

WISENET

ネットワークカメラ

ユーザーマニュアル

PNM-9320VQP

SLA-2M2400P/2M2800P/2M3600P/2M6000P/
2M1200P/5M3700P/5M4600P/5M7000P



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. 24時間 Auto Pan 動作は禁止。
16. Auto Pan 動作は1時間動作後、他のSequence (Swing・Tour・Group)を1時間以上運用後、Auto Pan機能を使うこと。
17. この製品は、“クラス2”または“LPS”と表示があり、PoE, 1.5A. 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-9320VQP)
18. 製品取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。
19. 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。
20. 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。
21. 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。
22. 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。

Pan / Tilt / ZoomモーターおよびSlip ringは連続動作する場合、部品寿命を1年保証します。

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: 感電の恐れ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、外部の施設ヘルレーティングなしで、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。

- 本製品は別途の防湿製品が適用されています。製品の特性上、電源印加後初期に結露が発生される場合がありますけど2〜3時間後に消えます。
- 本製品は防水通気構造が適用されているため、人為的な急激に温度が変化される条件の場所には設置しないでください。
- 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と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 GHz以降
 - 対応OS : MS Windows, Mac OS X
 - 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), MS Explorer
- 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

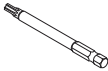
- 推奨容量 : 推奨容量:16GB～256GB (MLCタイプ)
- 以下の製造業者および種類のメモリーカードをこのカメラで使用するを推奨します。
 - 製造業者: SanDisk, Transcend
 - 製品グループ: 高耐久
- UHS-3クラス(MLCタイプ)の仕様に適合する16GB以上のメモリーカードを使用することを推奨します。

キット内容 (PNM-9320VQP)

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	
	HPoEインジェクター	1	電源供給およびネットワーク接続
	テストモニタ用ケーブル	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
	電源コード	1	HPoEインジェクターに接続

外観	品目名	数量	説明
	ターミナルブロック	1	アラーム入・出力接続
	六角レンチ	1	インストールベースとカメラ本体を結合してから固定する時に使用
	トルクスレンチ	1	ドームカバーとSDカードドアの分解・組み合わせする時に使用
	六角ネジ	3	インストールベースとカメラ本体の結合に使用
	インストールベース	1	製品設置のためのブラケット
	防水アクセサリ	1	湿気が多いところに設置する時使用

外観	品目名	数量	説明
	ドリルビット	1	ドームカバーとSDカードドアの分解・組み合わせする時に使用(電動工具使用時使用)
	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。

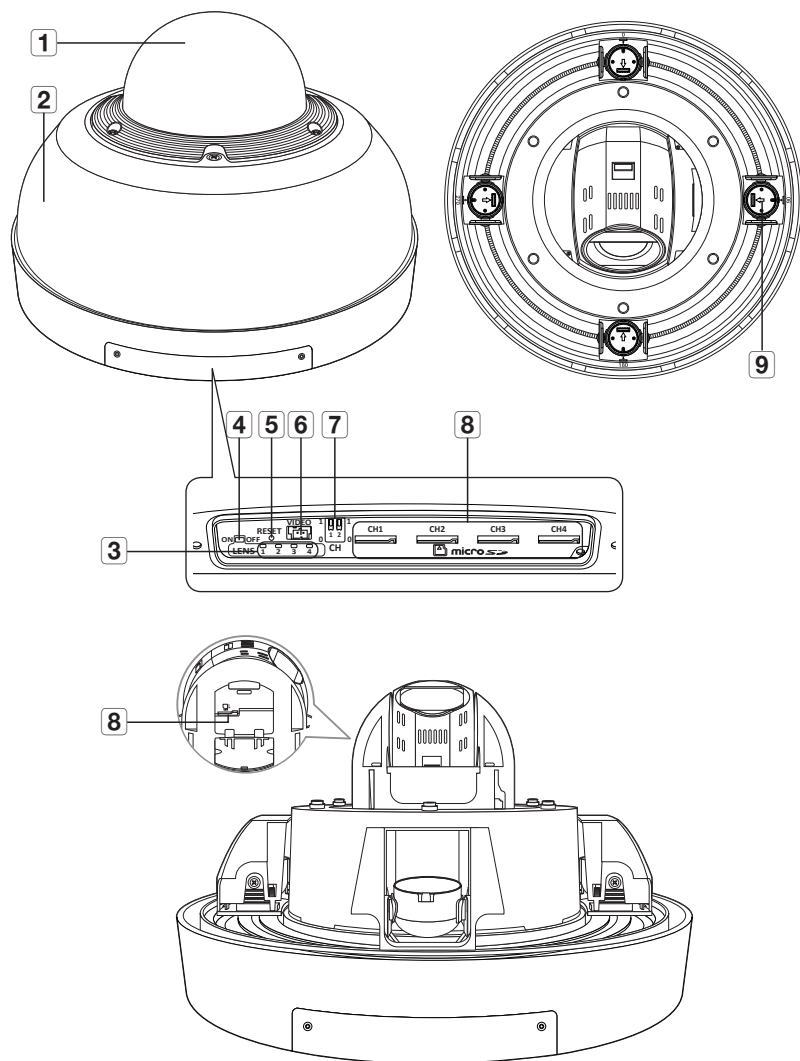
キット内容 (レンズモジュール-オプション)

