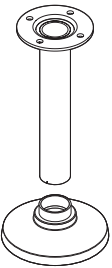
設置のためのオプション付属品

設置を容易にするため、適切なオプション付属品を購入できます。

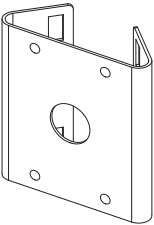
1. 壁面取付け用アダプタ（SBP-300WM/SBP-300WM1）/ハンギング・マウント（SBP-276HM）
ドーム・カメラを壁に設置するために使用するアダプタです。



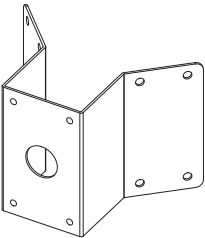
2. 天井取付け用アダプタ(SBP-300CM) /ハンギング・マウント (SBP-276HM)
ドーム・カメラをコンクリート製の天井に設置するために使用するアダプタです。



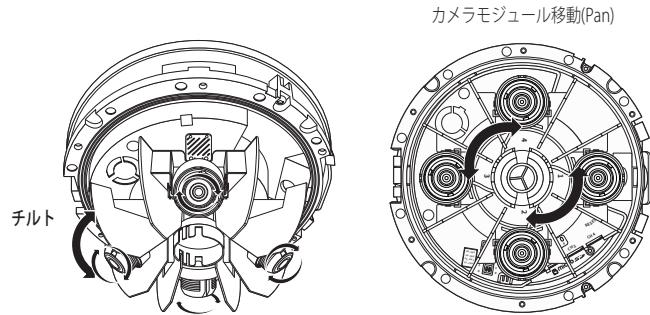
3. ポールマウントアダプター(SBP-300PM)は、ウォールマウントアダプター(SBP-300WMまたはSBP-300WM1)を80mm以上の支柱に取り付ける際に使用するアダプターです。



4. コーナー・マウント・アダプタ（SBP-300KM）
壁面取付け用アダプタ（SBP-300WMまたはSBP-300WM1）を壁接合部のコーナーに設置するためのアダプタです。



カメラの監視方向の調整



■ 監視方向の調整

カメラが天井に固定されている場合にのみカメラの方向を調整できます。
このとき、カメラモジュールを移動することPan、傾きを調整することをTilt、レンズを軸に回転させることをRotationといいます

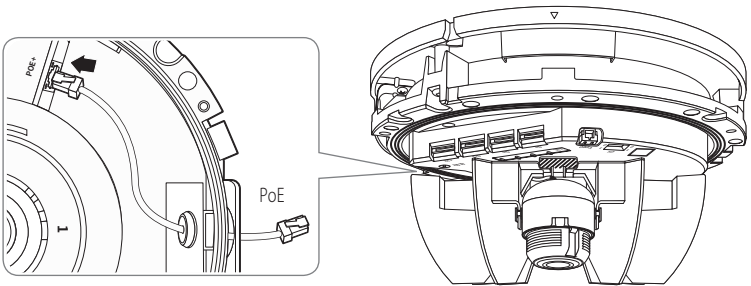
- Panの回転角度はモジュール別に-90°~+90°です。
- Rotationの回転角度は-180°~+180°です。
- Tiltの回転角度は、レンズ別に異なります。詳細仕様をご参照ください。(27ページ)

- 角度によっては画像がカメラケースによって覆われることがあります。
- Panは、回転角度以上に回さないでください。ケーブルが損傷され、製品が故障されるおそれがあります。

■ 調整方法

1. モニタリングする方向を考えてカメラを設置した後、底面のレールに沿ってPanの角度を調整してください。
2. 回転中に画像が反転して現れないように水平角度を調整します。
3. モニタリングする方向を向くようにチルト角度を調整します。

他のデバイスとの接続



- 本製品のCVBSアウト端子は、簡単なインストールのために提供されており、監視目的にはお勧めできません。

電源とネットワーク

PoE+装備とカメラのPoE端子を接続させてください。

- PoE+機能が可能なルーターを接続して使用してください。
- PoE+は、IEEE802.3at規格に対応する装備を使用してください。

ネットワークケーブルの仕様

アイテム	コンテンツ	備考
コネクタ	RJ45 (10/100/1000ベース-T)	
イーサネット	10/100/1000ベース-T	1000BASE-Tで動作させるには、Giga対応ハブでUTP-6以上のケーブルを使用しなければなりません。
ケーブル	UTP カテゴリ 6	
最大距離	100M	直流抵抗 ≤ 0.188 Ω/m
PoE+ サポート	IEEE 802.3at	

