Hanwha

网络摄像机
用户手册

SNP-6321/SNP-6321H

CE

网络摄像机
用户手册

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商标

本文件中的每个商标均经过注册。本产品的名称以及本手册中提到的其他商标均为各自公司的注册商标。

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❖ 设计和规格可能会随时更改，恕不提前通知。

❖ 初始管理员ID为“admin”，而密码则应在首次登录时设置。
请每三个月更改一次密码，以妥善保护个人信息并防止信息泄露造成的损害。
请注意，由于没有妥善管理密码而造成安全或其他方面的问题，由用户自行承担。

概述

重要的安全说明

1. 请阅读这些说明。
2. 请您妥善保存这些说明。
3. 请您遵守所有的操作说明。
4. 请您注意所有的警告说明。
5. 请您不要在水源附近运行本机器。
6. 使用柔软干布或湿布清洁产品表面的污染区域。
   （请勿使用含有酒精、有机溶剂或表面活性剂、或含油成分的清洁剂或化妆品，此类物质可能使产品变形或受损。）
7. 请您不要堵塞通风口，在装入机器时，请您注意制造商的说明。
8. 请您不要将此机器放置在热源附近，如散热器，炉子或其它发热设备。
9. 请您绝对不要移去双线插头或有接地插头的安全装置，双线插头有两个不同宽度的插塞接点，接地插头有两个插塞接点和第三个接地接点。较宽的插塞接点或附加的接地接点是用来确保您的安全的，如果随同供货的插头规格不适合您的插座，请您委托电工更换适当的插座。
10. 请您正确铺设电源线，使其不会被踩踏和尖角损坏。请您尤其注意插头处，加长电缆和电线延伸到机器处必须具备充分的保护。
11. 请您使用制造商推荐的附加设备或配件。
12. 仅可使用厂商指定或随设备出售的运载车、支脚、三脚架、支架或工作台。
    使用运载车时，请小心避免在移动运载车/设备组合时翻覆。

13. 在雷雨天气或长时间不用的情况下，请拔下本设备的插头。
14. 请您委托具备资格的售后服务人员进行保养工作。出现以下情况时，有必要进行保养，例如当机器被损坏时（如电线或插头损坏），有物体或液体进入到机器内部时，机器受到雨淋或潮湿后，机器运行不正常或摔落在地上时。
15. 本产品专门由标有 “Class 2” 或 “LPS” 的电源装置供电，并且额定交流电压为 24 V（50 或 60 HZ），最小电流为 1.0 A。(SNP-6321)
16. 本产品专门由标有 “Class 2” 或 “LPS” 的电源装置供电，并且额定交流电压为 24 V（50 或 60 HZ），最小电流为 2.9 A。(SNP-6321H)

概述

警告

为防止火灾或电击等引起的破坏，不要把产品暴露于水中或潮湿处。请勿穿过设备上的通风栅格或其他开口插入任何金属物体。

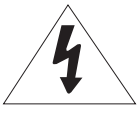
请勿将设备放置于滴水或溅水的地方，且勿将装有水的物体（如花瓶）放在设备上面。

为了避免造成人身伤害，必须按照安装说明牢固地把本设备固定在墙壁/天花板上。

Pan/Tilt/Zoom电动机和Slip ring可确保连续运行1年的部件寿命。

注意

图形符号说明



等边三角形内带箭头的闪电符号用于警告用户：产品机壳内存在“危险电压”，其电压量足以对人员构成电击危险。

等边三角形内的感叹号用于警告用户：产品附带的文字中包含重要的操作和维护（维修）说明。

电池

电池（安装的电池组或电池）不得暴露在过多的热量下（如阳光、火焰或类似物体）。

注意

如更换的电池类型不正确，可能发生爆炸。
按照说明妥当处理废旧电池。

这些维修说明仅供合格的维修人员使用。
为减少电击的危险，除了操作说明中所描述的之外，请勿执行其他任何维修工作，除非您合格这么做。

本产品提供的 CVBS 输出端子是为了便于安装，建议不要用于监视目的。

ITE只能连接到PoE网络，无需路由到外部设备。

产品内有害物质信息

部件名称	有毒有害物质元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 Cr (VI)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印制电路板组件	×	○	○	○	○	○
金属部品	×	○	○	○	○	○
电缆	×	○	○	○	○	○
塑料部品	○	○	○	○	○	○

○：部品中有毒有害物质含量在〈含量标准〉的标准值内。

×：部品中有毒有害物质含量超出〈含量标准〉的标准值。

本表格表明机器内部含有有害物质，数据是根据部件类型，由部件制作商提供并在Hanwha Techwin内部验证后做成的。

某些部品包含的有害物质，按照现在的技术基准不能替代，Hanwha Techwin一直在为改善此项而努力。

概述

请仔细阅读以下建议的安全预防措施。

- 请勿将本设备放置于不平的表面上。
- 请勿将本设备放置在传导物体附近。
- 请勿自行维修本设备。
- 请勿安装在任何磁源附近。
- 请勿堵塞任何通风口。
- 请勿在产品上放置任何重物。
- 不要让摄像机受到放射线照射。

用户手册是如何使用产品的指导书。

书中所用符号的含义如下。

- 参考：用于提供产品用法的帮助信息
- 注意：如果不遵照说明有可能对物品和人员造成任何损害

※ 在使用物品之前请阅读本手册以保证安全，并将它保存在安全的地方。

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产品特色

- **全高清视频质量**
- **多流**

  本网络摄像机可以同时使用不同的 CODEC、采用不同的分辨率和质量来显示视频。
- **基于 Web 浏览器的监视**

  使用互联网 Web 浏览器在本地网络环境中显示图像。
- **警报**

  如果发生事件，摄像机会将相关视频发送到用户注册的电子邮件地址或FTP服务器、将它们保存在SD卡或NAS中、或者将信号发送到警报输出终端。
- **防拆检测**

  在视频监视上检测拆离尝试。
- **移动探测**

  从摄像机的视频输入检测移动。
- **智能视频分析**

  分析视频以从摄像机的视频输入检测指定条件的逻辑事件。
- **面部探测**

  从摄像机的视频输入探测面部。
- **音频探测**

  检测高于用户指定的特定音量的声音。
- **自动检测断开的网络**

  检测网络断开连接，检测到便触发事件。
- **符合 ONVIF**

  本产品支持 ONVIF Profile-S。
  有关详细信息，请参阅 www.onvif.org.

ONVIF
Driving network video through global standardization

概述

推荐 PC 技术规格

- CPU：英特尔酷睿 2 双核 2.6 GHz 或更高（使用 1920x1080@30 fps）
  英特尔酷睿 i7 2.8 GHz 或更高（使用 1920x1080@60 fps）
  - Web 插件针对 SSE 4.1 指令集进行了优化。
- 分辨率：1280X1024 像素或更高（32 位颜色）
- RAM：2GB 或更大
- 支持的操作系统：Windows XP / VISTA / 7 / 8, MAC OS X 10.7
- 支持的浏览器：Microsoft Internet Explorer (版本 8~11)
  Mozilla Firefox (版本 9~19), Google Chrome (版本 15~25),
  Apple Safari (版本 6.0.2 (仅限 Mac OS X 10.8、10.7)、5.1.7) * Mac OS X 仅限
  - 仅在桌面模式下支持 Windows 8。
  - 既不支持测试版，也不支持开发者版，仅支持在公司官方网站发布的正式版本。
  - 若需要使用IPv6功能，建议使用 Windows 7操作系统。
  - 本机不支持Internet Explorer兼容性视图设置。
  - 对于 Mac OS X，只支持 Safari 浏览器。
- 显存：256MB 或更大

  - 如果显卡的驱动程序未正确安装或不是最新版本，则视频可能无法正确播放。
  - 对于至少涉及 2 个监视器的多监视系统，播放性能可能会下降，具体视系统而定。
  - 建议您在多浏览器环境中使用 Intel Core 2 Duo 2.93GHz 或更高档的处理器。

推荐 SD/SDHC/SDXC 存储卡 技术规格

- 4GB ~ 64GB
- 对您的摄像机，我们建议您使用以下厂商制造的存储卡：
  SD/SDHC/SDXC 存储卡：Sandisk, Transcend
- 如果帧率低于 30 fps，建议使用 Class 6 或更高速度的规格存储卡。
- 如果帧率超过 31 fps，建议使用 Class 10 UHS 或更高速度的规格存储卡。

NAS 建议规格

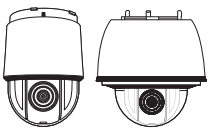
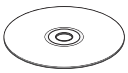
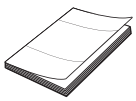
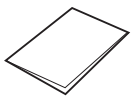
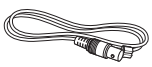
- 建议容量：200GB 或更高
- 同步访问：一套 NAS 可以同时接受最多十六个摄像机访问。
- 对于本摄像机，建议使用符合以下制造商规格的 NAS。

建议产品	可用尺寸
Netgear NAS	最多 16 个摄像机可同时访问。
Synology NAS	最多 16 个摄像机可同时访问。

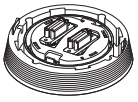
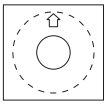
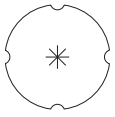
- 使用 Netgear 公司的 NAS 设备时，不要分配要使用的容量。
- 如果使用 NAS 设备的目的不是为了保存视频，可以减少可访问摄像机的数量。

随机提供的物品

请检查产品包装内是否已包括摄像机和所有附件。

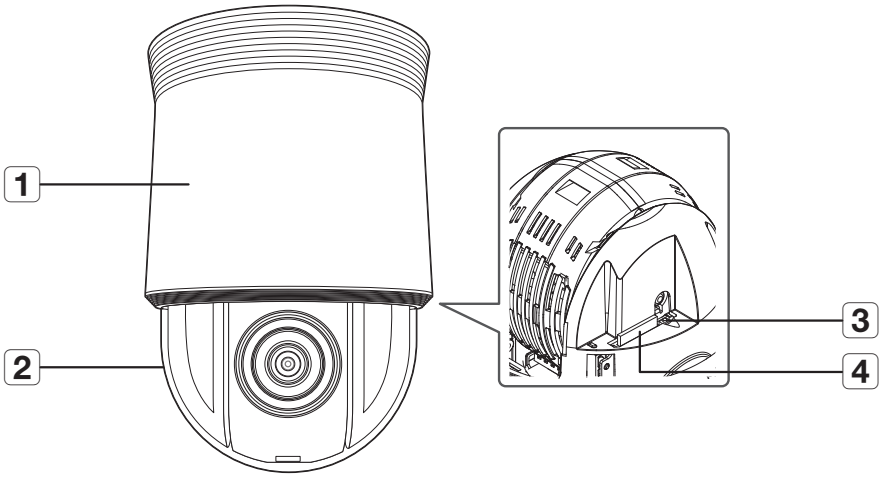
外观	项目名称	数量	说明	型号名称
	摄像机	1		SNP-6321 或者 SNP-6321H
	说明手册, Installer 软件 CD	1		
	用户手册	1		
	保修卡	1		
	测试连接线	1	用于连接到便携式显示设备，方便摄像机的安装。	

概述

外观	项目名称	数量	说明	型号名称
	安装基座	1	用于安装室内或者天花板支架上	SNP-6321
	自攻螺钉	4	用于安装在天花板上	
	安装模板	1	产品安装指南	
	绝缘片	1	将摄像机安装在高湿度场所时使用	
	六角螺钉	3	用于将安装基座安装在摄像机上	SNP-6321H
	L 型扳手	1	用于在将安装基座连接至摄像机之后固定基座。	
	安装基座	1	用于安装在室外支架上	
	防水配件	1	在湿度较高的地方安装和使用。	

简图 (SNP-6321)

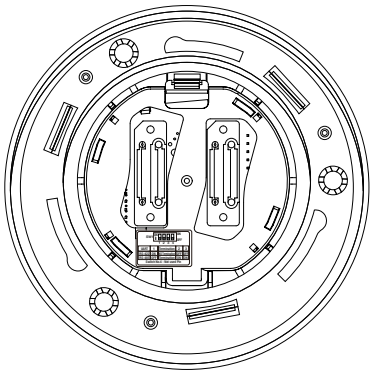
外观 **内部**



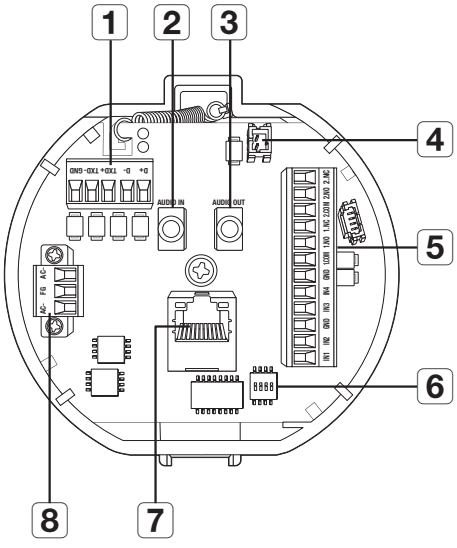
项目	说明
1 主设备	保护 PTZ 装置免受阳光直晒或外部冲击。
2 圆顶盖	用于保护镜头和设备的圆顶盖。
3 重置按钮	按住此按钮约 5 秒钟会将所有摄像机设置重置为出厂默认值。
4 SD 内存卡槽	用于 SD 内存卡的卡槽。

概述

安装基座的底部视图



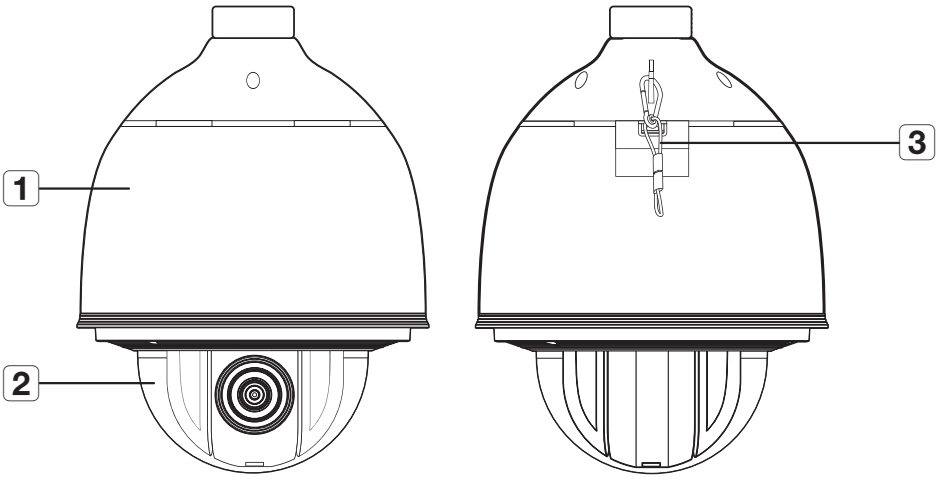
安装基座的内视图



项目	说明
1 通讯端口	用于 RS-485/422 通信。
2 音频输入端口	用于连接音频输入线。
3 音频输出端口	用于连接音频输出线。
4 视频输出端口	模拟视频输出端口。(用于安装)
5 警报 I/O 端口	用于连接警报 I/O 线。
6 通信设置开关	设置通信协议 (RS-486/422) 并指明是否要终止。
7 网络连接	可以使用 PoE+ 或以太网电缆将该端子连接到网络。
8 电源端口	用于连接电源。

简图 (SNP-6321H)