外観	品目名	説明	モデル名
	レンズモジュール	PNM-9320VQPiに取り付けます。	SLA-2M2400P
			SLA-2M2800P
			SLA-2M3600P
			SLA-2M6000P
			SLA-2M1200P
			SLA-5M3700P
			SLA-5M4600P
			SLA-5M7000P

概観 (PNM-9320VQP)

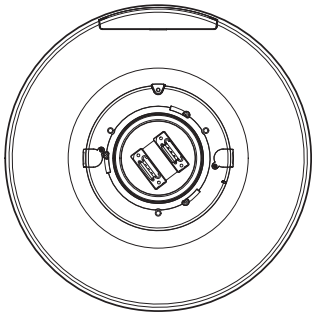
外観

部品

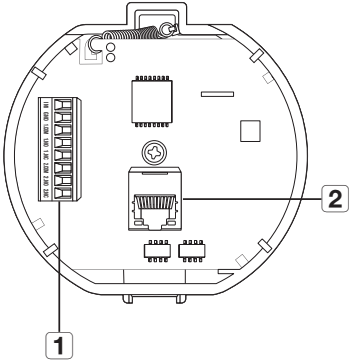


項目	説明
1 ドームカバー	レンズとメインユニットの保護に使用するケースカバー。
2 ウィンドウカバー	
3 レンズモジュール表示ライト (正常:緑、異常:赤)	レンズモジュールが正しく取り付けられていると、緑色のLEDが点灯し、およそ40秒後にオフになります。(不要な反射を防ぐため)
4 電源オン/オフスイッチ	製品の電源をオン/オフにするときに使用するスイッチ ■ レンズモジュールを取り替えるときのみ使用してください。
5 リセット・ボタン	すべてのカメラ設定を工場出荷時のデフォルトに復元します。 約5秒間押し続けてシステムを再起動します。 ■ カメラをリセットすると、DHCPを有効化さ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は、Device Managerプログラムを用いて基本的なネットワーク設定(IPアドレス、Subnet Mask、Gatewayなど)を再設定してから接続することができます。
6 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。
7 チャンネル変更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。 ■ 4CHレンズモジュールの映像のみ確認することができます。PTZ映像は確認されません。
8 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。
9 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。

設置面



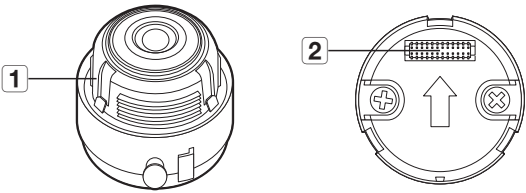
インストールベース内部



項目	説明
1 アラーム入・出力ポート	アラーム入・出力ケーブルを接続させるポートです。
2 ネットワーク/電源接続ポート	RJ45ケーブルで電源およびネットワークと接続させるポートです。

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

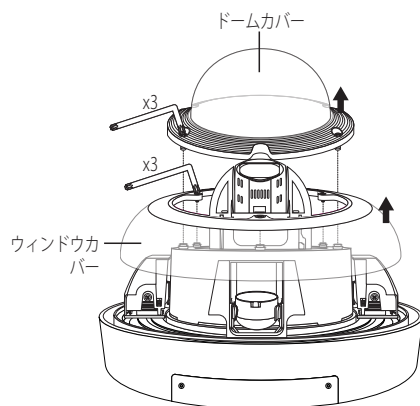
カメラを取り付ける前に、以下の指示をよく読んでください。

- 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。
- 電源をオンにしたまま、レンズモジュールを脱・付着しないでください。

取外し

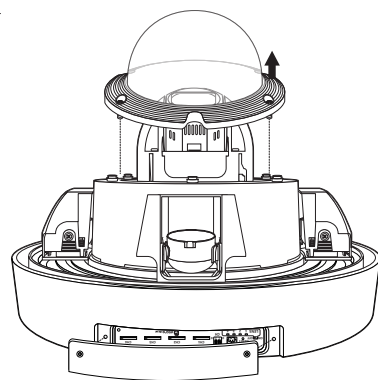
付属で提供されたトルクスレンチまたはドリルビットを用いて締結用のネジを反時計回りに外して、ドームカバーとウィンドウカバーを分離してください。

- ネジをカバーから完全に外す必要はありません。
 - PTZ用Micro SDカードを装着する時のみ、ドームカバーを外してください。それ以外にはドームカバーを外さないでください。
 - レンズモジュールを装着する時にウィンドウカバーを外してください。
ドームカバーを外せる必要はありません。
- ！ ■ ドームカバーとウィンドウカバーは透明なので、安全ケーブルがありません。墜落および落下にご注意ください。



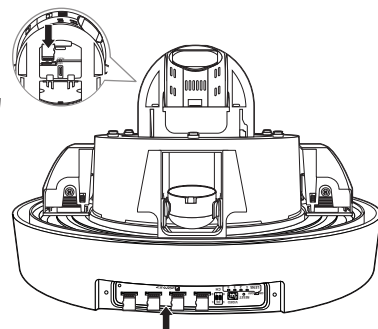
Micro SDメモリカード挿入

1. トルクスレンチまたはドリルビットを用いてドームカバーとSDカードドアを外してください。



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メモリカ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メモリカ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MicroSD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。
- PTZ用Micro SDカードを装着する時にドームカバーを外してください。