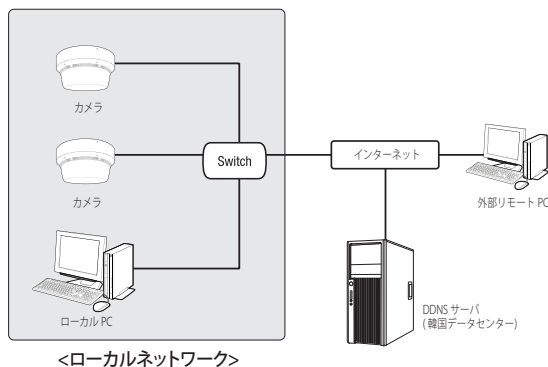
ネットワーク接続と設定

使用中のネットワーク環境に合わせてネットワークを設定することができます。

カメラを直接ローカルネットワークに接続する

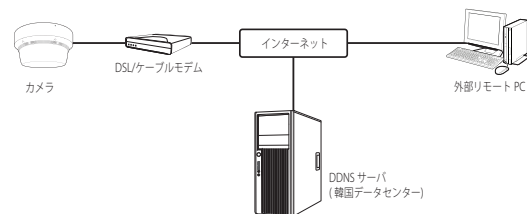
LAN のローカル PC からカメラに接続する

1. ローカル PC でインターネットブラウザを起動します。
2. ブラウザのアドレスバーにカメラの IP アドレスを入力します。



- LAN ネットワーク範囲外の外部インターネットのリモート PC は、ポート転送がきちんと設定されていない場合やファイアウォールが有効の場合には、設置済みカメラとインターネット接続ができない場合があります。この場合、ネットワーク管理者にお問い合わせください。
- IP インストーラでは、IP アドレス、サブネットマスク、ゲートウェイ、HTTP ポート、VNP ポート、IP 方式を設定するために、デフォルトパスワード、"4321"を御利用いただけます。ネットワークインターフェース変更後、セキュリティを向上させるため、ウェブビューアにアクセスしてパスワードを変更してください。
- 工場出荷時の設定で、IP アドレスが DHCP サーバーから自動的に割り当てられます。使用可能な DHCP サーバーがない場合、IP アドレスは 192.168.1.100 に設定されます。IP アドレスを変更するには IP インストーラを使用してください。IP インストーラの使用方法の詳細は、"静的 IP の設定"を参照してください。（19 ページ）

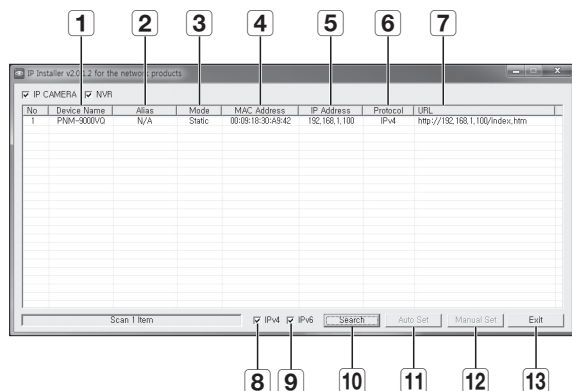
カメラを直接 DHCP ベースの DSL/ケーブルモデムに接続する



1. ユーザの PC をネットワークカメラに直接接続します。
2. IP インストーラを実行してカメラの IP アドレスを変更し、デスクトップ上で Web ブラウザを使用してインターネットと接続できるようにします。
3. インターネットブラウザを使用して Web Viewer と接続します。
4. [設定] ページに移動します。
5. [ネットワーク] - [DDNS] に移動し、DDNS の設定を行います。
6. [Basic] - [IP & ポート] へ移動し、IP 方式を [DHCP] に設定します。
7. PC から取り外したカメラを直接モデムに接続します。
8. カメラを再起動します。

- DDNS の設定方法についての情報は、ウェブビューアのオンラインヘルプを参照してください。
- IP フォーマットの設定方法についての情報は、ウェブビューアのオンラインヘルプを参照してください。