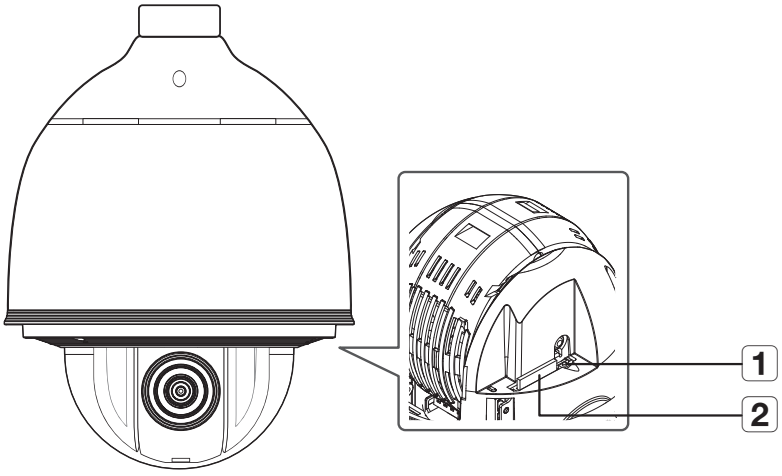
外观



项目	说明
1 主设备	保护内置 PTZ 机械，避免阳光直射、雨水或外部碰撞。
2 圆顶盖	用于保护镜头和设备的圆顶盖。
3 安全电缆	此电缆可防止产品在安装过程中跌落。

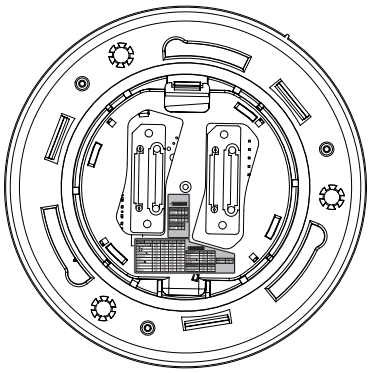
概述

内部

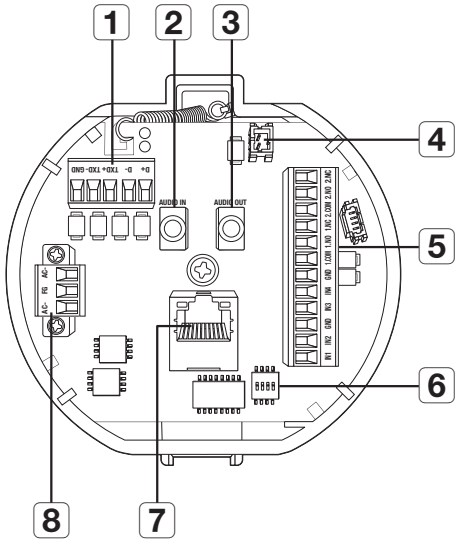


项目	说明
1 重置按钮	按住此按钮约 5 秒钟会将所有摄像机设置重置为出厂默认值。
2 SD 内存卡槽	用于 SD 内存卡的卡槽。

安装基座的底部视图



安装基座的内视图

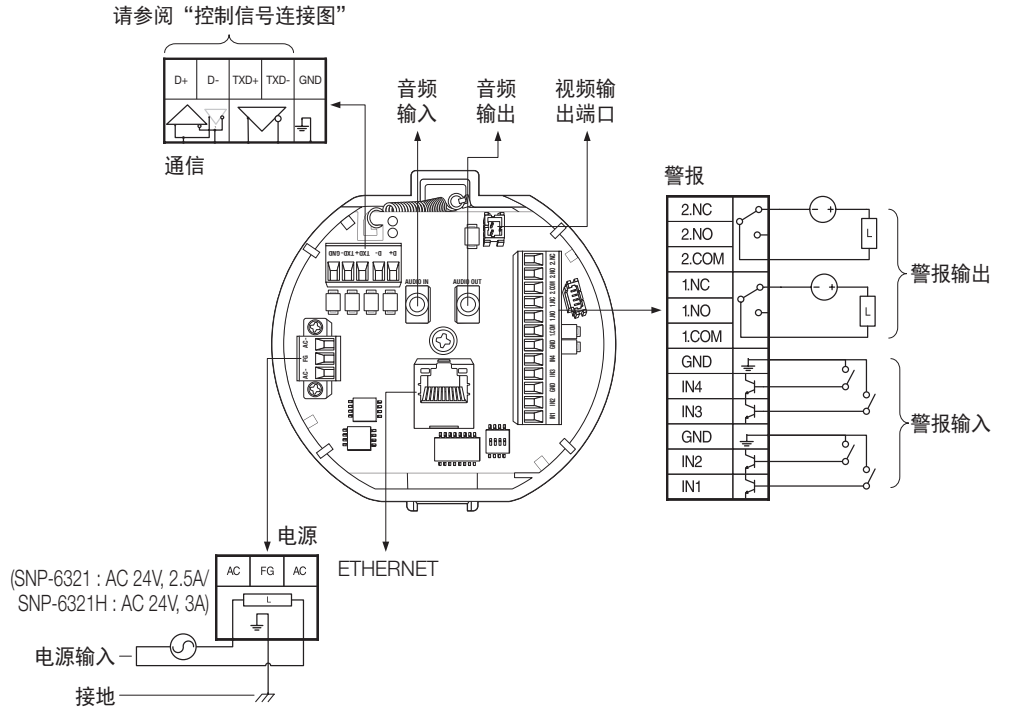


项目	说明
1 通讯端口	用于 RS-485/422 通信。
2 音频输入端口	用于连接音频输入线。
3 音频输出端口	用于连接音频输出线。
4 视频输出端口	模拟视频输出端口。(用于安装)
5 警报 I/O 端口	用于连接警报 I/O 线。
6 通信设置开关	设置通信协议 (RS-486/422) 并指明是否要终止。
7 网络连接	可以使用 PoE+ 或以太网电缆将该端子连接到网络。
8 电源端口	用于连接电源。

安装与连接

▪ 摄像机接线接口板

对于摄像机接线，请参阅下图。

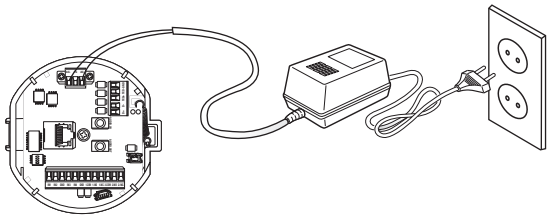


- 从设置菜单中选择常开。
  - 短路接触类型过程中或活动类型中处于“低”级别时，激活传感器输入。
- 从设置菜单中选择常闭。
  - 接触类型中打开或活动类型中处于高阻抗状态（打开收集器）时，激活传感器输入。
- 警报输出终端的最大容量为30V DC/2A、125V AC/0.5A和250V AC/0.25A。
- 连接警报输入和输出电缆时，请务必分别将一根电缆连接至一个端子。
- 要连接超过摄像机容量的产品，请使用额外的继电器设备。
- 如果电源线和GND线缆未正确连接到NC/NO或COM端口，可能会造成火灾或设备故障。

与其他设备连接

准备适配器和电线

- 将摄像机连接至电源适配器。然后，将适配器电源线插入到墙壁电源插座。



在连接之前，检查额定电压和电流。

电压	允许的输入电压	电流消耗
AC 24V	AC 22V~26V	(SNP-6321 : AC 24V, 2.5A/ SNP-6321H : AC 24V, 3A)

- 如果同时供应 PoE+ 和 AC 24V 电源，设备会采用先接通的电源。
  - 首选使用单个电源，即 PoE+ 和 AC 24V 之一。
- 如果连接至提供 PoE+ 电源的交换机设备，则您不需要供应 AC 24V 电源。
- 请确保 PoE 设备符合 PoE+ (IEEE 802.3at) 规格。
  - 如果设备连接到采用 PoE（IEEE 802.3af）标准的交换机，请转到交换机设置菜单来“取消激活 PoE”。有关交换机设备的更多信息，请参阅制造商的手册。
  - 建议使用符合PoE+规范的线缆。
- 如果使用 PoE+ 作为电源，启动时间可能会由于交换机型号（根据频道）或制造商而存在差异（因为包括 PoE+ 连接时间）。
- 加热器无法使用PoE+电源。(SNP-6321H)

[20°C (68°F)] 时铜线的电阻

铜线电量表 (AWG)	#24(0.22mm²)	#22(0.33mm²)	#20(0.52mm²)	#18(0.83mm²)
电阻 (Ω/m)	0.078	0.050	0.030	0.018
电压降 (V/m)	0.028	0.018	0.011	0.006
建议距离 (m)	少于 20	少于 30	少于 30	少于 30

- 如上表中所示，您可能会遇到电压下降，具体视电线长度而定。 如果您使用极长的线来连接摄像机，则摄像机可能无法正常工作。
  - 摄像机工作电压：AC 24V±10%
  - 上图中的电压降测量值可能会因铜线的类型和制造商而异。

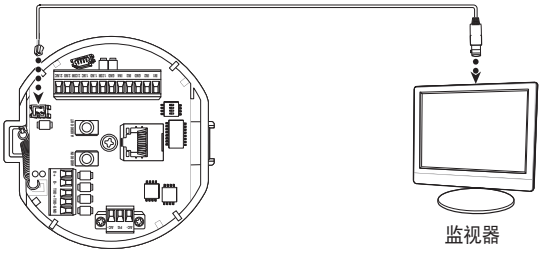
以太网连接

将以太网电缆连接到本地网络或互联网。

安装与连接

连接安装监视器

使用电缆连接摄像机背面的视频输出端子和监视器的视频输入端子。



- 接线会因监视器类型和外围设备而异；请参阅每个设备的用户手册。
- 连接监视器与摄像机时，请确保它们已关闭。

- 本产品是一款网络摄像机，可通过网络传送视频；视频输出端子用于在安装时设置摄像机的成像范围。
- 将该端子用于监控可能会导致视频质量降低等问题。
- 不适合使用专业 CRT 监视器或 TFT/LCD 便携式监视器进行 24 小时监视。
- 使用网络传输屏幕进行 24 小时监视和存储。

安装

准备和安装摄像机支架

有关支架和机盒的安装指南，请参阅支架或机盒随附的安装手册。

▪ 可用的支架型号

型号	项目	SNP-6321	SNP-6321H
SHP-3701H	室外机盒	是	-
SHP-3701F	天花板安装机盒		
SBP-301HM3	悬挂式安装适配器		
SBP-300WM1	墙上安装适配器		是
SBP-300WM			
SBP-300CM	天花板安装适配器		
SBP-300LM	胸墙安装适配器		
SBP-300KM	角落安装适配器		
SBP-300PM	柱式安装适配器		

- 有关每个支架（未捆绑提供）外观的信息，请参阅 **“可选的安装附件”**。（第 28 页）

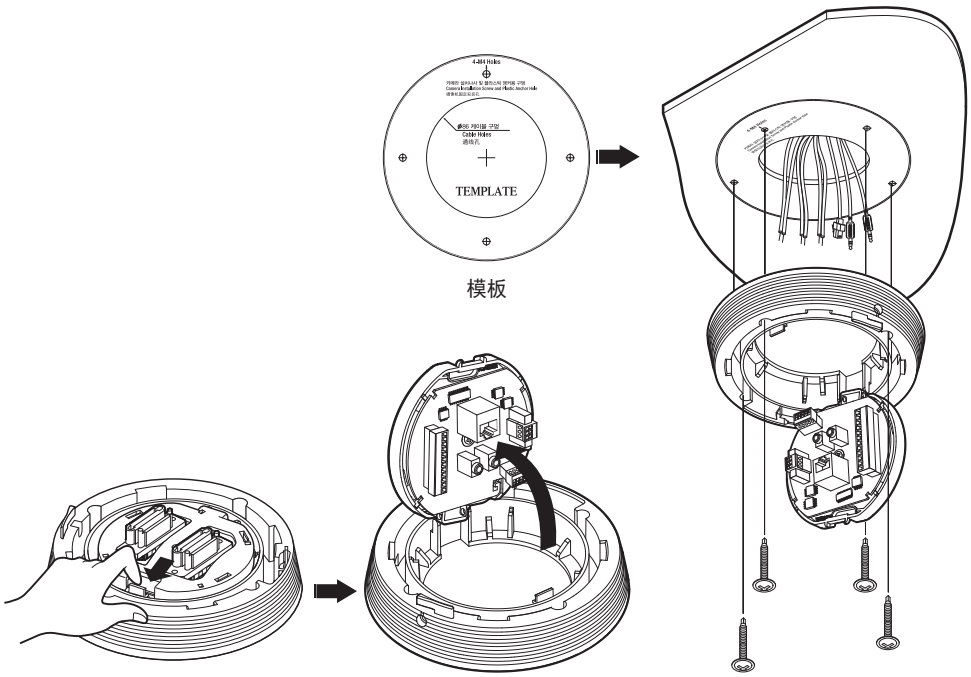
通过水平面附着安装

▪ 不能将 SNP-6321H 安装在墙壁或天花板的水平面上。

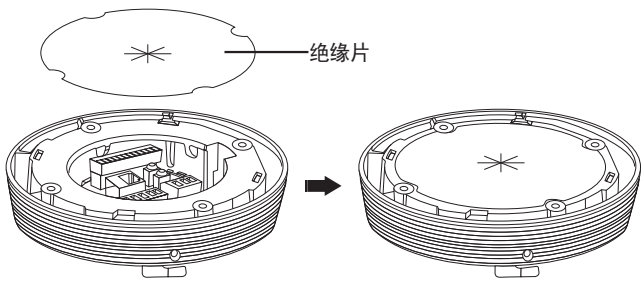
▪ 粘贴模板和安装安装基座

1. 将提供的模板帖在天花板上。 根据模板，在天花板中钻 86mm 的孔并将电线穿过该孔。
2. 如图中所示安装安装基座。
3. 在安装露出的支架时，请打开支架底部的铰链门，如图中所示。 按住铰链门上的旋钮可以将门打开。

▪ 将摄像机安装在高湿度场所时，在安装基座背面贴上随附的绝缘片，然后将摄像机安装在天花板上。



模板

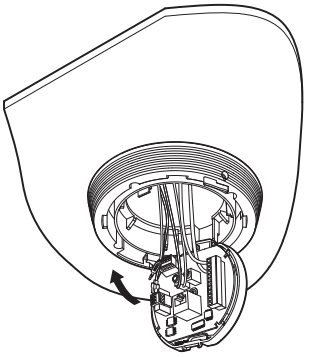


<贴上绝缘片>

安装与连接

▪ 连接端子线

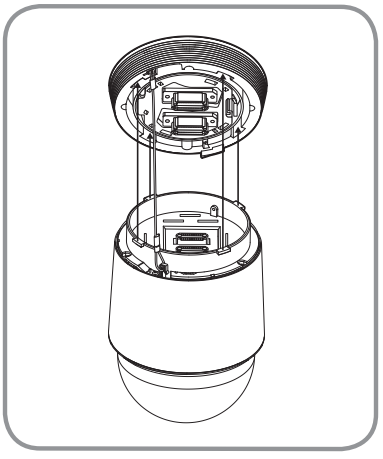
1. 将电线连接至铰链门上的接线端。
   请参阅 “**摄像机接线接口板**”。(第 18 页)
2. 接线完成后，关闭铰链门。