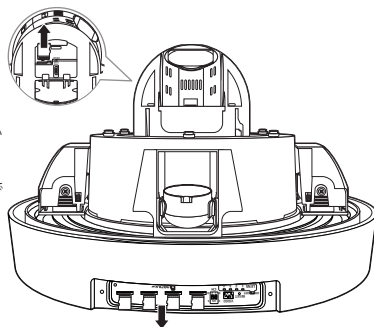


取付けおよび接続

Micro SDメモ리카ード外し

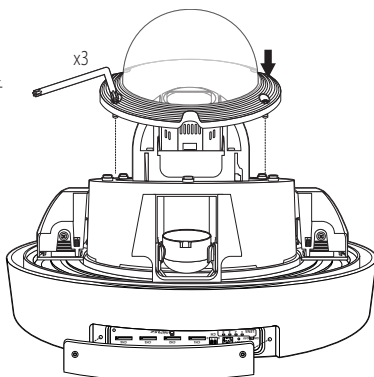
1. 図に示されているように、メモ리카ードの露出部分を慎重に押して、スロットからメモ리카ードを取り出します。

- 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리카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리카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。



2. トルクスレンチまたはドリルビットを用いてドームカバーとSDカードドアを結合させてください。

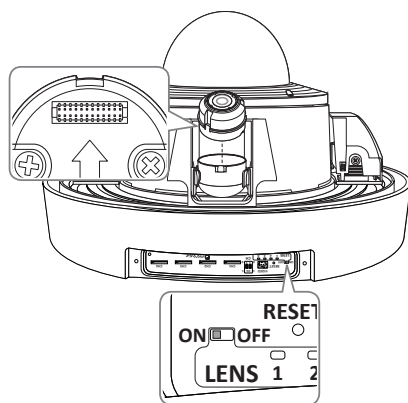
- 締結用のボルトは、防水に問題がないようにトルクスレンチまたはドリルビットを用いてしっかり締結させてください。



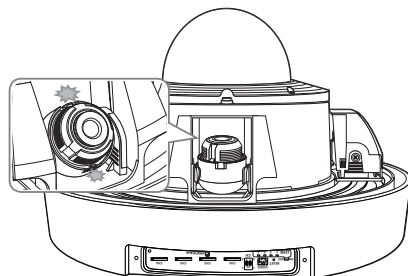
レンズモジュールの取付け

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(HPoE)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する前に電源スイッチが『OFF』に設定されているかご確認ください。『ON』の状態ではレンズモジュールを取り替えると製品に誤作動が発生することがあります。
- 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。



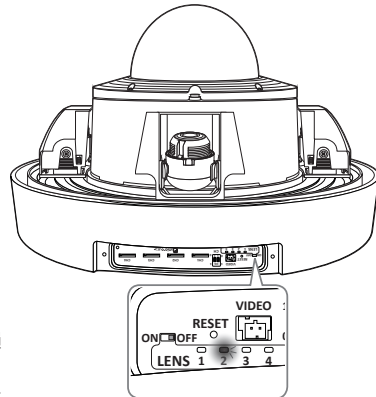
- レンズモジュールを挿入する時に上/下のフックで『カチッ』という音がするまで差し込んでください。



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(HPoE)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。
- 製品の電源接続(HPoE)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。



カメラブラケットの準備と設置

ブラケットおよびハウジングの設置ガイドラインについては、ブラケットまたはハウジングに同梱されている設置マニュアルを参照してください。

■ 使用可能なブラケットモデル

モデル	項目
SBP-390WM2	壁面取付けブラケット
SBP-300CM	天井マウント
SBP-300LM	手すりマウント
SBP-300KM	コーナーマウント
SBP-300PM	ポールマウント

■ 各ブラケット（別売り）の外観については、『設置のためのオプション付属品』を参照してください。（17ページ）

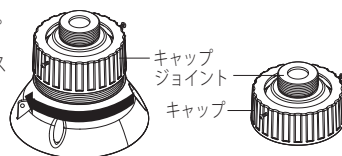
別売りのアダプタへの取付け

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。

別売り製品は『設置のためのオプション付属品』をご参照ください。（17ページ）

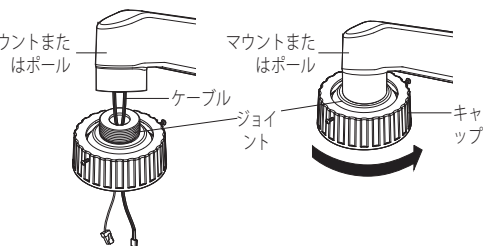
1. Capを矢印方向に回転させてCapとJointを分離させてください。

■ SFPモジュールを用いて設置しない場合、1～6番の設置過程をスキップすることができます。



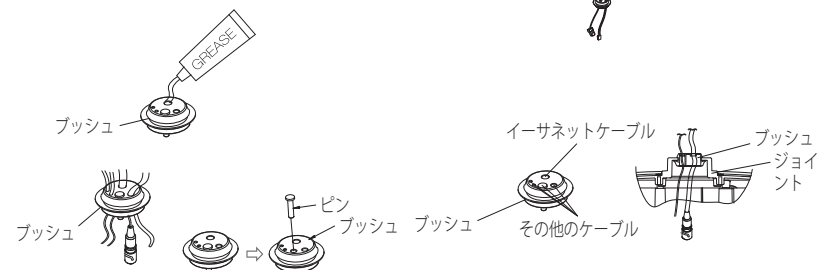
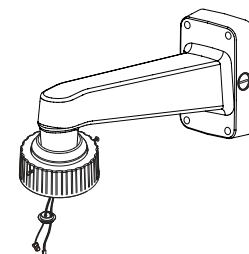
2. MountまたはPole外部に露出されたケーブルをJointに通過させてください。マウントまたはポール