IPインストーラに使用するボタン



項目	説明
1 Device Name	接続しているカメラのモデル名です。 列をクリックしてモデル名順にリストをソートします。 ただし、検索中にクリックすると検索は停止します。
2 Alias	この機能は現在導入されていません。
3 Mode	現在のネットワーク接続状態によって、<Static>もしくは<Dynamic>と表示します。
4 MAC(Ethernet) Address	接続されているカメラのイーサネットアドレスです。 列をクリックしてイーサネットのアドレス順にリストをソートします。 ただし、検索中にクリックすると検索は停止します。
5 IP Address	IPアドレスです。 列をクリックしてIPアドレス順にリストをソートします。 ただし、検索中にクリックすると検索は停止します。
6 Protocol	カメラのネットワーク設定です。 工場初期値は"IPv4"です。 IPv6設定のカメラは、"IPv6"と表示されます。
7 URL	外部のインターネットからのアクセスに使用するDDNS URLアドレス。 ただし、DDNS登録が失敗した場合、このアドレスはカメラの<IP Address>に置き換わり ます。
8 IPv4	IPv4設定のカメラをスキャンします。

項目	説明
9 IPv6	IPv6設定のカメラをスキャンします。 IPv6対応の環境でのみ有効化されます。
10 Search	ネットワークに接続されているカメラをスキャンします。 ただし、IPv4、IPv6どちらも確認できない場合、このボタンはグレー表示されます。
11 Auto Set	IPインストーラによって自動的にネットワークが設定されます。
12 Manual Set	ネットワーク設定を手動で行う必要があります。
13 Exit	IP Installerプログラムを終了します。

- IPインストーラは、インストールCDで提供されているインストーラバージョンか、入手可能な場合は最新バージョンのいずれかを使用してください。最新バージョンはHanwha TechwinのWebサイトからダウンロードすることができます。
- サポートするOSが Windows 8.1である場合は、IP Wisenetの代わりにWisenetデバイスマネージャーを使用することを推奨します。
Wisenetデバイスマネージャープログラムは、メニューの<テクニカルガイド>-<オンラインツール>から、Hanwha Techwinのウェブサイト (<http://www.hanwha-security.com>)へアクセスしてダウンロードできます。

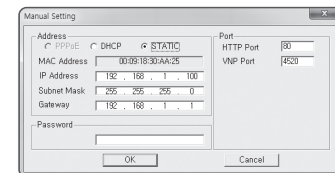
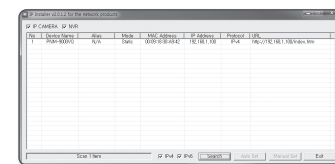
静的IPの設定

手動ネットワーク設定

<IP Installer_v2.XX.exe>を実行し、カメラの検索リストを表示します。
最初の起動時には、[Auto Set]と[Manual Set]は両方グレー表示となります。

- IPv6設定のカメラが見つかった場合、カメラがこの機能をサポートしていないため、ボタンがグレー表示されます。

1. 検索リスト内のカメラを選択します。
カメラのラベルに印字されているカメラのMACアドレスを確認します。
[Auto Set]と[Manual Set]の両方のボタンが有効となります。
2. [Manual Set]をクリックします。
Manual Settingダイアログが表示されます。
カメラの<IP Address>、<Subnet Mask>、<Gateway>、<HTTP Port> 及び <VNP Port>が予め設定された値で表示されます。
3. <Address>ペインに必要な情報が表示されます。
 - MAC (Ethernet) Address : カメラのラベルに印字されているカメラのMACアドレスが自動的に表示されるため、ユーザー設定は不要です。
 - IP関連パラメータは、DHCPにチェックが入っていない場合にのみ設定することができます。



ネットワーク接続と設定

ブロードバンドルーターを使用しない場合

<IP Address>、<Subnet Mask>、<Gateway>の設定については、システム管理者にお問い合わせください。

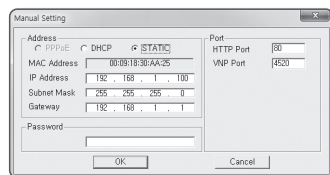
4. <Port>ペインに必要な情報が表示

されます。

- HTTP Port: インターネットブラウザを使用してカメラにアクセスする際に使用します。初期設定は80です。
- VNP Port: 映像信号の送信の制御に使用され、初期値は4520です。