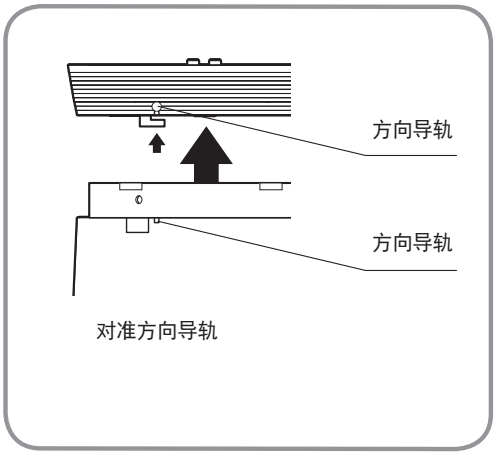


▪ 在安装完成之前，不要将摄像机连接到电源插座。
在安装过程中供电可能会导致火灾或损坏产品。

▪ 连接摄像机安全电缆和安装摄像机

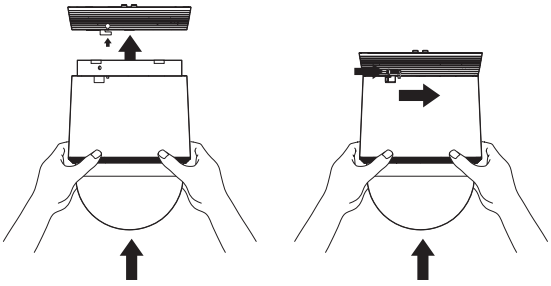
1. 首先，如左图所示，从基座中拉出安全电缆，然后将它钩在底座上。安全电缆收在基座内。
   ▪ 要将摄像机安装到安装适配器上，请参阅图中所示的对准导轨标记。
2. 按照图片中所示的对准导轨标记，谨慎地将摄像机安装至安装适配器。





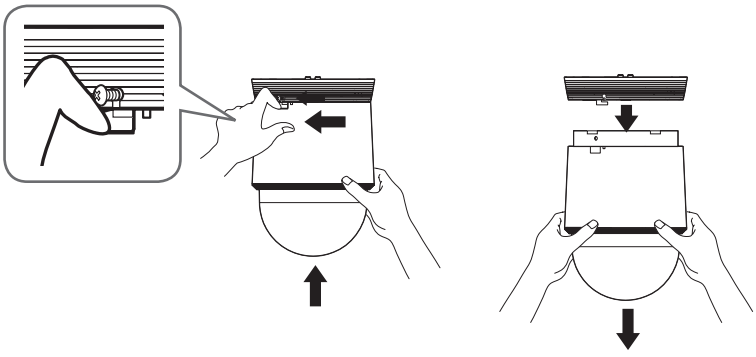
▪ 确保将摄像机的安全电缆钩住安装适配器，然后开始工作。否则，摄像机跌落可能让您受到严重伤害。

- 要安装或拆下摄像机，请参阅图片。
  - 安装摄像机：如图所示，向上推动摄像机装置并按顺时针方向转动它，直至无法继续转动。
    完成转动操作后，拧紧装到安装基座上的螺丝。



< 安装摄像机 >

  - 拆下摄像机：如图所示，拧松螺丝，推入钩子，并按逆时针方向转动它。
    （螺丝未完全卸下）
    当无法继续转动钩子时，向下拉摄像机装置并将它拆下。



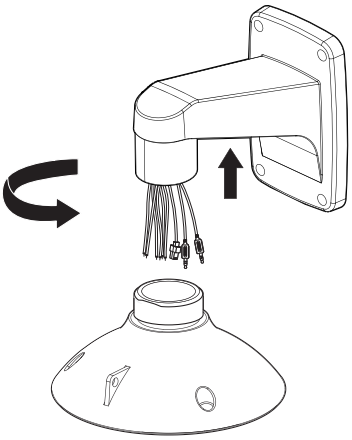
< 拆下摄像机 >

安装与连接

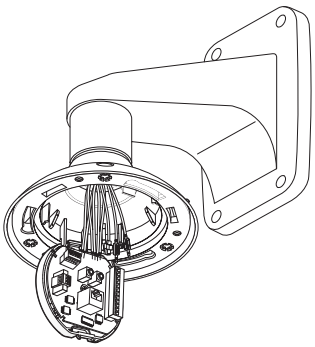
通过墙上安装适配器安装

▪ 固定安装基座和支架

1. 顺时针旋转支架以固定基座。



2. 如下图所示，轻按然后提起安装基座底部铰接的门的手柄。请参阅第 18 页上的 **“摄像机接线接口板”**，连接电线。

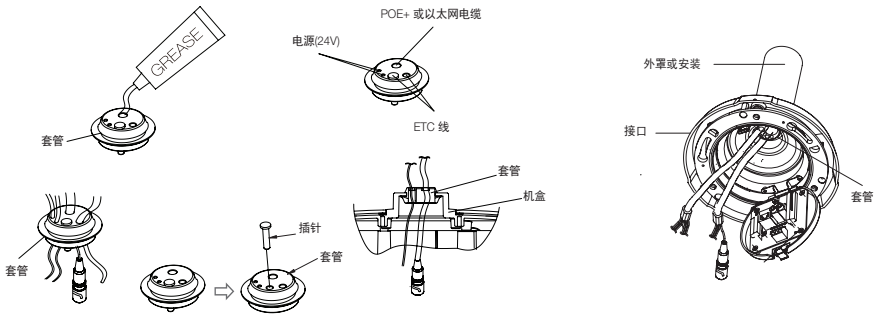


▪ 在安装完成之前，不要将摄像机连接到电源插座。在安装过程中供电可能会导致火灾或损坏产品。

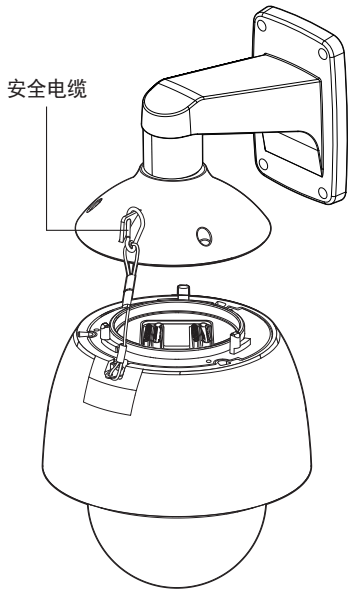
检查电缆连接方法并进行安装。

▪ 请注意，**套管**用于通过**管道**或**安装**在暴露于潮湿环境中进行安装，使用**套管**安**装机**盒可以防止湿气进入。

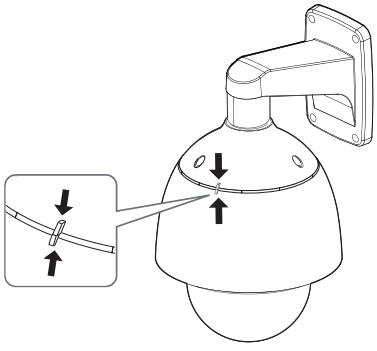
- 在组装前将适量的油脂涂到**套管**上，然后将电缆穿过套管的每个孔。使用**插针**堵住没有电缆穿过的空孔。
- 如下图所示，将**套管**组装到**机盒**内侧的顶部。然后，如图所示在**机盒**上均匀施压以将其牢牢地固定在**套管**上。



3. 将摄像机安全电缆连接至安装基座。

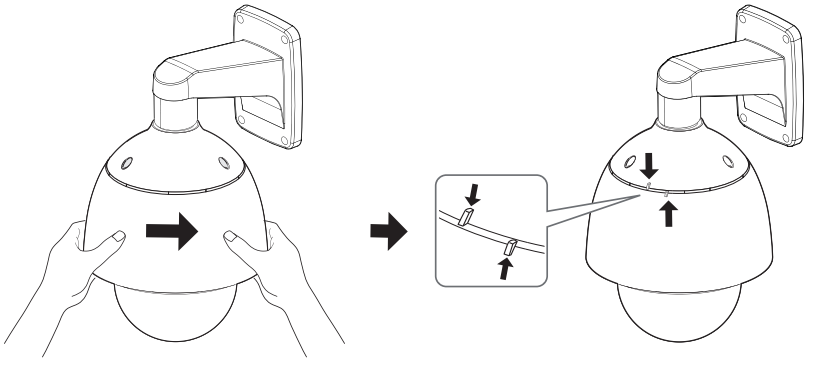


4. 装配摄像机和安装基座
通过对准安装方向导轨装配安装基座和摄像机。

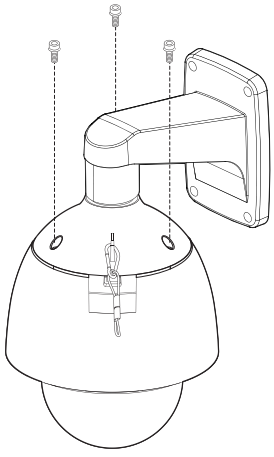


安装与连接

5. 固定摄像机
   顺时针方向转动摄像机装置，使顶部和底部的参考指示器如右图所示。



6. 固定摄像机和安装基座
   如下图所示，使用 3 颗六角螺钉固定安装基座和摄像机。



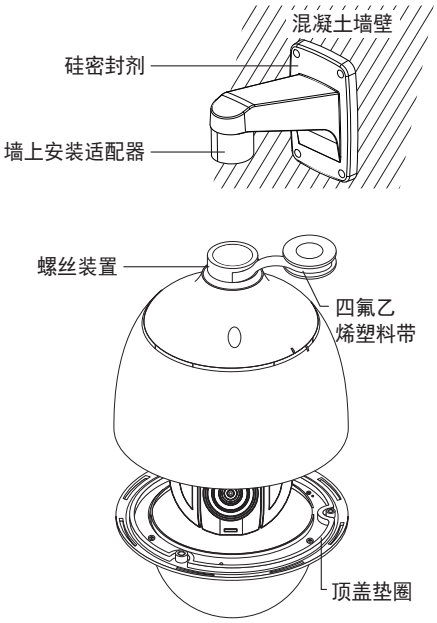
防水注意事项

本产品为室内装置。如安装在室外，请使用室外保护罩防水。

▪ 通过合并室外保护罩和墙上安装适配器，将装置安装在墙壁上

1. 将墙上安装适配器安装在垂直墙壁上。如底座安装在倾斜墙壁上，湿气可能通过外部电缆渗入室外保护罩中。
2. 用足够的四氟乙烯塑料带进行装配，包裹住保护罩的螺丝部分。
3. 取下顶盖并将它固定到保护罩边框时，确保垫圈未从顶盖上松脱。
4. 安装墙上安装适配器进行防水，并在墙壁与墙上安装适配器之间及其周围区域涂上硅密封剂进行密封。

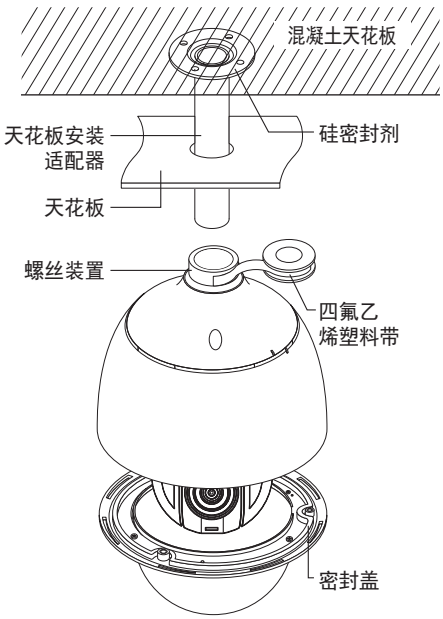
▪ 安装面不平时请特别注意，确保采取正确的密封措施。



▪ 通过合并室外保护罩和天花板安装适配器，安装在墙壁上

1. 用足够的四氟乙烯塑料带进行装配，包裹住保护罩的螺丝部分。
2. 取下顶盖并将它固定到保护罩边框时，确保垫圈不会从顶盖上松脱。
3. 安装天花板安装适配器进行防水，并在墙壁与天花板安装之间及其周围区域涂上硅密封剂进行密封。

▪ 安装面不平时请特别注意，确保采取正确的密封措施。

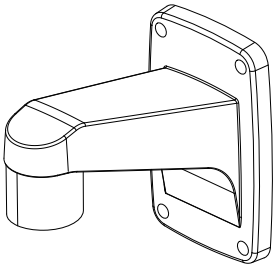


安装与连接

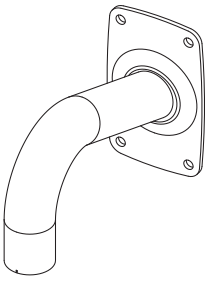
可选的安装附件

为了更方便安装，您可以购买可选的附件。

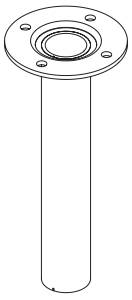
1. 如果将摄像机安装在墙壁上
   - 墙上安装适配器 (SBP-300WM1)



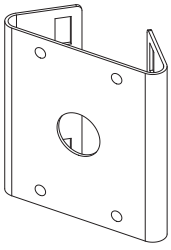
   - 墙上安装适配器 (SBP-300WM)



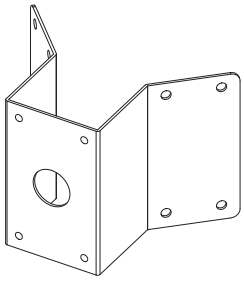
2. 如果将摄像机安装在天花板上
   - 天花板安装适配器 (SBP-300CM)



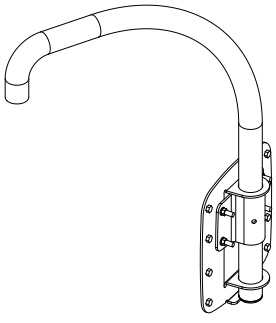
3. 如果将墙上安装适配器 (SBP-300WM/SBP-300WM1) 安装在长度至少为 80 mm 的圆柱上
   • 柱式安装适配器 (SBP-300PM)



4. 如果将墙上安装适配器 (SBP-300WM /SBP-300WM1) 安装在墙角
   • 角落安装适配器 (SBP-300KM)

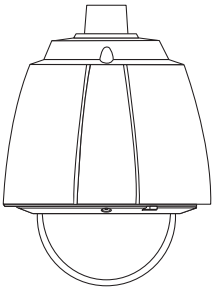


5. 如果安装在屋顶
   • 胸墙安装适配器 (SBP-300LM)

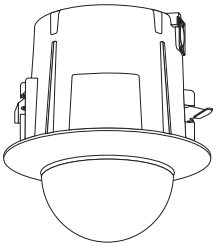


安装与连接

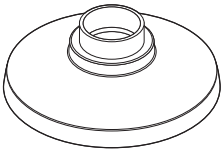
6. 如果将 SNP-6321 安装在室外
   - 室外机盒 (SHP-3701H)



7. 如果将 SNP-6321 作为内嵌组件安装在天花板上
   - 圆顶摄像机的平齐安装室内机盒 (SHP-3701F)



8. 如果将 SNP-6321 安装在墙上安装适配器或天花板安装适配器中
   - 悬挂式安装适配器 (SBP-301HM3)