3. Jointを矢印方向に回転させて二つの部材を締結させてください。

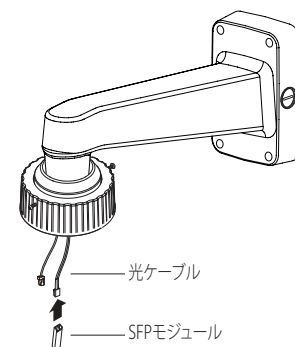


■ MountまたはPoleで外部の湿気が多量に流入される場所に本製品を設置する場合、アクセサリに含まれたプッシュを使って外部湿気の流入を遮断してください。

- プッシュにグリースを適量塗った後、ケーブルをプッシュの各ホールに合わせて締結させてください。ケーブルが締結されないホールには、ピンを使ってホールを防いでください。
- プッシュを全体的に押して、断面図のように『Joint』に正しく締結できるようにしてください。

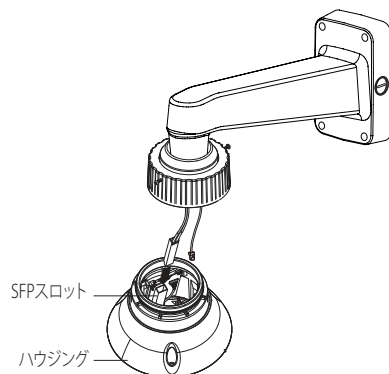


4. Optical CableにSFP Moduleを締結させてください。

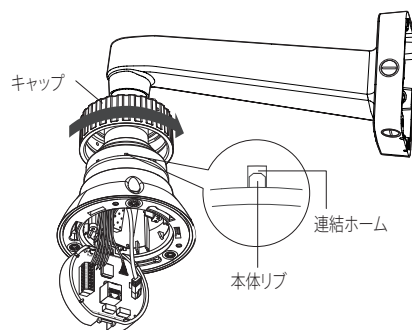


取付けおよび接続

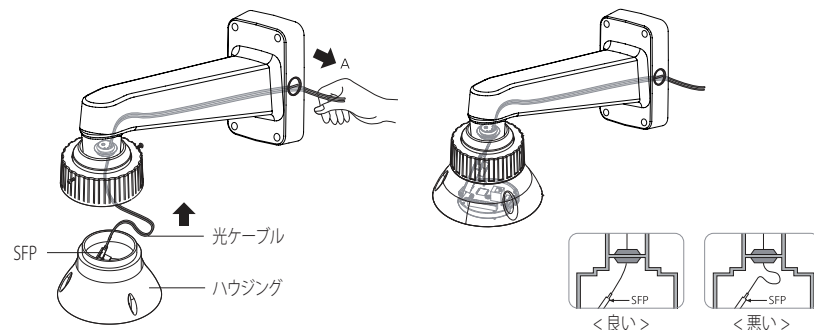
5. 本体のSFP SLOTに締結させてください。



6. 本体のRIBとJointホーム形状の方向に合わせて二つの部材を結合した後、矢印方向にCapを回転させて二つの部材を締結させてください。

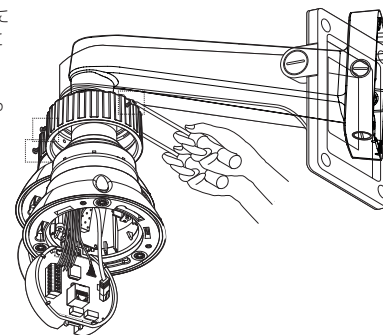


❗ ■ 但し、二つの部材を締結する時にOptical Cableが内部で折れないようにOptical Cableを外から引っ張りながら二つの部材を結合させてください。



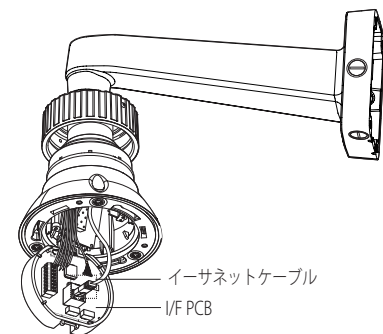
7. CAPが反対方向に外せることを防ぐためにCAPの両側にあるネジを回転させてください。(ネジは、完全に内部に入らず一定深さまでのみ入ります。)