5. パスワードを入力してください。

カメラへのアクセスに使用していた“admin”アカウントのパスワードを入力します。



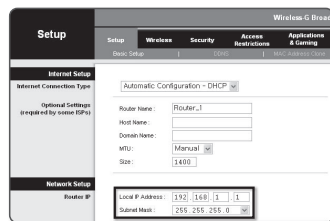
- セキュリティ上の目的で、数字、アルファベット、大文字小文字および特殊文字を使用することをお勧めします。
- パスワードの変更方法についての情報は、ウェブビューアのオンラインヘルプを参照してください。

6. [OK]をクリックします。

手動でのネットワーク設定が完了しました。

ブロードバンドルーター使用の場合

- IP Address: ブロードバンドルーターによって指定されたIP範囲でアドレスを入力します。
例) 192.168.1.2~254、192.168.0.2~254、192.168.XXX.2~254
- Subnet Mask: ブロードバンドルーターの<Subnet Mask>が、カメラの<Subnet Mask>となります。
- Gateway: ブロードバンドルーターの<Local IP Address>が、カメラの<Gateway>となります。



- 設定は、接続しているブロードバンドルーターのモデルによって異なる場合があります。詳細は、該当するルーターのユーザーマニュアルを参照してください。
- ブロードバンドルーターのポートフォワーディングの詳細については、“ポートフォワード (ポートマッピング)の設定”を参照してください。(21ページ)

ブロードバンドルーターに複数のカメラが接続されている場合

IPに関する設定と、ポートに関する設定は別々に設定します。

例)

カテゴリ	カメラ#1	カメラ#2
IP設定	IP Address Subnet Mask Gateway	192.168.1.100 255.255.255.0 192.168.1.1
ポート設定	HTTP Port VNP Port	8080 4520

- <HTTP Port>が80以外に設定されている場合、カメラにアクセスするには、インターネットブラウザのアドレスバーで<Port>番号を設定する必要があります。
例) http://IPアドレス:HTTPポート
http://192.168.1.100:8080

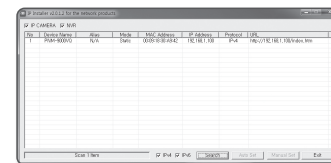
自動ネットワーク設定

<IP Installer_v2.XX.exe>を実行し、カメラの検索リストを表示します。

最初の起動時には、[Auto Set]と[Manual Set]は両方グレー表示となります。

- IPv6設定のカメラが見つかった場合、カメラがこの機能をサポートしていないため、ボタンがグレー表示されます。

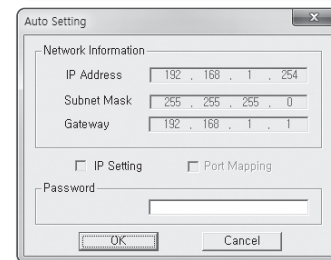
1. 検索リスト内のカメラを選択します。カメラのラベルに印字されているカメラのMACアドレスを確認します。
[Auto Set]と[Manual Set]の両方のボタンが有効となります。
2. [Auto Set]をクリックします。
Auto Settingダイアログが表示されます。
<IP Address>、<Subnet Mask>、<Gateway>が自動的に設定されます。
3. パスワードを入力してください。
カメラへのアクセスに使用していた“admin”アカウントのパスワードを入力します。



- セキュリティ上の目的で、数字、アルファベット、大文字小文字および特殊文字を使用することをお勧めします。
- パスワードの変更方法についての情報は、ウェブビューアのオンラインヘルプを参照してください。

4. [OK]をクリックします。

自動ネットワーク設定が完了しました。



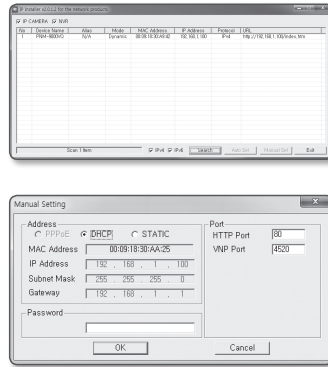
動的IP設定

動的IP環境設定

- 動的IP環境の例
 - カメラに接続しているブロードバンドルーターが、DHCPサーバーでIPアドレスを割り当てられている場合
 - DHCPプロトコルを使用して直接カメラをモデムに接続する場合
 - IPがLAN経由で内部DHCPサーバーに割り当てられている場合