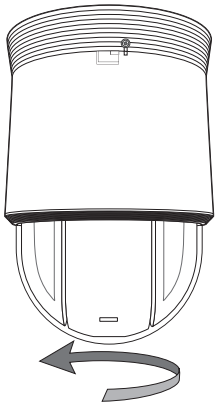


插入/拔出 SD 存储卡

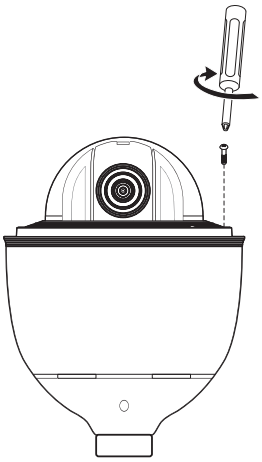
▪ 先从摄像机拔下电源线，然后再插入 SD 存储卡。

插入 SD 存储卡

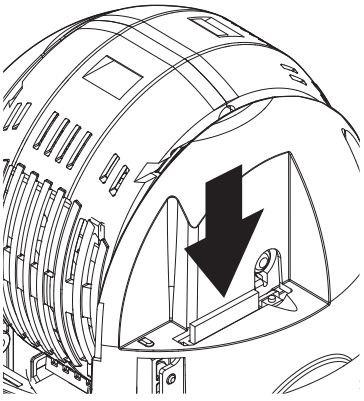
1. 逆时针旋转球罩以将其打开。(SNP-6321)



通过使用螺丝起子逆时针旋转 3 颗螺钉将其松开，然后揭开圆顶盖。(SNP-6321H)



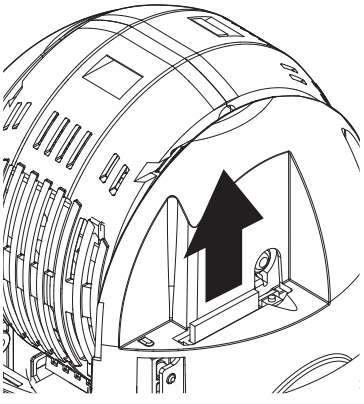
2. 请按图中所示箭头方向推 SD 存储卡。



- 请勿在 SD 内存卡翻转时用力插入。否则，可能会损坏 SD 内存卡。

拔出 SD 存储卡

轻轻地按压存储卡露在外面的一端，依图示的方向从卡槽中弹出存储卡。



- 过度用力按压 SD 存储卡可能会导致卡不可控制地从卡槽中弹出。
- 若要关闭摄像机或取出 SD 存储卡，请在 <**存储器**> 菜单中将卡设置为 <**关**>，然后按 [**应用 (** 应用)] 按钮。(第 96 页)
- 如果关闭摄像机或取出 SD 内存卡，并且其中包含来自产品的数据，则数据可能丢失或受损。

存储卡信息(不含)

什么是存储卡?

存储卡是一种外部数据储存设备，它的开发为使用数字设备进行录制和共享音频、视频和文本数据提供了崭新的方式。

选择一款适合您的存储卡

您的摄像机支持 SD/SDHC/SDXC 存储卡。
根据存储卡的型号和制作材料不同，您可能会遇到兼容性的问题。

对您的摄像机，我们建议您使用以下厂商制造的存储卡：
SD/SDHC/SDXC 存储卡：Sandisk, Transcend

建议将 4GB ~ 64GB 的存储卡与本摄像机配合使用。

回放性能可能受存储卡速度的影响，因此，请使用高速存储卡。

如果帧率低于 30 fps，建议使用 Class 6 或更高速度的规格存储卡。

如果帧率超过 31 fps，建议使用 Class 10 UHS 或更高速度的规格存储卡。

存储卡的使用

SD/SDHC/SDXC 存储卡有一个能够禁止写入的开关。
将开关拨到锁定位置能够保证存储卡中的数据不会因意外删除，但同时，您也无法向其中写入数据。

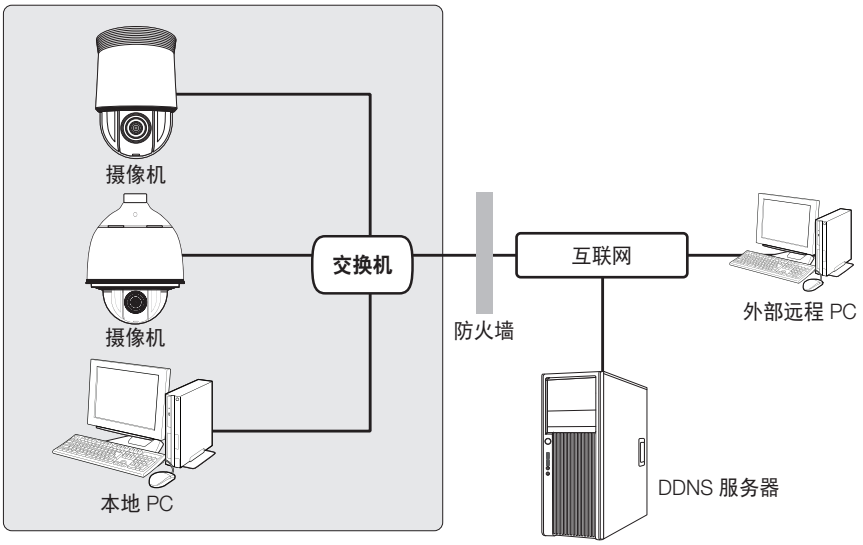
网络连接和设置

可根据您的网络配置来设置网络的设定。

将摄像机与局域网直接连接

连接局域网内的本地 PC 和摄像机

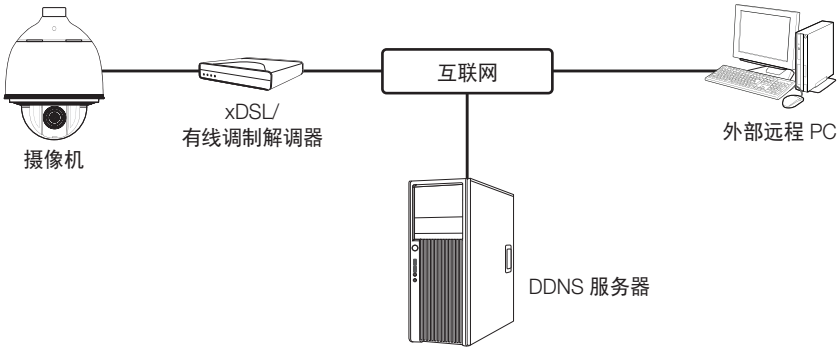
1. 启动本地 PC 上的网络浏览器。
2. 在浏览器的地址栏中输入 IP 地址。



<局域网>

- 在正确设置防火墙或端口转发前，局域网外部的远程互联网 PC 可能无法连接安装于内部网的摄像机。在此情况下，联系网络管理员解决问题。
- 在IP安装程序中，您可以使用初始密码“**4321**”来设置IP地址、子网掩码、网关、HTTP端口、VNP端口或IP类型。在更改网络接口后，为了提高安全性，请访问Web查看器并更改密码。
- 根据出厂默认值，会自动从 DHCP 服务器分配 IP 地址。
  如果没有可用的 DHCP 服务器，则会将 IP 地址设置为 192.168.1.100。
  要更改 IP 地址，请使用 IP Installer。
  有关 IP Installer 使用的详细信息，请参阅“**静态 IP 设置**”。（第 39 页）

将摄像机直接连接至基于 DHCP 的 XDSL/有线电视网调制解调器

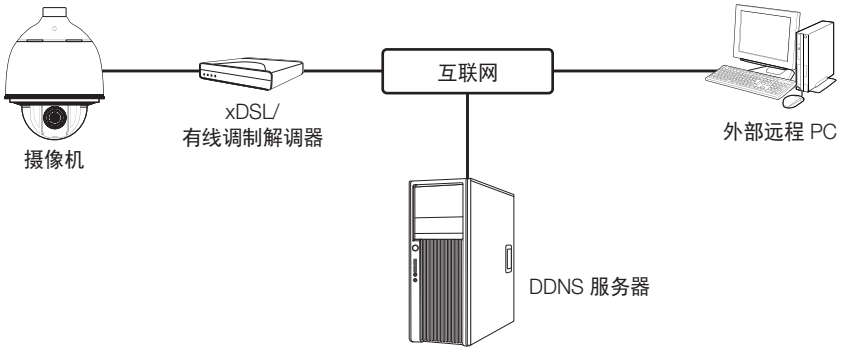


1. 直接将用户 PC 与网络摄像机连接。
2. 运行 IP Installer 并更改摄像机的 IP 地址，以便可以使用桌面上的 Web 浏览器连接至互联网。
3. 使用互联网浏览器连接至 Web Viewer。
4. 移至 [**Setup**] 页面。
5. 移至 [**Network**] – [**DDNS**] 并配置 DDNS 设置。
6. 移动到 [**Basic**] – [**IP & 端口**] 并将“IP 类型”设置为 [**DHCP**]。
7. 将摄像机（已从您的 PC 上拔下）直接连接至调制解调器。
8. 重新启动摄像机。

- 有关注册 DDNS 设置，请参阅“**注册 DDNS**”。(第 88 页)
- 有关配置 DDNS 设置，请参阅“**DDNS**”。(第 87 页)
- 请参阅“**IP & 端口**”部分，了解如何设置IP。(第 65 页)

网络连接和设置

直接将摄像机连接到 PPPoE 调制解调器

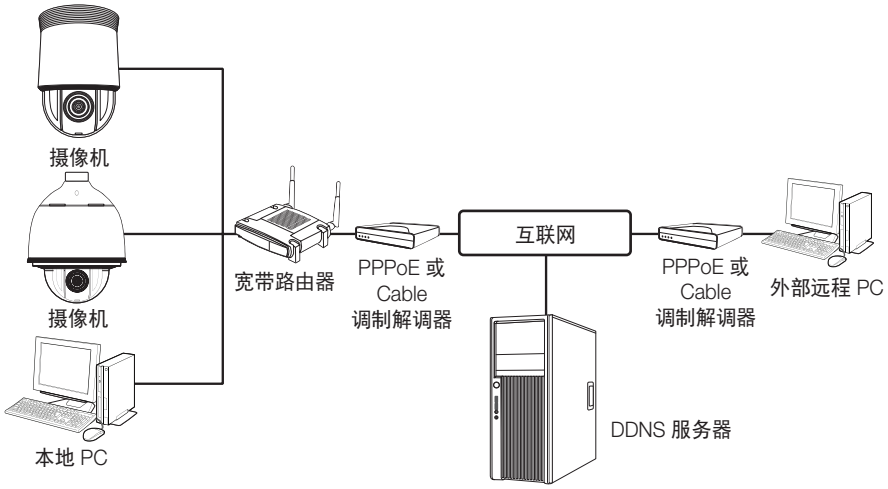


1. 直接将用户 PC 与网络摄像机连接。
2. 运行 IP Installer 并更改摄像机的 IP 地址，以便可以使用桌面上的 Web 浏览器连接至互联网。
3. 使用互联网浏览器连接至 Web Viewer。
4. 移至 [**Setup**] 页面。
5. 移至 [**Network**] – [**DDNS**] 并配置 DDNS 设置。
6. 移动到 [**Basic**] – [**IP & 端口**] 设置页面，将“IP 类型”设置为 [**PPPoE**]，然后输入网络服务的 ID 和密码。
7. 将摄像机（已从您的 PC 上拔下）直接连接至调制解调器。
8. 重新启动摄像机。

- 有关注册 DDNS 设置，请参阅“**注册 DDNS**”。（第 88 页）
- 有关配置 DDNS 设置，请参阅“**DDNS**”。（第 87 页）
- 请参阅“**IP & 端口**”部分，了解如何设置IP。（第 65 页）

将摄像机与使用 PPPoE/CABLE 调制解调器的宽带路由器连接

适用于小型网络环境，如家庭、SOHO 以及普通的商店。



配置连接到宽带路由器

在配置连接到宽带路由器的本地 PC 的网络设置时，遵循以下说明。

- 选择：<**网络**> → <**属性**> → <**本地连接**> → <**常规**> → <**属性**> → <**Internet 协议 (TCP/IP)**> → <**属性**> → <**自动获得 IP 地址**> 或 <**使用下面的 IP 地址**>。
- 若您选择的是 <**使用下面的 IP 地址**>，遵照以下说明操作：

例1) 若宽带路由器的地址 (LAN IP) 为 192.168.1.1
IP 地址：192.168.1.100
子网掩码：255.255.255.0
默认网关：192.168.1.1

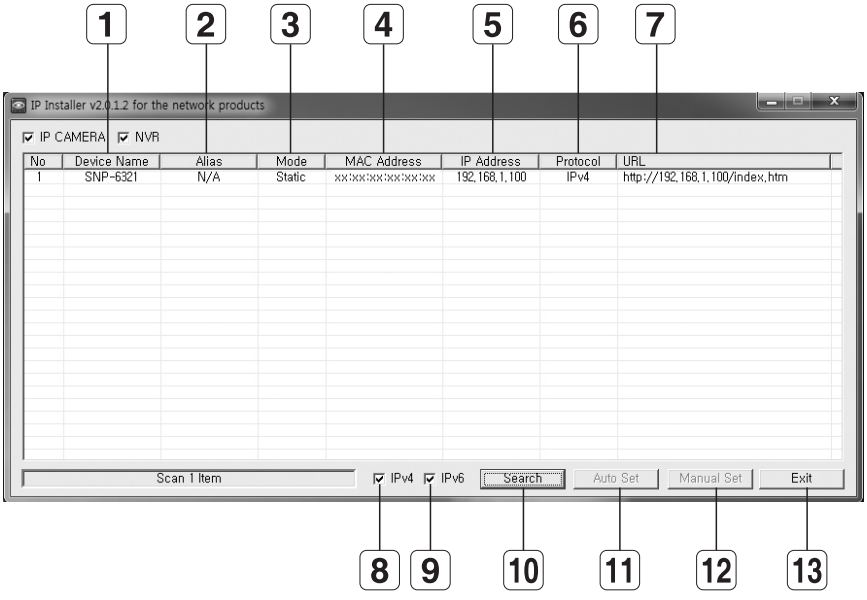
例2) 若宽带路由器的地址 (LAN IP) 为 192.168.0.1
IP 地址：192.168.0.100
子网掩码：255.255.255.0
默认网关：192.168.0.1

例3) 若宽带路由器的地址 (LAN IP) 为 192.168.xxx.1
IP 地址：192.168.xxx.100
子网掩码：255.255.255.0
默认网关：192.168.xxx.1

- 关于宽带路由器的地址，请参见产品文档。
- 如需宽带路由器的正向端口的更多信息，请参阅 “**路由器端口设置**”。(第 43 页)

网络连接和设置

在 IP INSTALLER 中使用的按钮



项目	说明
1 Device Name	已连接摄像机的型号名称。 单击此列可以按型号名称对列表进行排序。 但是，如果在搜索时单击将会停止搜索。
2 Alias	此功能当前不可用。
3 Mode	对当前网络连接状态显示 <Static>，<Dynamic> 和 <PPPoE>。
4 MAC(Ethernet) Address	已连接摄像机的以太网地址。 单击此列可以按以太网对列表进行排序。 但是，如果在搜索时单击将会停止搜索。
5 IP Address	IP 地址。 单击此列可以按 IP 地址对列表进行排序。 但是，如果在搜索时单击将会停止搜索。
6 Protocol	摄像机的网络设置。 出厂默认设置为 “IPv4”。 使用 IPv6 设置的摄像机将显示 “IPv6”。