❗ ■ SFPモジュールを接続させなくても漏水防止のためにCAPをしっかり締めてください。
出荷時には、ゆるく組み立てられています。

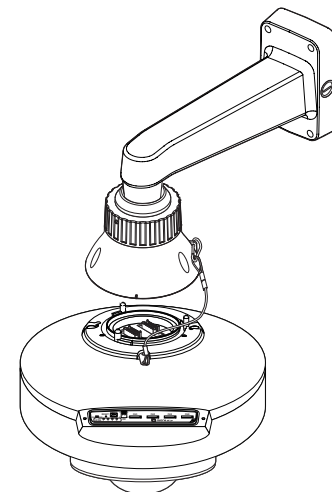


8. イーサネットケーブルをI/F PCBに接続させてください。

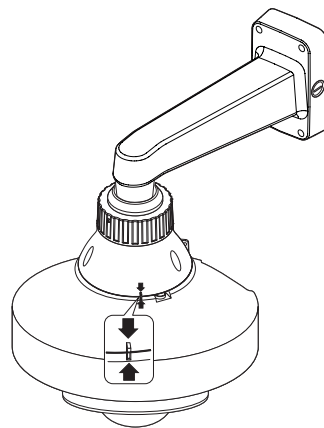
❗ ■ PTZカメラと円滑な結合のためにケーブル定型にご注意ください。
(カメラを結合する時にI/F PCBが回転しながら、ケーブルが引っかかることがあります。)



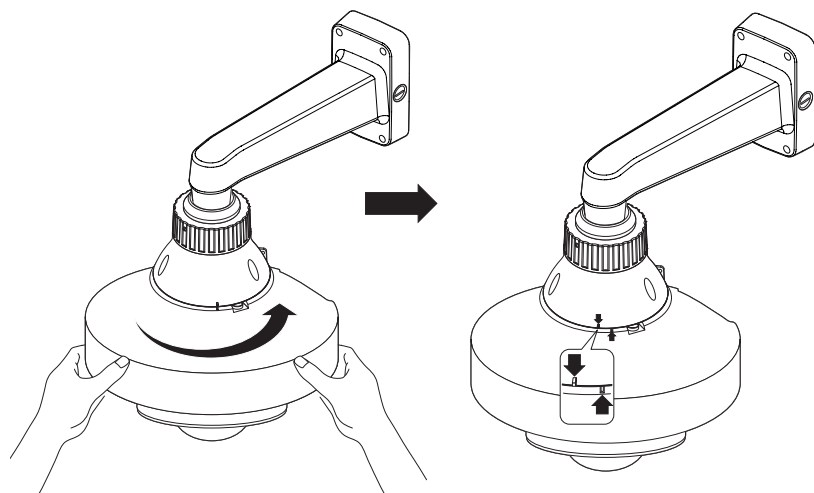
9. I/F PCBを本体に締結した後、カメラ本体の安全ケーブルをインストールベースに装着してください。



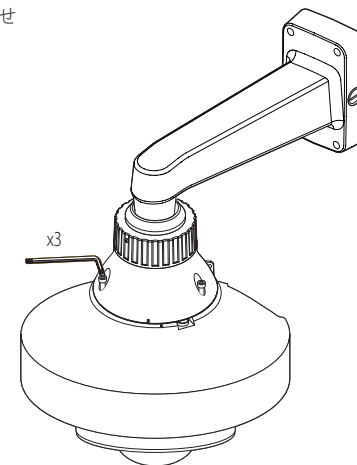
10. インストールベースとカメラ本体の方向参考表示が合うように結合してください。



11. カメラを矢印方向に回して上、下の参考表示部を右側のイメージのように回転させてください。



12. 六角レンチを用いてインストールベースとカメラを固定させてください。

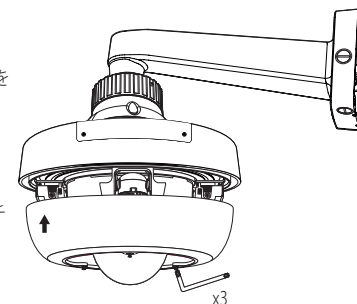


13. 「カメラのモニタリング方向を調整する」を参照して任意の方向にレンズを調整します。(18ページ)

- 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。

14. トルクスレンチまたはドリルビットを用いてウィンドウカバーを結合させてください。

- ! ■ 締結用のボルトは、防水に問題がないようにトルクスレンチまたはドリルビットを用いてしっかり締結させてください。
- ウィンドウカバーは透明なので、安全ケーブルがありません。墜落および落下にご注意ください。



取付けおよび接続

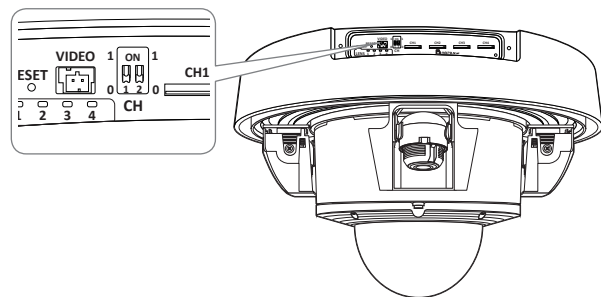
取付けをモニタリングするチャンネルの設定方法

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。

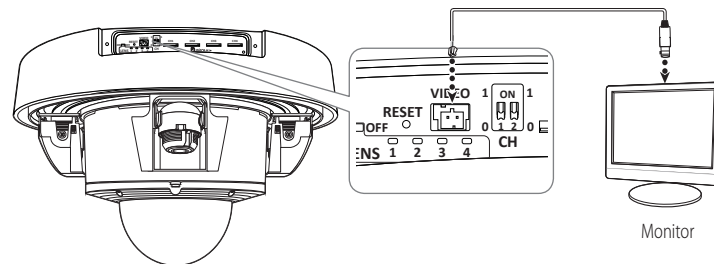
CH1	CH2	CH3	CH4
00	01	10	11

- 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。



設置モニターの接続

本製品の映像出力ポートを設置用モニターの映像入力ポートに接続します。



- 配線は、ご使用のモニターの種類と周辺デバイスによって異なります。各デバイスのユーザーマニュアルを参照してください。
- 接続する際には、モニターとカメラの電源がオフになっていることを確認してください。