動的IPの確認

1. ユーザーのローカルコンピュータでIPインストーラを実行します。
<Dynamic IP>アドレスが割り当てられているカメラがリストに表示されます。
2. 検索結果からカメラを選択します。
3. [Manual Set]ボタンをクリックし、カメラの<Dynamic IP>アドレスを確認します。
<DHCP>のチェックを外しておくと、IPを<Static>に変更できます。

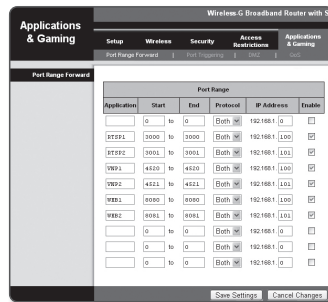


ポートフォワード(ポートマッピング)の設定

カメラを接続したままブロードバンドルーターをインストールした場合は、ブロードバンドルーター上でポート範囲フォワードを設定し、ルーター内のカメラにリモートPCからアクセスできるようにする必要があります。

手動ポートフォワード

1. ブロードバンドルーターの設定メニューから<Applications & Gaming> - <Port Range Forward>を選択します。
サードパーティのブロードバンドルーター用にポートフォワードを設定するには、ブロードバンドルーターのユーザーマニュアルを参照してください。
2. ブロードバンドルーターに接続されている各カメラ用の、<TCP>と<UDP Port>を選択します。
IPルーターに設定する各ポートの数字は、カメラWeb Viewerの<設定> - <Basic> - <IP & ポート>に指定されるポート番号に合わせて設定しなければなりません。



3. 完了後、[Save Settings]をクリックします。
設定が保存されます。

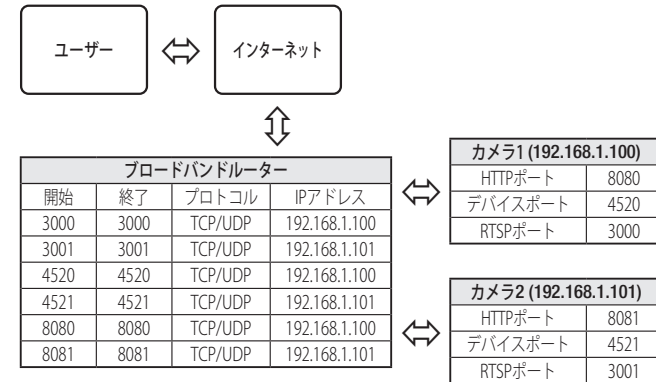


- 上記の説明の例はCISCOのブロードバンドルーターに基づいています。
- 設定は、接続しているブロードバンドルーターのモデルによって異なる場合があります。
詳細は、該当するルーターのユーザーマニュアルを参照してください。

複数のネットワークカメラに関するポートフォワード範囲設定

- ブロードバンドルーターデバイスの設定Webページで、ポートフォワーディングのルールを設定することができます。
- ユーザーは、カメラ設定画面を使って各ポートを変更できます。

カメラ1とカメラ2がルーターに接続されている場合:

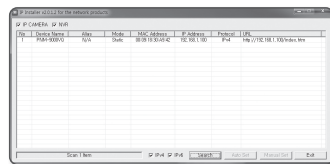


- ルータがUPnP (ユニバーサルプラグアンドプレイ) 機能をサポートしている場合、ポートフォワーディングを追加ルータの設定なしで行うことができます。
ネットワークカメラ接続後、メニューから、「設定 -> ネットワーク -> DDNS」の<Wisenet DDNS>の<クイック接続>のチェックボックスを選択します。

ネットワーク接続と設定

共有ローカルPCからカメラへの接続

1. IPインストーラを実行します。
接続されているカメラをスキャンし、そのリストを表示します。
2. アクセスするカメラをダブルクリックします。
インターネットブラウザが起動し、カメラに接続されます。



- インターネットブラウザのアドレスバーに検出されたカメラのIPアドレスを入力し、カメラにアクセスすることもできます。

リモートPCからインターネット経由でのカメラへの接続

ブロードバンドルーターのネットワーククラスターに属さないリモートコンピュータ上でIPインストーラを使用することはできないため、ユーザーはカメラのDDNS URLを使用してブロードバンドルーターのネットワーク内のカメラにアクセスすることができます。