项目	说明
7 URL	DDNS URL 地址可以从外部互联网访问。 但是，如果 DDNS 注册失败，此按钮将被摄像机的 <**IP Address**> 代替。
8 IPv4	扫描使用 IPv4 设置的摄像机。
9 IPv6	扫描使用 IPv6 设置的摄像机。 只能在符合 IPv6 的环境中激活。
10 Search	扫描当前连接到网络的摄像机。 但是，如果没有选取 IPv4 也没有选取 IPv6，该按钮将呈灰色。
11 Auto Set	IP Installer 自动配置网络设置。
12 Manual Set	手动配置网络设置。
13 Exit	退出 IP Installer 程序。

▪ 对于 IP Installer，请仅使用在安装 CD 中提供的版本，或者最新版本（如果可以获得）。
可以从 Hanwha Techwin 网站下载最新版本。

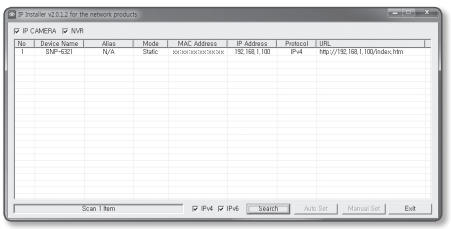
静态 IP 设置

手动网络设置

运行 <**IP Installer_v2.XX.exe**> 以显示摄像机搜索列表。
在初始启动时，[**Auto Set**] 和 [**Manual Set**] 将呈灰色

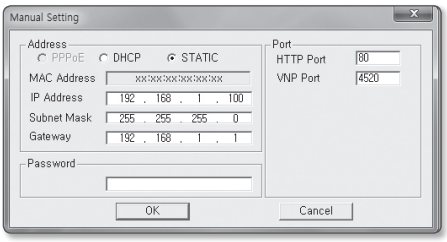
▪ 对于以 IPv6 设置为基础的摄像机，这些按钮将呈灰色，因为摄像机不支持此功能。

1. 从搜索列表中选择一个摄像机。
   在摄像机的标签上检查摄像机的 MAC 地址。
   将激活 [**Auto Set**] 和 [**Manual Set**] 按钮。
2. 单击 [**Manual Set**]。
   Manual Setting 对话框将会出现。
   将显示摄像机的 <**IP Address**>、<**Subnet Mask**>、<**Gateway**>、<**HTTP Port**> 和 <**VNP Port**> 默认值。



网络连接和设置

3. 在 <**Address**> 窗格中，提供必需的信息。
   - MAC (Ethernet) Address：印在摄像机标签上的 MAC 地址会自动显示，不需要用户设置。

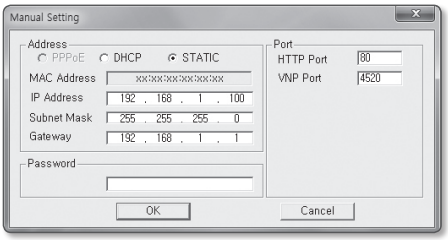


▪ 只有在未选中 DHCP 复选框的情况下，才能配置静态 IP 设置。

如果不使用宽带路由器

若要设置 <**IP Address**>、<**子网掩码**> 和 <**Gateway**>，请联系网络管理员。

4. 在 <**Port**> 窗格中，提供必需的信息。
   - HTTP Port：用于使用互联网浏览器访问摄像机，默认值为 80。
   - VNP Port：用于控制视频信号传输，默认值为 4520。
5. 输入密码。
   输入用来访问摄像机的“**admin**”帐户的密码。



▪ 出于安全考虑的原因，建议您的密码使用数字、大小写字母以及特殊字符的组合。

▪ 如果您要更改密码，请参考用户设置的“**管理员密码更改**”。（第 58 页）

6. 单击 [**OK**]。
   将完成手动网络设置。

如果使用宽带路由器

- IP Address：输入宽带路由器提供的 IP 范围内的地址。
  例) 192.168.1.2~254,
  192.168.0.2~254,
  192.168.XXX.2~254
- Subnet Mask：宽带路由器的 <**子网掩码**> 将是摄像机的 <**子网掩码**>。
- Gateway：宽带路由器的 <**本地 IP 地址**> 将是摄像机的 <**Gateway**>。

▪ 设置可能因连接的宽带路由器型号而异。
有关详细信息，请参阅适用路由器的用户手册。

▪ 如需宽带路由器的正向端口的更多信息，请参阅“**路由器端口设置**”。（第 43 页）

如果宽带路由器连接了多个摄像机

彼此清楚地配置 IP 相关设置和端口相关设置。

例)

类别		摄像机 1	摄像机 2
IP 相关设置	IP Address Subnet Mask Gateway	192.168.1.100 255.255.255.0 192.168.1.1	192.168.1.101 255.255.255.0 192.168.1.1
端口相关设置	HTTP Port VNP Port	8080 4520	8081 4521

- 如果 <**HTTP Port**> 设置为除 80 以外的值，您必须在互联网浏览器的地址栏中提供 <**Port**> 号，才能访问摄像机。

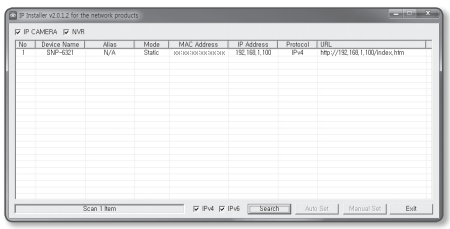
  例) http://IP address: HTTP Port
  http://192.168.1.100:8080

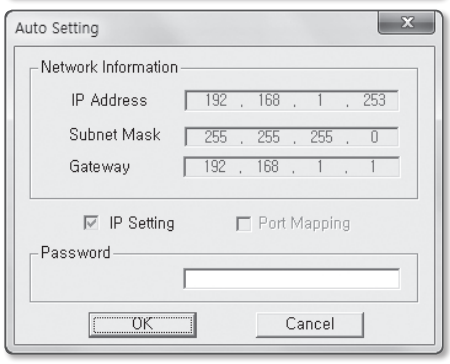
自动网络设置

运行 <**IP Installer_v2.XX.exe**> 以显示摄像机搜索列表。
在初始启动时，[**Auto Set**] 和 [**Manual Set**] 将呈灰色。

- 对于以 IPv6 设置为基础的摄像机，这些按钮将呈灰色，因为摄像机不支持此功能。

1. 从搜索列表中选择一个摄像机。
   在摄像机的标签上检查摄像机的 MAC 地址。
   将激活 [**Auto Set**] 和 [**Manual Set**] 按钮。
2. 单击 [**Auto Set**]。
   Auto Setting 对话框将会出现。
   将自动设置 <**IP Address**>、<**Subnet Mask**> 和 <**Gateway**>。
3. 输入密码。
   输入用来访问摄像机的“**admin**”帐户的密码。





- 出于安全考虑的原因，建议您的密码使用数字、大小写字母以及特殊字符的组合。
- 如果您要更改密码，请参考用户设置的“**管理员密码更改**”。(第 62 页)

4. 单击 [**OK**]。
   将完成自动网络设置。

网络连接和设置

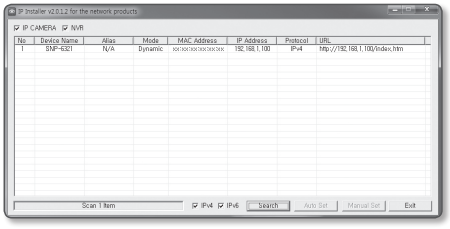
动态 IP 设置

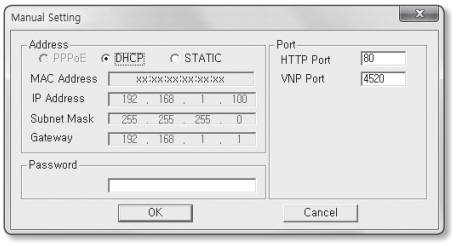
动态 IP 环境设置

- 动态 IP 环境示例
  - 如果连接了摄像机的宽带路由器由 DHCP 服务器分配了 IP 地址
  - 如果使用 DHCP 协议将摄像机直接连接至调制解调器
  - 如果 IP 由内部 DHCP 服务器通过 LAN 分配

检查动态 IP

1. 在用户的本地计算机上运行 IP Installer。
   分配了 <**Dynamic IP**> 地址的摄像机将会显示在列表中。
2. 从搜索结果中选择摄像机。
3. 单击 [**Manual Set**] 按钮，然后检查摄像机的 <**Dynamic IP**> 地址。
   如果取消选择 <**DHCP**>，您即可将 IP 更改为 <**Static**>。



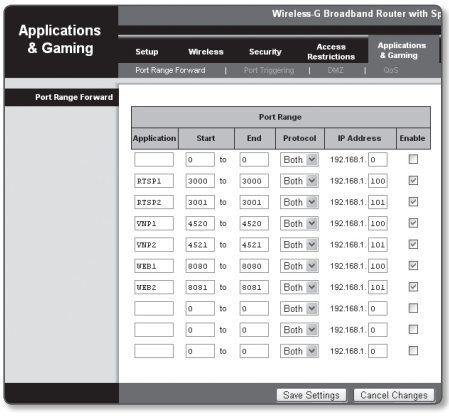


路由器端口设置

如果您安装了连接摄像机的宽带路由器，就必须在宽带路由器上设置转发的端口范围，以便远程PC可以访问其中的摄像机。

手动端口设置

1. 从宽带路由器的 Setup 菜单中，选择 <**Applications & Gaming**> - <**Port Range Forward**>。
   对于第三方宽带路由器端口范围转发设置，请参阅该宽带路由器的用户手册。
2. 对连接到宽带路由器的每个摄像机选择 <**TCP**> 和 <**UDP Port**>。
   宽带路由器的每个端口号都应该与在摄像机的 Web Viewer 菜单的 <**Setup**> - <**Basic**> - <**IP & 端口**> 中指定的端口号相符。
3. 完成后，单击 [**Save Settings**]。
   将保存设置。



- 以上样本说明基于 CISCO 的宽带路由器。
- 设置可能因连接的宽带路由器型号而异。
  有关详细信息，请参阅适用路由器的用户手册。

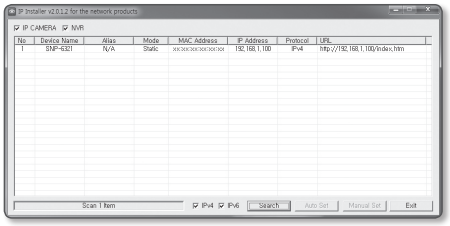
设置多个网络摄像机的端口范围转发

• 您可通过配置网页在宽带路由器设备上设置端口转发的规则。

网络连接和设置

从共享的本地 PC 连接到摄像机

1. 运行 IP Installer。
   它将扫描连接的摄像机，并显示摄像机列表。
2. 双击要访问的摄像机。
   互联网浏览器将启动，并连接到摄像机。



- 您也可以在互联网浏览器的地址栏中键入所发现摄像机的 IP 地址的方式访问摄像机。

从远程 PC 通过互联网连接到摄像机

由于不允许在不属于宽带路由器网络群集的远程计算机上使用 IP Installer，所以用户需通过摄像机的 DDNS URL 在宽带路由器网络内访问摄像机。

1. 您应该设置宽带路由器端口范围转发，然后才能访问宽带路由器网络中的摄像机。
2. 从远程 PC 启动互联网浏览器，并在地址栏中键入摄像机的 DDNS URL 地址，或宽带路由器的 IP 地址。
   例) http://ddns.hanwha-security.com/ID

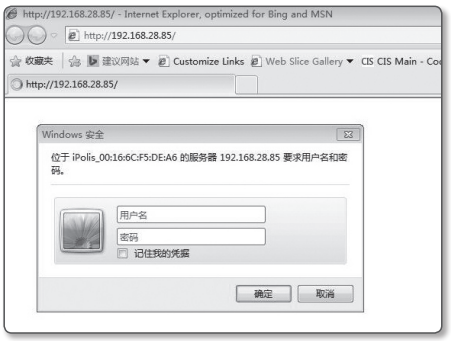
- 有关注册 DDNS 设置，请参阅 “**注册 DDNS**”。（第 88页）

web 查看器

连接到摄像机

通常，您应该：

1. 启动互联网浏览器。
2. 在地址栏中键入摄像机的 IP 地址。
   例) • IP 地址 (IPv4)：192.168.1.100
   → http://192.168.1.100 - 将会出现登录对话框。
   • IP 地址 (IPv6)：2001:230:abcd:ffff:0000:0000:ffff:1111 → http://[2001:230:abcd:ffff:0000:0000:ffff:1111] - 将会出现登录对话框。



如果 HTTP 端口为除 80 以外的值

1. 启动互联网浏览器。
2. 在地址栏中键入摄像机的 IP 地址和 HTTP 端口号。
   例) IP 地址：192.168.1.100:HTTP 端口号(8080)
   → http://192.168.1.100:8080 - 将会出现登录对话框。

使用 URL

1. 启动互联网浏览器。
2. 在地址栏中键入摄像机的 DDNS URL。
   例) URL 地址：http://ddns.hanwha-security.com/ID
   - 将会出现登录对话框。

检查 DDNS 地址

如果摄像机直接连接到 DHCP 有线电视网调制解调器、xDSL 调制解调器或 PPPoE 调制解调器，每当您尝试连接到 ISP（互联网服务提供商）服务器时，您的网络 IP 地址都会更改。
在这种情况下，将不会通知您 IP 地址已被 DDNS 更改。

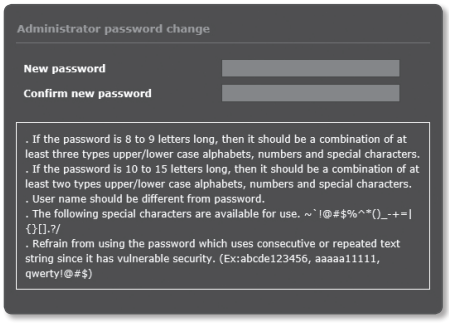
一旦您向 DDNS 服务器注册了基于动态 IP 的设备，当尝试访问该设备时，就可以轻松检查更改的 IP。要向 <**DDNS**> 服务器注册您的设备，请访问 http://ddns.hanwha-security.com 并先注册您的设备，然后将 Web Viewer 的 <**Network**> - <**DDNS**> 设置为 <**Wisenet DDNS**>，同时提供用于 DDNS 注册的 <**产品 ID**>。

▪ 只有连接到外部网络时才能使用 DDNS 连接。

web 查看器

密码设置

首次访问产品时，必须先注册登录密码。
出现“密码更改”窗口时，输入新密码。

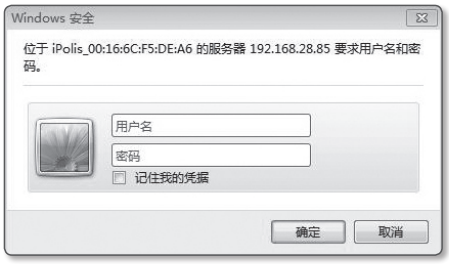


- 对于 8 到 9 位的新密码，必须至少使用下列 3 种类型：大写字母/小写字母、数字和特殊字符。对于 10 到 15 位的密码，必须至少使用上述两种类型。
  - 允许使用的特殊字符为：~`!@#$%^*()_-+=|{}[].?/
- 为了获得较高的安全性，建议您不要重复使用相同的字符作为密码，也不要使用连续的键盘输入作为密码。
- 如果您丢失了密码，可按住[**RESET**]按钮初始化该产品。因此请使用记事簿写下或记住您的密码以防丢失。

登录

每当访问摄像机时，登录窗口都会出现。
输入用户 ID 和密码以访问摄像机。

1. 在 <**用户名**> 输入框中输入“**admin**”。
   管理员 ID，即“admin”是固定的，
   无法更改。
2. 在 <**密码**> 输入字段中输入密码。
3. 单击 [**确定**]。
   如果已成功登录，您将会看到 Live Viewer 屏幕。