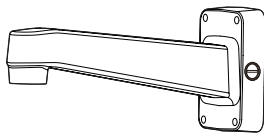
- 本製品は、ネットワーク経由で映像を転送するネットワークカメラです。設置するカメラの撮像範囲を設定するために、ビデオ出力端子を使用します。
- モニタリングのために端子を使用すると、映像画質の劣化などの問題が発生する可能性があります。
- 24時間監視をする場合、専門的なCRTモニターや、TFT/LCD携帯モニターの使用は適切ではありません。
- 24時間モニタリングと保存向けにネットワーク転送スクリーンを使用します。
- 4CHレンズモジュールの映像のみ確認することができます。PTZ映像は確認されません。

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。

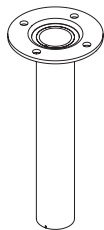
1. カメラを壁に設置する場合

- 壁面取付けブラケット (SBP-390WM2)



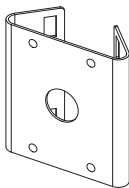
2. カメラを天井に設置する場合

- 天井マウント (SBP-300CM)
天井マウント設置時、側壁と最小30cm以上離れたところに設置することをお勧めします。



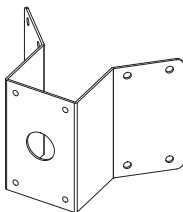
3. 長さ80mm以上の円柱にウォールマウント (SBP-390WM2) を設置する場合

- ポールマウント (SBP-300PM)



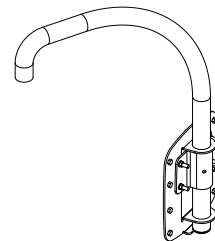
4. 壁面コーナーにウォールマウント (SBP-390WM2) を設置する場合

- コーナーマウント (SBP-300KM)

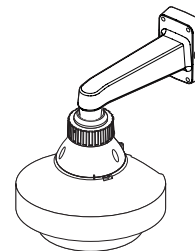


5. 建物の屋根に設置する場合

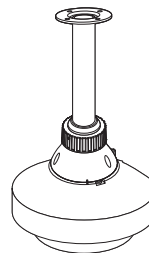
- 手すりマウント (SBP-300LM)



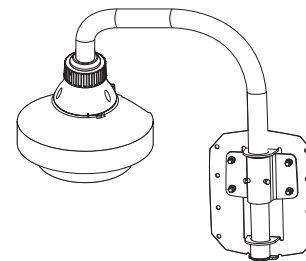
■ マウント用継手



壁面取付けブラケット (SBP-390WM2)



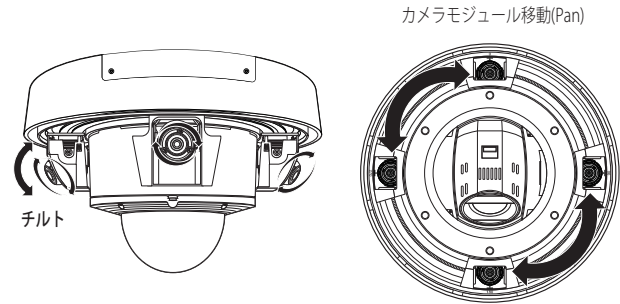
天井マウント (SBP-300CM)



手すりマウント (SBP-300LM)

取付けおよび接続

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。下の表をご参照ください。

- ❗ 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。

■ レンズモジュール別のチルト許容角度範囲

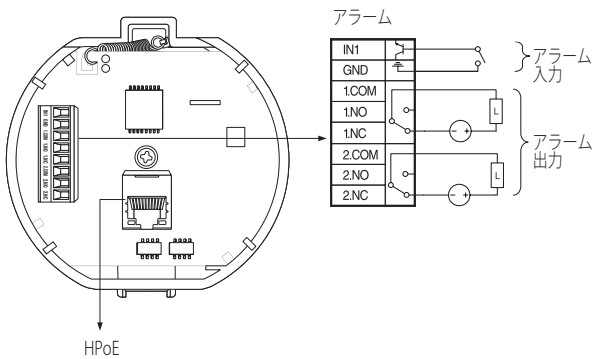
レンズモジュール名	SLA-2M2400P	SLA-2M2800P	SLA-2M3600P	SLA-2M6000P	SLA-2M1200P	SLA-5M3700P	SLA-5M4600P	SLA-5M7000P
一般設置	52°~56°	26°~80°	22°~84°	10°~95°	10°~97°	36°~73°	21°~85°	12°~93°
HallywayView 利用時	未対応	37°~70°	33°~73°	17°~88°	12°~92°	45°~62°	38°~74°	21°~85°