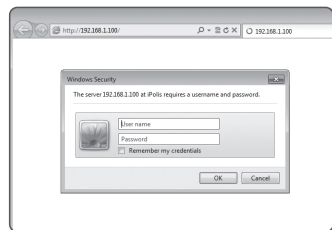
1. ブロードバンドルーターのネットワーク内のカメラへアクセスする前に、ブロードバンドルーターにポートフォワードを設定しておく必要があります。
2. リモートPCから、インターネットブラウザを起動しカメラのDDNS URLアドレスを入力するか、アドレスバーでブロードバンドルーターのIPアドレスを入力します。
例) <http://ddns.hanwha-security.com/ID>

- DDNSの登録方法についての情報は、ネットワーク設定ガイドを参照してください。

カメラへの接続

通常の方法

1. インターネットブラウザを起動します。
2. アドレスバーにカメラのIPアドレスを入力します。
例) • IPアドレス(IPv4): 192.168.1.100 → http://192.168.1.100
- ログインダイアログが表示されます。
• IPアドレス(IPv6): 2001:230:abcd:ffff:0000:0000:ffff:1111
→ http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - ログインダイアログが表示されます。



HTTPポートが80以外の場合

1. インターネットブラウザを起動します。
2. アドレスバーにカメラのIPアドレスとHTTPのポート番号を入力します。
例) IPアドレス: 192.168.1.100:HTTPのポート番号(8080)
→ http://192.168.1.100:8080 - ログインダイアログが表示されます。

URLを使用する場合

1. インターネットブラウザを起動します。
2. アドレスバーにカメラのDDNS URLを入力します。
例) URLアドレス: http://ddns.hanwha-security.com/ID
- ログインダイアログが表示されます。

■ ネットワーク接続はLANのみの環境では無効になります。

UPnPを介した接続

1. UPnPプロトコルをサポートするために、クライアントまたはオペレーティングシステムを実行します。
2. 検索するカメラ名をクリックします。
Windowsオペレーティングシステムでは、ネットワークメニューから検索したカメラ名をクリックします。
- ログインウィンドウが表示されます。

Bonjourを介した接続

1. Bonjourプロトコルをサポートするためにクライアントまたはオペレーティングシステムを実行します。
2. 検索するカメラ名をクリックします。
Macのオペレーティングシステムでは、SafariのBonjourタブから検索したカメラ名をクリックします。
- ログインウィンドウが表示されます。

DDNSアドレスを確認するには

カメラを直接DHCPベースのケーブルモデムまたはDSLモデムに接続すると、ISP(ユーザーが契約する会社)に接続を試行する度にIPアドレスが変更されます。
その場合、DDNSによるIPアドレスの変更は通知されません。

動的なIPベースのデバイスをDDNSサーバーに登録すると、そのデバイスにアクセスするときに、変更されたIPを簡単に確認することができます。

使用するデバイスを<DDNS>サーバーに登録するには、http://ddns.hanwha-security.comにアクセスして最初にデバイスを登録し、Web Viewerの<ネットワーク> - <DDNS>を<Wisenet DDNS>に設定し、DDNS登録に使用した<製品ID>を指定します。

パスワード設定

本製品を初めて使用する場合、ログインパスワードを登録する必要があります。
“パスワード変更”ウィンドウが表示されましたら、新しいパスワードを入力します。



- 新しいパスワードが8～9桁の場合、以下のうち3種類以上を使用する必要があります：大文字/小文字、数字、特殊文字。パスワードが10～15桁の場合、2種類以上を使用する必要があります。

- 認められている特別文字：~!@#\$%^&*()_+=|[]?/

- 安全性を高めるため、同じ文字を繰り返したり、キーボード上の連続した文字を入力したりするのはお勧めしません。
- パスワードをなくした場合、[RESET]を押して製品を初期化します。そのため、メモ帳を利用したり、記憶したりして、パスワードをなくさないようにしてください。