- 访问Web查看器时，图像数据没有加密，因此要特别注意。

- 如果您在完成输入之后选中“**记住我的凭据**”选项，则从下次起将自动登录，而不会提示输入登录信息。
- 如果屏幕大小是 100%，则您可以体验最佳视频质量。降低该比率可能会切掉边框上的图像。

安装 WebViewer 插件

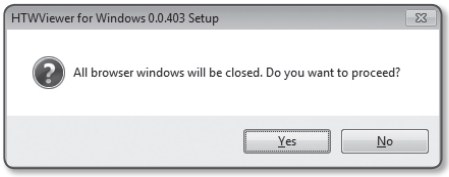
如果首次连接到摄像机，您将会看到安装消息。然后，安装所需的 WebViewer 插件以访问摄像机并在摄像机内实时控制视频。

1. 在第一次访问监控页面时，屏幕会显示安装页面。 单击 [**Click Here**] 以开始安装。

▪ 如果 Internet Explorer 浏览器中的插件安装文件下载状态停留在 99%，请在“工具 → SmartScreen 筛选器”中选择“释放 SmartScreen 筛选器”。

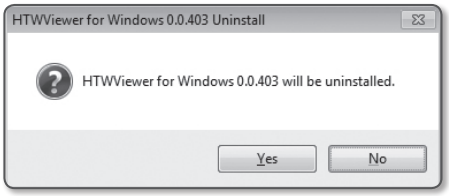
2. 在消息窗口中单击 [**Run**]。

3. 当通知窗口指示将关闭所有浏览器窗口时，单击 [**Yes**]。



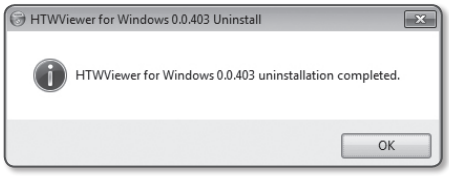
▪ 如果尚未安装任何 Web 浏览器插件，将跳过步骤 4 和 5。

4. 如果已安装了旧版本的 Web 浏览器插件，屏幕会显示一个通知窗口以指示旧版本将被删除。在该通知窗口中单击 [**Yes**]。

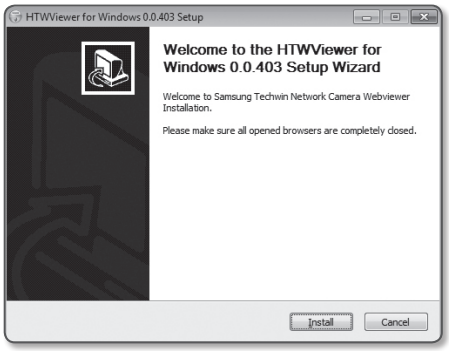


web 查看器

5. 单击 [OK]。
   旧版本的 Web 浏览器插件即被删除。

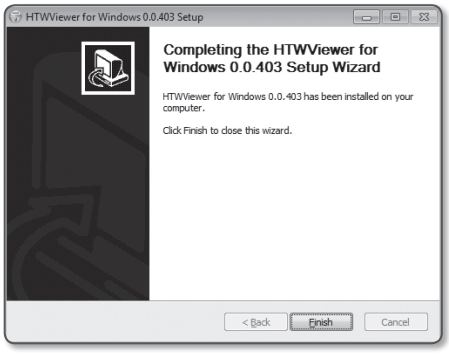


6. 单击 [Install]，开始安装 Web 浏览器插件。



7. 单击 [Finish]。
   Web 浏览器插件即完成安装。

- 在您的 Internet 浏览器中，如果在安装 webviewer 插件后移到安装屏幕，请检查“工具 → 其他功能管理”菜单中的 webviewer_activexplugin_lib.control 是否“已启用”。如果未启用且一直有问题，请选择“工具 → Internet 选项 → 常规 ”并删除所有搜索记录。



使用现场屏幕

项目	说明
1 正在监视	移至监视屏幕。
2 播放	移动到您可以搜索 SD 存储卡或 NAS 中保存的视频录制的屏幕。
3 设置	移至设置屏幕。
4 配置文件访问信息	您可以读取配置文件信息。
5 查看器屏幕	显示屏幕上的现场视频。 ▪ 在 Viewer 屏幕中，可以使用鼠标滚轮来激活数码缩放。
6 配置文件类型	可以在 <**Basic**> 设置菜单下的 <**视频配置文件**> 中选择配置文件类型。 ▪ 连接 Web Viewer 后，将会显示当前使用的配置文件的信息。
7 屏幕调整	来自摄像机的视频尺寸将放大为与 Web 浏览器尺寸一样大。
8 固定分辨率	不管在摄像机中配置的分辨率设置如何，系统都会将分辨率设置为 640x480。再按一次它会切换回默认分辨率。
9 全屏	将当前视频切换至显示器的最大大小。

web 查看器

项目	说明
10 捕捉	将快照保存为 .jpg 格式的图像文件。
11 手动录制	用户可以将他们的视频保存在 SD 存储卡中，或者保存在自己的 NAS 中。 ▪ 要手动录制视频，请首先更改录制设置。请参阅“**存储器**”部分，了解如何设置录制（第96页）。
12 音频/麦克风控制	启用音频和麦克风音量控制。 ▪ 只能控制音频音量。
13 警报输出	激活警报输出端口。
14 PTZ	控制摄像机的平移/倾斜/缩放操作。
15 隐藏上下文菜单	左上角的上下文菜单将会消失，只留下菜单图标。

捕捉快照

1. 在场景上单击 [**捕捉 (** **)**] 进行捕捉。
2. 保存捕捉到的视频时，会显示通知信息。
   使用 Internet Explorer 时，捕捉到的视频将保存在“我的电脑/我的文档/图片”中。
   对于 Mac OS，它保存在“~/Pictures”或“/Users/{用户帐户}/Pictures/”中。

▪ 如果您在 Windows 7 计算机上使用 IE8 时发生视频中断，请从“**工具 – Internet 选项 – 安全**”中取消选择“**启用保护模式**”。

▪ 如果 Windows 7 或 8 中的 IE 浏览器没有捕捉该屏幕，请使用管理员权限运行 IE 浏览器。

如何手动录制视频

1. 按[**手动录制 (** **)**]。
2. 要结束录制，再次按[**手动录制 (** **)**]。

▪ 插入 SD 卡后，转到 <**Event**> - <**存储器**> 并通过选择 <**开**> 打开 SD 卡或者通过在连接 NAS 之后选择 <**开**> 打开 NAS。之后，您便可以使用手动录制功能。

适合全屏

1. 单击 [**全屏 (** **)**] 按钮。
2. 这将使查看器适合全屏。
3. 要退出全屏模式，请按键盘上的 [**Esc**]。

▪ 对于 Internet Explorer 和 Google Chrome 浏览器，您可以切换至全屏幕。

使用麦克风

单击 [**麦克风 (**)] 图标以激活麦克风。

使用音频

1. 单击 [**音频 (**)] 图标以激活音频通信。
2. 使用 [ ] 滑块控制音量。

▪ 如果设备运行中插入和拔出音频插头时没有声音，单击 [**音频 (**)] 图标以将其再次启用。

控制 PTZ

1. 按 [**PTZ (**)] 选项卡。
2. 通过控制屏幕移动垫的光标[ ]，或者通过控制缩放或对焦，可以调整摄像机的方向。

▪ 有关 PTZ 使用的详细信息，请访问 “**PTZ 设置**”。（第 67 页）

要运行序列

- ：运行保存的预设。
  请参阅 “**配置预设位的详细设置**” 部分，了解预设设置的详细信息。（第 68 页）
- ：运行保存的摆动。
  请参阅 “**配置摆动设置**” 部分，了解摆动设置的详细信息。（第 69 页）
- ：运行保存的组。
  请参阅 “**配置组设置**” 部分，了解组设置的详细信息。（第 70 页）
- ：运行保存的浏览。
  请参阅 “**配置浏览设置**” 部分，了解浏览设置的详细信息。（第 70 页）
- ：运行保存的跟踪。
  请参阅 “**设置跟踪功能**” 部分，了解跟踪设置的详细信息。（第 71 页）
- ：运行保存的起始位置。
  请参阅 “**添加初始位置**” 部分，了解起始位置设置的详细信息。（第 71 页）
- ：配置预设。有关预设配置的详细信息，请参阅 “**配置预设位的详细设置**”。（第 68 页）

web 查看器

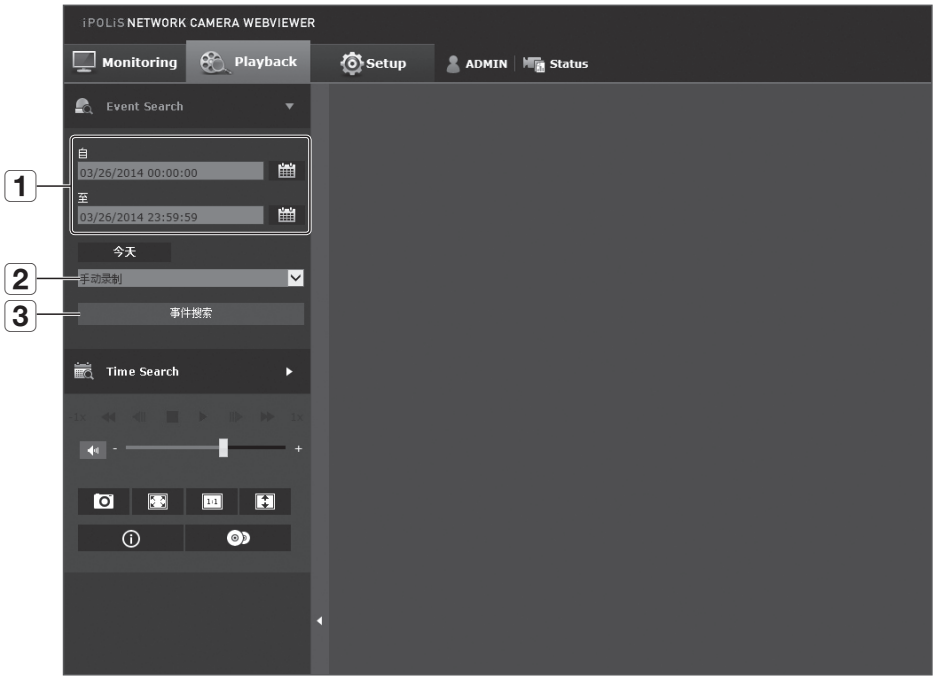
启用区域缩放模式

- : 若要实现缩放移动，请单击并拖动到屏幕上您要移动到的位置。
- : 将当前缩放系数更改为 x1。
- : 返回之前的区域和设置。
- : 如果通过“上一步”进行导航，则会切换到导航之前的区域和设置。

播放录制的视频

▪ 在可以播放视频之前，必须配置录制设置。有关录制设置的详细信息，请参阅“**存储器**”。(第 96 页)

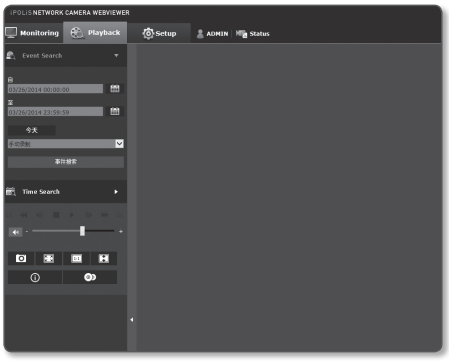
事件搜索屏幕的名称及其功能



项目	说明
1 **搜索范围设置**	为 SD 存储卡或 NAS 中保存的数据设置搜索日期和时间范围。
2 **搜索事件设置**	将事件类型设置为在搜索时间段内搜索。
3 **事件搜索**	运行事件搜索。

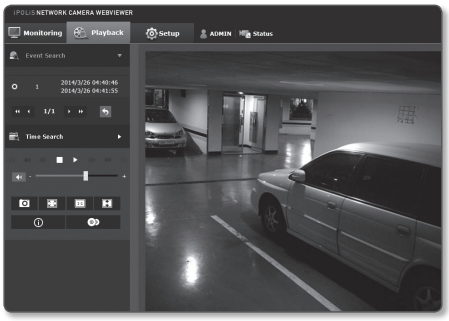
在按事件搜索后播放内容

1. 单击 [Playback ( )] 按钮。
2. 指定搜索的开始和结束时间。
3. 选择指定时间段内搜索的事件类型。
4. 单击 [**事件搜索**] 按钮。
   搜索结果将显示在列表中。



- 如果在搜索时间段内录制了超过 800 个事件，则搜索将限制为录制第 800 个事件的日期。
  例如，如果搜索时间段在一个月的第 10 天和第 15 天之间，并且在第 10 天到第 11 天录制了超过 800 个事件，则搜索将限制为最多第 11 天（共 800 个事件），将找不到之后（从第 12 天开始）的事件。

5. 在搜索列表中选择要播放的数据项目。
6. 单击 [**播放 (** **)**] 按钮。
7. 要停止播放视频，请单击 [**停止 (** **)**]。
8. 要返回到搜索屏幕，请单击 [**退出 (** **)**]。



web 查看器

时间搜索屏幕的名称及其功能

项目	说明
1 时间条	通过移动时间条播放特定时间段的视频。
2 搜索日期设置	使用日历设置搜索日期。 ▪ 如果这一天有数据保存到 SD 存储卡或 NAS 中，则会在日历上将这一天标记为一个方框。
3 扬声器	若要收听录制视频中的语音信号（如果有），则需要在播放时激活语音信号图标。
4 屏幕调整	转换摄像机图像，使它适合 Web 浏览器窗口。
5 固定分辨率	不管在摄像机中配置的分辨率设置如何，系统都会将分辨率设置为 800x600。 再按一次它会切换回默认分辨率。
6 捕捉	当前图像保存为 .jpg 图像文件。

项目	说明
7 全屏幕	转换当前图像，使它覆盖显示器的最大尺寸。
8 视频信息	屏幕上将显示回放视频的时间数据。
9 备份	设置指定日期备份存储在SD卡或NAS中的视频数据。 ▪ 最多可设置为 5 分钟。

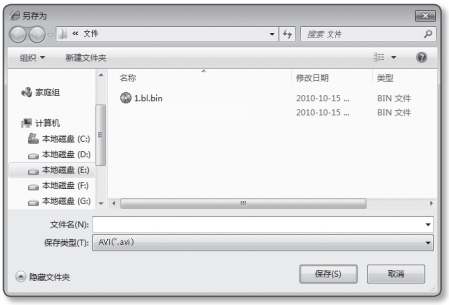
在按时间搜索后播放

1. 单击 [Time Search ( )]。
2. 在日历中单击所需日期。
   将会播放指定日期上的视频。
3. 如果视频播放已停止，请选择时间，
   然后单击 [**播放** ( )]。
   将会播放所选日期上的视频。
4. 播放视频时，将会显示当前视频的录制时间。
5. 向前或向后搜索视频，并控制播放速度。
   - 如何控制播放间隔
     ▮▶：选择该按钮可前移 1 帧。
     ◀▮：选择该按钮可后移 1 秒。
   - 控制播放速度
     如果选择 ▶▶，按钮将切换为 x1，x2，x4，x8，并且播放速度相应提高。
     如果选择 ◀◀，播放速度降至 -x1，-x2，-x4，-x8，并且播放速度逐渐放慢。随后，快速播放速度恢复为正常速度，反向播放速度增加。
   - 控制播放方向
     如果您看到显示 ▶▶ 按钮和播放速度，将会向前播放视频；而如果您看到显示 ◀◀ 按钮和播放速度，将会向后播放视频。
   - 如何设置时间条
     如果按 ＋ 按钮，则可以查看时间条部分的详细信息。
     如果按 － 按钮，则可以查看更广的时间范围并且可以更轻松地选择所需的时间。
6. 先将 [**时间滑块** ( )] 移至视频的所需时间点再播放。
   包含标准录制文件的时间将以蓝色突出显示；包含事件录制内容的时间将以红色突出显示。

web 查看器

备份搜索到的视频

1. 在播放期间，在场景上单击 [ ] 进行备份。
   备份开始和结束时间的计划窗口将会出现。
2. 单击 [ ] 按钮。
   另存为窗口将会出现。
3. 确认保存路径，然后单击 [**保存(S)**] 按钮。
   选择的数据将备份到指定的路径中。