- ❗ 許容角度以外に設置する時、モニターの角が隠される現象が発生することがあります。

他のデバイスとの接続

カメラ配線インタフェースボード

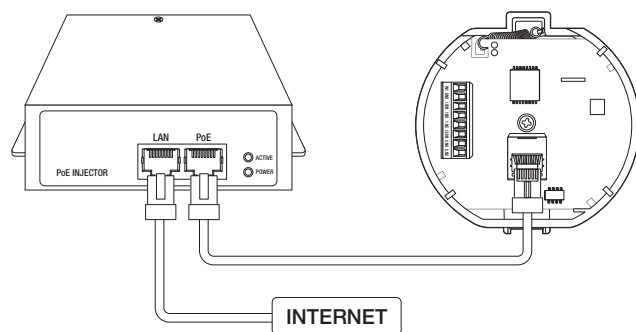
カメラの配線については、下図を参照してください。



- ❗ ■ アラーム出力をNormal Openに接続した場合:
 - 接点方式の場合にはショート、能動方式の場合には『LOW』レベルの時にセンサー入力が動作します。
- アラーム出力ターミナルの最大能力は、30V DC/2A、125V AC/0.5Aおよび250V AC/0.25Aです。
- アラーム入力ケーブルおよびアラーム出力ケーブルを接続する際には、各ケーブルを確実にそれぞれの端末に接続してください。
- カメラの容量を超える製品を接続する場合は、追加のリレーデバイスを使用してください。
- GNDをNC/NOポートとCOMポートに間違えて接続する場合、火災および製品破損のおそれがあります。

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。



■ 機器の電源は、規格に適合するアダプター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 ≤ 0.125 Ω/m
HPoE サポート	HPoE	

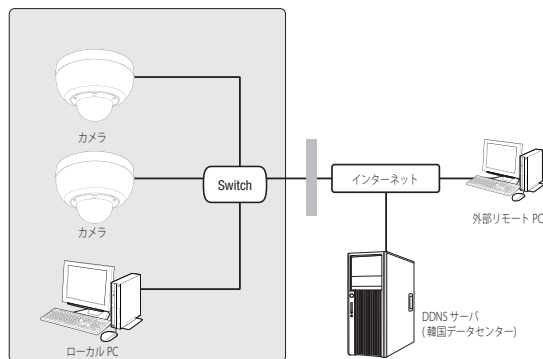
ネットワーク接続と設定

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

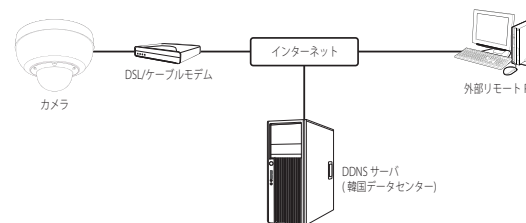
1. ローカル PC でインターネットブラウザを起動します。
2. ブラウザのアドレスバーにカメラの IP アドレスを入力します。



<ローカルネットワーク>

- 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。
- 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ためには、Device Manager を使用してください。Device Manager の使い方は、「**Device Manager を使用する**」をご参照ください。(21 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. Device Manager を使用してカメラの IP アドレスをユーザーのパソコンからインターネットブラウザで接続できる IP アドレスに変更してください。
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。

DEVICE MANAGERを使用する



- Device Manager プログラムは、ハンファテックウィンのウェブサイト(<http://www.hanwha-security.com>)に接続して<技術ガイド>-<Online Tool>でダウンロードすることができます。
- Device Managerの詳しい使い方は、トップの<ヘルプ>メニューで確認することができます。

自動にカメラを検索する

Device ManagerがインストールされたPCと同じネットワークにカメラが接続された場合、検索機能でネットワークカメラを探すことができます。

1. Device Managerのトップで<検索>をクリックしてください。
2. 検索リストで検索したいカメラが表示されているか確認してください。
 - カメラに付着されたステッカーでMACアドレスを確認してください。

IPアドレスを設定する

カメラのネットワーク設定を変更するためには、<状態>項目に<Login OK>と表示される必要があります。Device Managerのトップで<認証>をクリックすると、ログインできます。

Static IPを設定する

IPアドレス&ポート情報を手動で入力して設定します。

1. 検索リストでIP設定を変更するカメラをクリックしてください。
2. Device Managerのトップで<IP割り当て>をクリックしてください。
3. <IPアドレス手動割り当て>を選択してください。
 - カメラのIP情報が既存に設定されている値で表示されます。
4. IP関連項目&ポート関連項目を入力してください。

ブロードバンドルーターを使用しない場合

ネットワークマネージャーに<IPアドレス>、<Subnet Mask>、<Gateway>の設定値をお問い合わせください。

- HTTP ポート：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。
- RTSPポート：リアルタイム・ストリーミングを制御するポートであり、初期値は554です。

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。(23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アドレス	192.168.1.100	192.168.1.101
	Subnet Mask	255.255.255.0	255.255.255.0
	Gateway	192.168.1.1	192.168.1.1
ポート設定	HTTP ポート	8080	8081
	RTSP ポート	554	555



- <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>

5. [適用]ボタンをクリックしてください。
6. 成功確認メッセージが表示されたら、[OK]ボタンをクリックしてください。

ネットワーク接続と設定

ダイナミックIPを設定する

IPアドレスをDHCPで自動に割り当てられます。

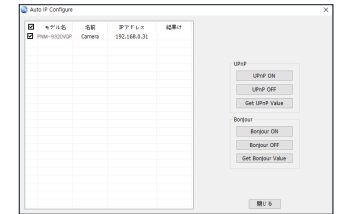
- 動的IP環境の例
 - カメラに接続しているブロードバンドルーターが、DHCPサーバーでIPアドレスを割り当てられている場合
 - DHCPプロトコルを使用して直接カメラをモデムに接続する場合
 - IPがLAN経由で内部DHCPサーバーに割り当てられている場合