Administrator password change

New password

Confirm new password

. If the password is 8 to 9 letters long, then it should be a combination of at least three types: upper/lower case alphabets, numbers and special characters.
. If the password is 10 to 15 letters long, then it should be a combination of at least two types: upper/lower case alphabets, numbers and special characters.
. User name should be different from password.
. The following special characters are available for use: ~!@#\$%^&*()_+=|[]?/
. Don't use 4 or more characters consecutive together. (examples: 1234, abcd)
. Don't use 4 or more characters repeated. (examples: HHH, 1111, aaaa)

ログイン

カメラにアクセスするたびに、ログインウィンドウが表示されます。
ユーザーIDとパスワードを入力してカメラにアクセスします。

1. <User name>入力ボックスに“admin”と入力します。
管理者ID“admin”は、確定されており変更できません。
2. <Password>入力欄に入力します。
3. [OK]をクリックします。
正常にログインすると、Live Viewerの画面が表示されます。



- カメラのWebビューアーにアクセスする場合は、画像データが暗号化されているか確認し、セキュリティに特にご注意ください。



- 入力完了時に、“Remember my credentials”オプションをチェックしておくと、次回からはログイン情報の入力を求められることなく自動的にログインします。
- 画面サイズが100%である場合、映像画質が最高の状態になります。倍率を小さくすると、境界線上の画像がカットされます。

Windows Security

The server 192.168.1.100 at iPolis requires a username and password.

User name

Password

☐ Remember my credentials

OK Cancel

カメラ・ウェブビューアーの設定

1. [設定 (⚙️)]アイコンをクリックします。
2. 設定画面が現れます。
3. カメラの基本情報、ビデオ、オーディオ、ネットワーク、イベント、分析、ネットワーク全体のシステムの設定を構成することができます。
4. <ヘルプ (📖)>をクリックして、それぞれの機能の詳細説明を表示します。

トラブルシューティング

問題	解決策
Safariを使用してHTTPS経由でプラグインフリーのWeb Viewerにアクセスすると、映像は表示されません。	- https初回接続時に表示されるウェブサイトの認証ポップアップで<証明書の表示>をクリックした後、<Webビューアの設定IPに接続する際、常に信頼する>の項目のチェックボックスを選択してください。 - 以下のメッセージウィンドウで「次へ」を選択した後にWeb Viewerでの表示に失敗する場合、commandキー + Qを押してSafariブラウザを終了し、再度アクセスして上述の手順に従います。
ウェブブラウザからカメラにアクセスできない。	- カメラのネットワーク設定が適切か確認します。 - ネットワークケーブルがすべてきちんと接続されているか確認します。 - DHCPを使用して接続した場合、カメラが問題なく動的IPアドレスを取得できたか確認します。 - カメラがブロードバンドルーターに接続している場合、ポート転送がきちんと設定されているか確認します。
閲覧中にビューアが遮断された。	- カメラまたはネットワーク設定に変更が生じた場合、接続済みビューアは遮断されます。 - ネットワーク接続をすべて確認します。
ネットワークに接続しているカメラがIPインストラプログラムを検知しない。	使用中のPCのファイアウォールを無効にし、カメラを再検索してください。

問題	解決策
画像がオーバーラップする。	複数のカメラが個々のアドレスではなく、単一のマルチキャストアドレスに設定されているか確認します。複数のカメラが単一アドレスを使用すると、画像がオーバーラップする原因になります。
画像が表示されない。	- 送信方法がマルチキャストに設定されている場合、カメラが接続しているLANにマルチキャストに対応しているルータがあるか確認します。 - レンズモジュールが正しく動作しているかどうかを確認します。
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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 μ T-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.
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 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.
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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.
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Article 6. Distribution and Registration of the Ported Source Code

1. The Source Code User and the System Developer may, whether with or without charge, distribute to any third party only the following parts of the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware:

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

Article 7. Use for Other Purpose

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

Article 8. Limited Warranty

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

Article 10. Breach of Agreement

1. In case that T-Engine Forum considers that this License Agreement is breached or that the popularization of T-Kernel is obstructed, T-Engine Forum shall take measures to correct such breach or such obstruction, take measures on the ground of copyright infringement, or take any other necessary measures against the breaching person or the obstructing person, regardless of whether or not the said person is a member of T-Engine Forum.
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

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Jean-loup Gailly Mark Adler

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



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