播放备份视频

备份数据保存为 .avi 格式。建议使用兼容该格式的 Gom Player、VLC Player 或 Window Media Player 媒体播放器。

- 如果使用 Windows Media Player，请在使用前从 www.windows7codecs.com 下载最新的编解码器，然后安装。

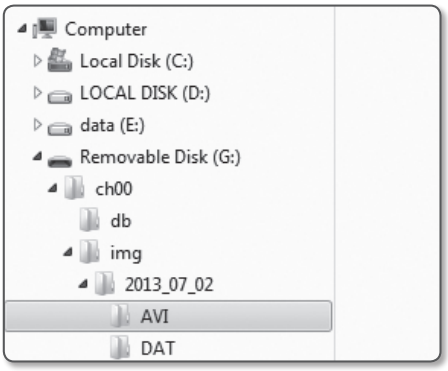
播放 AVI 文件

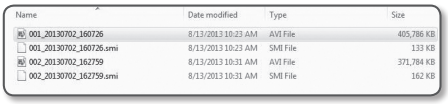
(1) SD 存储卡

1. 从摄像机取出 SD 存储卡。

> ▪ 在取出 SD 存储卡前，将“**Setup → Event → 存储器**”菜单中的 <**启用**> 设置为 <**关**>。

2. 将 SD 存储卡插入 PC。
3. 使用媒体播放器播放“**\ch00\img\YYYY_mm_DD\AVI**”目录中的 AVI 文件。

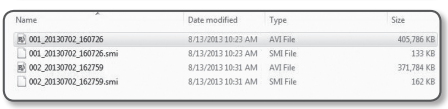




> ▪ 文件名以“**001_YYYYMMDD_HHMMSS.avi**”的格式开始，其中文件编号逐一递增。YYYYMMDD_HHMMSS 表示数据保存的开始时间。
> ▪ “**001_YYYYMMDD_HHMMSS.smi**”文件是一个字幕文件，如果它与关联 AVI 文件位于相同目录，就可以查看它。
> ▪ 每个 AVI 文件的最大录制时间是 5 分钟。
> ▪ 如果受损，SD 存储卡中的数据将无法在 Web Viewer 的 [**Playback**] 中播放。

(2) NAS（网络连接存储器）

1. 在 Windows 浏览器中，使用 \\<ip address>\ 来访问。ex)\\192.168.20.31\defaultfolder\ch01\img\2013_07_02\AVI
2. 转到 <**Computer**> → <**Network drive connection**> → 输入 1。
3. 已连接到 NAS。
该目录结构与 SD 存储卡使用的目录结构相同。



> ▪ 文件名以“**001_YYYYMMDD_HHMMSS.avi**”的格式开始，其中文件编号逐一递增。YYYYMMDD_HHMMSS 表示数据保存的开始时间。
> ▪ “**001_YYYYMMDD_HHMMSS.smi**”文件是一个字幕文件，如果它与关联 AVI 文件位于相同目录，就可以查看它。
> ▪ 每个 AVI 文件的最大录制时间是 30 分钟。
> ▪ 如果自行更改或损坏所保存数据，它将无法正常播放或保存。

设置屏幕

设置

可以配置基本设置、PTZ、视频&音频、网络、事件、系统设置。

1. 在现场屏幕中，单击 [**Setup (** Setup **)**]。
2. 设置屏幕将会出现。

> ▪ 预览视频的设置页面要求在PC上安装web查看器插件。
> 如果尚未正确安装，则安装页面将自动出现。

基础设置

视频配置文件

1. 从设置菜单，选择 <**Basic (** **)**> 选项卡。
2. 单击 <**视频配置文件**>。
3. 设置 <**视频配置文件连接策略**>。
   - 在更改配置文件设置时保持连接：
     更改现有连接使用的配置文件属性不影响此类连接并且保留旧配置文件的设置。
     如果未选中，则更改现有连接使用的配置文件会重设此类连接。
4. 选择每个配置文件属性。
   如需更多信息，请参阅 “**添加/更改视频配置文件**”。（第 60 页）
5. 单击每个项目的输入框，并输入/选择所需的值。
   - ▪ 上下文菜单可能因所选的编解码器类型而异。
   - 默认配置文件：如果在使用 Web Viewer 时未选择配置文件，则会应用默认视频配置文件。

- 电子邮件/FTP配置文件：将传送至指定的电子邮件或 FTP 站点的视频配置文件。
  - 只能将 MJPEG 编解码器设置为电子邮件/FTP 配置文件。
- 录制配置文件：该配置文件适用于在SD卡或NAS上进行视频录制。
- 音频输入：设置是否使用音频进行视频录制。

6. 根据您的情况，设置 ATC（自动传输控制）模式。

- ATC 模式：它可以根据网络带宽的变化调整视频属性，以控制比特率。
  根据 ATC 模式调整比特率。
  - 控制帧速率：如果网络带宽下降，则降低帧速率。
  - 控制压缩：如果网络带宽下降，则控制压缩率。
    压缩调整可能会导致图像质量下降。
  - 如果 <**比特率控制**> 设置为 <**CBR**>，则根据 ATC 模式，按如下所示固定编码优先级：

比特率控制/ATC 模式	控制压缩
CBR	压缩

- ATC 灵敏度：根据网络带宽的变化影响传输速率。
  如果带宽为 <**非常高**>，传输速率将调整为最高，如果带宽为 <**非常低**>，则调整为最慢。
- ATC 限制：如果调整帧速率的质量，此属性将更改为针对上一设置值 (100%) 的应用值 (%)。
  请注意，如果您将此属性值降低太多，屏幕上可能会闪烁。因此，建议在阈值范围内调整该值。

- 建议您仅对支持 ATC 的摄像机应用 ATC 控制。
- 在网络带宽变化较大的网络环境中，将 ATC 灵敏度设置为 <**非常低**>。
- 如果网络连接不稳定，屏幕可能会闪烁。

7. 完成后，请单击 [**应用 (** 应用 **)**]。

- MJPEG，H264 是默认的配置文件，因此您不能删除该文件，也不能更改名称和编解码器。

设置屏幕

添加/更改视频配置文件

根据录制条件，可以添加或修改配置文件设置来适应不同的配置文件。

1. 选择 <**视频配置文件**> 选项之一。
2. 提供名称并选择编解码器。
3. 指定将应用编解码器的条件。
4. 指定所选编解码器的详细信息，包括分辨率和帧率。
   单击 <**高级**> 以显示上下文。
   - 分辨率：设置 H.264 和 MJPEG 文件的视频大小。
   - 帧率：设置每秒的最大视频帧数。

▪ “视频设置”中的 <**传感器**> 模式设置会改变可配置的最大帧速率。

传感器	25 fps	30 fps	50 fps	60 fps
帧率	1~25 fps	1~30 fps	1~50 fps	1~60 fps

- 最大比特率：当比特率控制设置为 VBR 时设置视频的最大比特率。

▪ 由于比特率可以根据清晰度、帧频和屏幕复杂性进行有限的调整，所以实际比特率可能比最大比特率要大。所以在设定值时必须考虑使用环境。

- 目标比特率：当比特率控制设置为 CBR 时设置目标比特率。
- 比特率控制：您可从恒定比特率和可变比特率中选择一种方式进行压缩。
  固定比特率意味着改变视频质量或帧速率时网络传输的比特率是固定的，可变比特率意味着改变比特率时优先考虑视频质量。

▪ 为比特控制设置固定比特率之后，如果选择视频质量优先模式，则为了保证对于给定的比特率获得最佳的视频质量，实际传输的帧速率可能会与帧速率设置有所不同（取决于屏幕的复杂程度）。

- 编码优先权：可以将视频传输的优先级设置为帧速率或压缩。
- 视频组长度：当 H.264 编解码器被选择时指定一个视频序列中两个连续 I 帧之间的距离（按照多个帧）。
- 配置文件：可以选择 H.264 靠模方法。
- 熵编码：减少可能因编码引起的压缩损失。
- 智能编码：指定使用智能编解码器。

▪ 只有当编码解码器是 H.264 并且比特率控制为 CBR 时，智能编码解码器才有效。

- 多播 (SVNP)：指定使用 SVNP 协议。
  - IP 地址：输入可用于连接至 IPv4 网络的 IPv4 地址。
  - 端口：指定视频通信端口。
  - TTL：为 SVNP 数据包设置 TTL。
- 多播 (RTP)：指定 RTP 协议的使用。
  - IP 地址：输入可用于连接至 IPv4 网络的 IPv4 地址。
  - 端口：指定视频通信端口。
  - TTL：可为 RTP 数据包设置 TTL。

▪ 如果您将多播地址设置为 224.0.0.0~224.0.0.255，则多播不能在所有环境中都正常工作。鉴于这种情况，我们建议您更改多播地址。

什么是视频组长度

视频组（视频对象平面组）是用于 H.264 压缩的视频帧，表示从初始图像帧（关键帧）到下一个图像帧的帧集合。视频组由 2 类帧组成：I 帧和 P 帧。

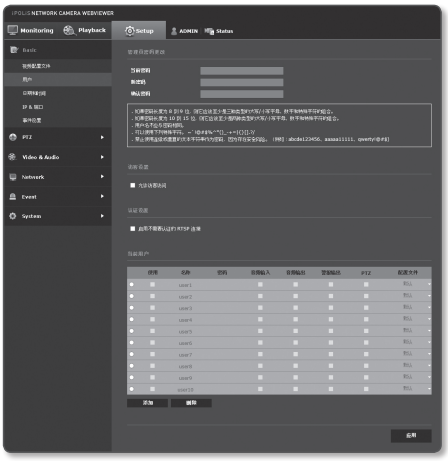
I 帧是压缩的基本帧，也称为关键帧，包含一幅完整图像的数据。P 帧仅包含与先前的 I 帧相比发生了变化的数据。

对于 H.264 编解码器，您可以决定视频组长度。
如果您使用H.264编解码器设置录制配置文件，则GOV长度将为帧率/2。

设置屏幕

用户

1. 从设置菜单，选择 <**Basic (** **)**> 选项卡。
2. 单击 <**用户**>。
3. 提供必要的用户信息。
   - 管理员密码更改：更改管理员的密码。



- 出于安全考虑的原因，建议您的密码使用数字、大小写字母以及特殊字符的组合。
- 建议每三个月更改密码一次。
- 密码长度和限制如下所示。
  - 8 到 9 位字符：至少是大写、小写、数字和特殊字符中 3 种类型的组合。
  - 至少两种类型的大写字母、小写字母、数字和特殊字符的组合：10 到 15 个字符。
  - 密码应与 ID 不同。
  - 为了获得较高的安全性，建议您不要重复使用相同的字符作为密码，也不要使用连续的键盘输入作为密码。
  - 允许使用的特殊字符为：~`!@#$%^*()_-+=|{}[].?/
  - 在首次或者初始化后访问摄像机网页时，您将转到管理员密码设置菜单。
  - 在此菜单中，您需要先使用新密码再次登录，然后再使用摄像机网页菜单。
  - 如果现有密码不匹配，则更改管理员密码时，无法更改该密码。
  - 在更改密码后，如果有摄像机连接到 CMS 或 NVR 客户端，则需要使用新更改的密码重新注册。如果仍使用相同的密码连接摄像机，则帐户可能被锁定，因为客户端使用的是以前的密码。
- 如果您尝试使用注册的帐户登录，5 次或更多次连续密码验证失败，则帐户可能会被锁定三十秒钟。
- 在更改密码时，如果从 PC 发出多个活动状态连接，则浏览器可能功能不正常。在此情况下，请重新连接到服务器。

- 访客设置：如果选择了 <**允许访客访问**>，则访客帐户可以访问 Web Viewer 屏幕，但是只能查看 Live Viewer 屏幕。
  - 访客帐户的 ID/密码是 <**guest/guest**>，无法更改。
- 认证设置：如果您选择了 <**启用不需要认证的 RTSP 连接**>，则您不需要登录就可以访问 RTSP 并查看视频。
- 当前用户：如果您选择了 <**使用**>，则您可以设置或更改用户权限。
  - 管理员可以设置音频输入、音频输出、警报输出以及 PTZ 控制权限。
  - 配置文件：如果您选择了 <**默认**>，则您只能查看默认配置文件视频；如果选择了 <**全部**>，则您可以查看全部配置文件视频。

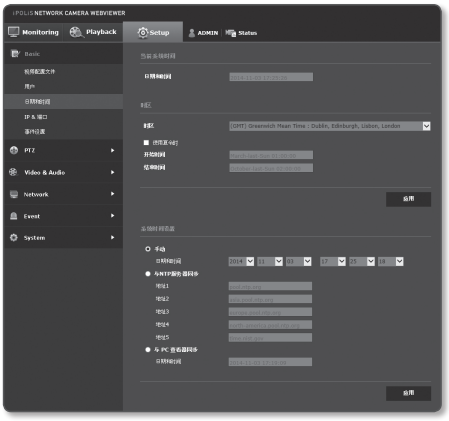
- 允许使用已注册ONVIF功能的用户限制为那些已授予许可权的用户。
- 视频传输和更改视频信息：将配置文件设置为 <**全部**>，并设置 音频输入 和 音频输出。
- 视频传输、更改视频信息、视频输出：将配置文件设置为 <**全部**>，并根据偏好选择其余内容。
- PTZ控制：选择 <**PTZ**>。

4. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

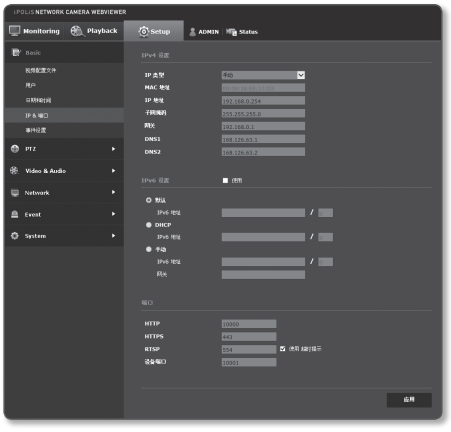
日期和时间

1. 从设置菜单，选择 <**Basic (** **)**> 选项卡。
2. 单击 <**日期和时间**>。
3. 指定将应用于摄像机的时间和日期。
   - 当前系统时间：显示系统的当前时间设置。
   - 时区：指定本地基于 GMT 的时区。
   - 使用夏令时：如果选中、将在指定的时间段内将时间设置成比当地时区早一小时。
     仅在应用夏令时的地区显示此选项。
   - 系统时间设置：指定将应用于您的系统的时间和日期。
     - 手动：手动指定时间。
     - 与 NTP 服务器同步：与指定的服务器地址的时间同步。
     - 与 PC 查看器同步：设置为连接计算机的时间。
4. 完成后，请单击 [**应用 (** **应用** **)**]。