- 検索リストでIP設定を変更するカメラをクリックしてください。
- Device Managerのトップで<IP割り当て>をクリックしてください。
- <IPアドレス自動割当(DHCP)>を選択してください。
- [適用]ボタンをクリックしてください。
- 成功確認メッセージが表示されたら、[OK]ボタンをクリックしてください。



自動にIPを設定する

- 検索リストでIPを自動に設定するカメラをクリックしてください。
- Device Managerのトップで<+>をクリックしてください。
 - デバイス設定メニューが表示されます。
- デバイス設定メニューで<Auto IP Configure (IP自動設定)>をクリックしてください。
- [閉じる]ボタンをクリックしてください。



手動でカメラを登録する

検索機能でカメラを探せなかったり、外部ネットワークにカメラを接続した場合、IP情報を手動で入力してリモートでカメラを探して登録することができます。

- Device Managerのトップで<デバイス追加>-<装備の手動登録>をクリックしてください。
- 検索するIPアドレス範囲を入力してください。
- 登録するカメラの<モデル名>を選択してHTTPポート、ID、パスワードを入力してください。
- [登録]ボタンをクリックしてください。
- リストでカメラが登録されているか確認してください。
 - カメラに付着されたステッカーでMACアドレスを確認してください。

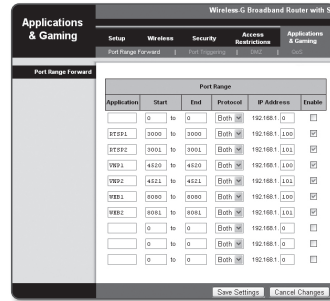


ートフォワード (ポートマッピング)の設定

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

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

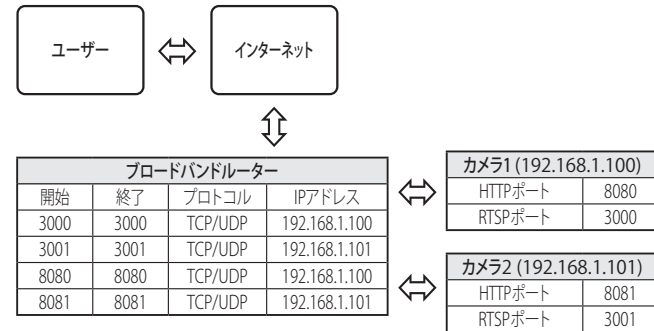


- ポートフォワーディング設定の説明は、CISCO IPのルーターで設定した例示です。
- 設定は、接続しているブロードバンドルーターのモデルによって異なる場合があります。
詳細は、該当するルーターのユーザーマニュアルを参照してください。

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. Device Managerを起動してください。
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

IPルーターのネットワーククラスター外部のリモートパソコンでは、ユーザーがカメラのDDNS URLを用いてIPルーターのネットワーク内部にある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>

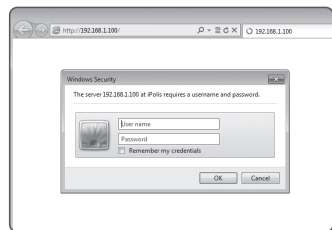


- Wisenet DDNSを有効にするためには、Wisenet DDNSのウェブサイト(<http://ddns.hanwha-security.com>)で会員登録した後、**[My DDNS]>[製品登録]**で先に製品を登録する必要があります。

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。

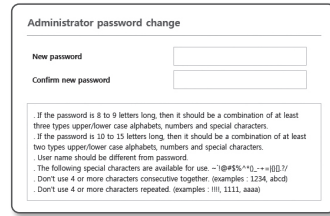
動的なIPベースのデバイスをDDNSサーバーに登録すると、そのデバイスにアクセスするときに、変更されたIPを簡単に確認することができます。

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。

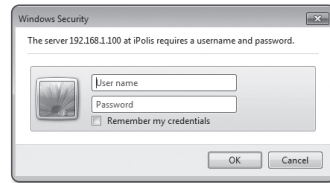


ログイン

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。

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を確認します。 - 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。
Device Managerプログラムでネットワークに接続されたカメラが検索できません。	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。
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。

問題	解決策
<アナリティクス>の<モーション検知>は<イベント>に設定されていますが、分析イベントが発生したときであっても、通知用のEメールは到着しません。	- 設定を次の順序で確認します。 A. <日付 & 時間>設定をチェックします。 B. <モーション検知>が<使用>に設定されていることを確認します。 C. <イベント設定>メニューの<E-mail>オプションが選択されて使用可能になっているかどうか確認してください。
インテリジェント映像分析イベントが生成されていても、アラーム出力ポートに信号が検出されません。	アラーム出力ポートの設定をチェックしてください。
Micro SDメモ리카ードに録画できません。	メモ리카ードに問題がないか確認してください。
Micro SDメモ리카ードを挿入しても、カメラが正しく動作しません。	- メモ리카ードが正しい方向で挿入されているかを確認してください。他のデバイスで初期化されたメモ리카ードの場合は、このカメラ装置で正常に動作しない可能性があります。 - メモ리카ードを<設定> → <イベント> → <ストレージ>メニューで再度初期化してください。

OPEN SOURCE ANNOUNCEMENT

GPL/LGPL software license

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

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

GPL SW

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

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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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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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