▪ 如果您选择 <**与 PC 查看器同步**>，则应该将标准时区设置为与计算机中的当前时区相同。

IP & 端口



1. 从设置菜单，选择 <**Basic (**)> 选项卡。
2. 单击 <**IP & 端口**>。
3. 配置 <**IPv4 设置**>。
   - IP 类型：选择 IP 连接类型。
     - 手动：指定 IP 地址、子网掩码、网关、DNS1 和 DNS2。
     - DHCP：指定 DNS1 和 DNS2。
     - PPPoE：指定 DNS1、DNS2、ID 和 密码。
     - 如果将其设置为 <**手动**>，则应手动指定 IP、子网掩码、网关和 DNS 1 和 2。
   - MAC 地址：显示 MAC 地址。
   - IP 地址：显示当前 IP 地址。
   - 子网掩码：显示所设 IP 的 <**子网掩码**>。
   - 网关：显示所设 IP 的 <**网关**>。
   - DNS1/DNS2：显示 DNS（域名服务）服务器地址。
4. 配置 <**IPv6 设置**>。
   - 设置为 <**使用**> 以使用 IPv6 地址。
   - 默认：使用默认 IPv6 地址。
   - DHCP：显示并使用从 DHCP 服务器获取的 IPv6 地址。
   - 手动：手动输入 IP 地址和网关并使用它。

- IP 寻址系统将默认为 DHCP。如果未找到 DHCP 服务器，将自动恢复之前的设置。
- 完成编辑之后，单击 [**应用 (** 应用)] 以应用更改，并且浏览器将会退出。几秒钟之后，使用更改后的 IP 再次连接。

设置屏幕

5. 在端口菜单的每个项目中键入所需信息。
   - 0 至 1023 之间的端口范围和端口 3702 都不可用。
   - HTTP ：用于通过 Web 浏览器访问摄像机的 HTTP 端口。
     默认值是 80(TCP)。
     - 安全策略不允许将 Safari 和 Google Chrome 浏览器的 HTTP 端口设置为 65535。
   - HTTPS：在这个版本中，加强了 Web 通信协议 HTTP 的安全性。在 SSL 中设置 HTTPS 模式时可以使用该端口。初始值设置为 443(TCP)。
     - 可用的设置范围为 1024~65535。(为了安全起见，在您的 Safari 或 Google Chrome 浏览器中，可以不使用 65535 作为您的 HTTPS 端口。)
   - RTSP：用于以 RTSP 模式传输视频，默认值为 554。
   - 使用 超时提示 : 连接 RTSP 时，如果一段时间之内没有响应，该功能会重置连接。
   - 设备端口：设置用于根据 Wisenet 协议传输视频信号的端口。

   - 如果更改了 HTTP 端口，则浏览器会退出。
     此后，地址应该在 IP 后面包含新分配的 HTTP 端口。
     例) IP 地址：192.168.1.100，HTTP 端口：分配了 8080 → http://192.168.1.100:8080
     (如果将 HTTP 端口设置为 80，则不需要指定端口号)
   - 建议使用RTSP和HTTPS，以便防止图像信息被还原。

6. 完成后，请单击 [**应用 (** 应用 **)**]。

事件设置

您可以轻松设置事件探测项，并移到具体设置。

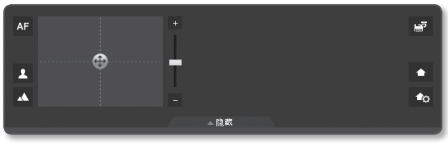
1. 从设置菜单，选择 <**Basic (** **)**> 选项卡。
2. 单击 <**事件设置**>。
3. 激活“事件列表”中的所需项。
4. 完成后，请单击 [**应用 (** 应用 **)**]。

   - 要进行具体的事件设置，单击所需设置。转到具体的<**Event**>设置。

设置 PTZ

预设位设置

可以更改镜头的方向，并且可以激活缩放。



1. 从设置菜单，选择 <**PTZ (**)> 选项卡。
2. 单击 <**预设位设置**>。
3. 单击[**▼ 显示**]。
4. 单击屏幕移动垫上的光标[ ]，可控制屏幕移动。
   - 移动屏幕：朝期望方向滚动光标。
   - 控制屏幕移动速度：光标距离中心越远，在屏幕上的移动速度越快。
5. 控制缩放移动。
   - 放大：上移UI右侧的栏，或按[+]按钮。栏距离中心越远，屏幕放大得越快。
   - 缩小：下移UI右侧的栏，或按[−]按钮。栏距离中心越远，屏幕缩小得越快。
6. 调整对焦。
   - 手动对焦(/)：由用户设置对焦。
   - 自动对焦(AF)：由系统自动设置对焦。

   ▪ 在高温或低温情况下执行序列操作时，系统的反应速度可能低于精准序列操作的设置速度。

7. 设置是否使用最后一次位置保存时间。
   使用最后一次位置保存时，如将时间设置在 1 和 600 秒之间，当前位置值将在设置时间之后予以保存。
8. 重启摄像机后，屏幕将显示最后一次位置。

设置屏幕

添加初始位置

1. 移至所需起始屏幕点并按 [ ]。
   该点将设置为返回位置。
2. 单击返回位置中的 [ ] 您将移至预先确定的返回位置
3. 完成设置并重启摄像机后，屏幕位于起始位置。（如果摄像机之前在进行另一个序列操作，将执行该序列。）

添加预设

1. 单击 [ ] 按钮。
2. 选择要添加的预设编号。
3. 设置预设名称并单击 [**确认**] 按钮。

删除预设

1. 选择要删除的预设编号。
2. 按下 [删除] 按钮。

移动到所需预设

1. 双击预设配置上您要转到的预设编号。

配置预设位的详细设置

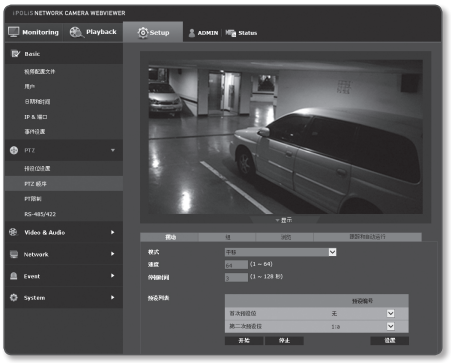
1. 选择想要配置的预设位的编号。

   - 操作后：在<**操作后**>，您可在预设操作后选择自动执行/视频分析操作。（此设置不适用于摆动功能。）
     - 自动运行：执行自动运行的序列设置。如果关闭此功能或没有自动执行操作，将保持预设操作状态。（如果预设与组或浏览功能一起运行，则此设置不适用。）
     - 视频分析：运行MD/VA操作。
   - 摄像机设置：您可以将摄像机设置更改为选定预设的环境。
     请参阅“**摄像机设置**”部分，了解如何设置摄像机。（第78页）
   - MD / VA：当预设中探测到移动或探测到智能视频分析事件时，可将系统设置为生成事件信号。有关详细信息，请参阅“**MD/VA**”。（第 105 页）
2. 完成后，请单击 [**应用 (** 应用 **)**]。

- 保存预设设置后，请务必选择<**顺序设置**>或运行此预设。如果操作无法执行，系统可能运行了不正确的操作，如无意更改了预设设置。
- 设置预设编辑时，无法使用某些功能，如预设设置、起始位置设置和移到起始位置。

PTZ 顺序

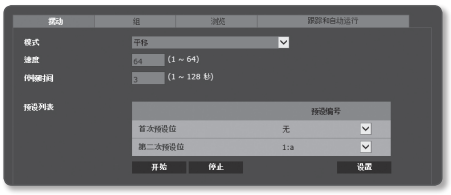
1. 从设置菜单，选择 <**PTZ (** **)**> 选项卡。
2. 单击 <**PTZ 顺序**>。
3. 设置摆动、组、浏览、跟踪和自动操作。



配置摆动设置

摆动是在两个预置点之间移动并让您可以跟踪移动的监控功能。

1. 选择 <**摆动**>。
   菜单屏幕将切换到摆动设置屏幕。
2. 选择摆动设置模式。
   - 平移：可使用平移功能设置摆动监视。
   - 倾斜：可使用倾斜功能设置摆动监视。
   - 平移及倾斜：可设置同时使用平移和倾斜功能的摆动监控。
3. 设置 <**首次预设**> 和 <**第二次预设**> 以指定摆动范围。



▪ 从第一个预设项转到第二个预设项时，摄像机将在屏幕上转到适当方向。
如果在视频设置中将 <**翻转/镜像**> 设置为 <**开**>，它将朝相反方向移动。（第 75页）

4. 设置移动速度和停留时间。
5. 按下 [**设置**] 按钮。
   首次预设、第二次预设、速度和停留时间将保存在设置模式中。
6. 按下 [**开始**] 按钮。
   它执行摆动操作。
7. 按下 [**停止**] 按钮。
   正在运行的摆动将停止。

▪ 如果您想设置摆动,则至少需要两个已经设置的预设。

设置屏幕

配置组设置

组功能让您可以为各种预置分组，然后可以按顺序调用它们。
6 个组中的每个组共可以保存 128 个预设。

1. 选择 <**组**>。
   菜单屏幕将切换到组设置屏幕。
2. 选择组设置模式。
   - 组编号：选择组编号。
   - 预设编号：选择预置编号。
   - 速度：指定移动的速度。
   - 停顿时间：指定操作在预置位置保持的持续时间。
3. 按下 [**设置**] 按钮。
   已保存在底部列表中。
4. 按下 [**开始**] 按钮。
   它执行分组操作。
5. 按下 [**停止**] 按钮。
   正在运行的分组将停止。
6. 按下 [**删除**] 按钮。
   将删除所选的组数据。

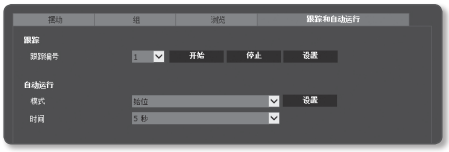
配置浏览设置

浏览功能让您可以按顺序调用预置的组。

1. 选择 <**浏览**>。
   菜单屏幕将切换到浏览设置屏幕。
2. 详细配置浏览设置。
   - 组编号：选择组编号。
   - 停顿时间：指定调用新组之前的等待时间。
3. 按下 [**设置**] 按钮。
   已保存在底部列表中。
4. 按下 [**开始**] 按钮。
   它执行浏览操作。
5. 按下 [**停止**] 按钮。
   正在运行的浏览将停止
6. 按下 [**删除**] 按钮。
   将删除所选的浏览数据。

设置跟踪功能

跟踪会记住使用方向按钮指示的移动踪迹并重现它供您参考。



1. 选择 <**跟踪和自动运行**>。
   该操作将显示跟踪和自动操作设置菜单屏幕。
2. 选择跟踪编号。
   将会保存该操作，并显示存储卡使用情况。
   保存时间会因 PTZ 操作的级别而异。
   如内存已达到 100% 或录制结束配置从保存开始的 2 分钟内未完成，它将自动终止。
3. 按下 [**设置**] 按钮。
4. 使用平移/倾斜/缩放移动保存的导航路径。
5. 按下 [**停止**] 按钮。
   将保存所选跟踪编号。
6. 按下 [**开始**] 按钮。
   将按设置激活所选跟踪编号。

设置自动运行

如果用户在特定时间内未在产品上执行任何操作，此功能将激活预先定义的顺序功能。

1. 选择 <**跟踪和自动运行**>。
   该操作将显示跟踪和自动操作设置菜单屏幕。
2. 选择自动运行模式。
   - 始位：它移到始位。
   - 预设：它移到选定预设位编号。
   - 摆动：自动在摆动模式下执行操作。
   - 组：自动在组模式下执行操作。
   - 浏览：自动在浏览模式下执行操作。
   - 跟踪：自动在跟踪模式下执行操作。
   - 自动平移：自动沿水平方向执行 360° 旋转。
     您可以指定倾斜角度和速度。
   - 计划：可以根据天/时间设置自动运行功能。您能以分钟为单位设置操作，默认设置是起始位置。
3. 设置自动运行的开始时间。选择模式后，选择时间（5秒/10秒/20秒/30秒/1分/2分/3分/4分/5分）。
4. 按 [**设置**] 按钮。
   将自动执行所选操作。

设置屏幕

PT限制

可以对平移或倾斜功能指定限制。

1. 从设置菜单，选择 <**PTZ (**)> 选项卡。
2. 单击 <**PT限制**>。
3. 指定是否要限制 PT 操作。 如果要限制，请指定详细信息。
   - 模式：选择要设置在平移限制和倾斜限制之间的模式。
   - 使用：指定是否使用平移/倾斜功能。
   - 倾斜角度：选择倾斜限制范围。
     选择-5º~185º或-15º~195º。
   - 动作：设置 PT 限制操作。
     - [开始]：开始限制设置。
     - [输入]：提供开始和结束点。
     - [退出]：如果要更改点设置，请单击此项以返回到输入对话框。
4. 设置平移/倾斜速度。
   滚轮调速可从指数和线性方式中选择。
   - Exponential：以曲线速率控制平移/倾斜速度。
   - Linear：以线性速率控制平移/倾斜速度。
5. 设置云台转速与镜头倍数关联开关模式。
   平移和倾斜会根据缩放情况进行调整。缩放量增加时，平移和倾斜速度会下降。
   - 关：关闭缩放互通模式。
   - 慢：手动平移和倾斜控制速度将根据缩放情况而变。它按20%的幅度放慢。
   - 普通：手动平移和倾斜控制速度将根据缩放情况而变。
   - 快：手动平移和倾斜控制速度将根据缩放情况而变。它按20%的幅度加快。
6. 设置是否使用平移/倾斜初始化。
   - 使用：如勾选<使用>项，将在每一指定日期/时间对平移/倾斜马达的位置进行初始化。
   - 持续/初始化时间：按照每个转换周期日期的初始化时间执行平移/倾斜操作。
     示例） 2017 年 1 月 1 日。转换周期：2 天，初始化时间：09
     初始化操作于 2017 年 1 月 3 日 09:00 开始。

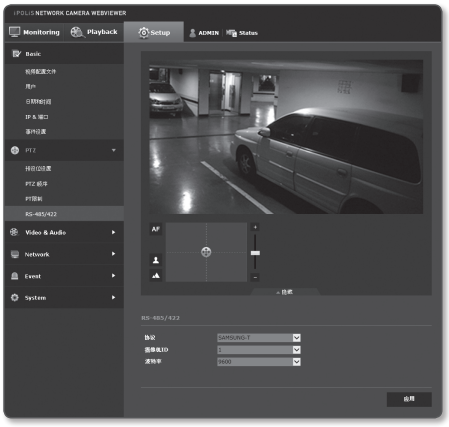
- 可能发生 ±10 分钟的错误。
- 在平移/倾斜初始化操作完成后，保持上一操作状态。
  示例）如在预设操作期间执行初始化，初始化过程完成后将返回至预设操作。

7. 设置完成时，点击 [**设置 (** 设置)]按钮。

RS-485/422

配置控制器连接以便可以使用连接到摄像机 RS-485/422 终端的控制器来控制摄像机的 PTZ。

1. 从设置菜单，选择 <**PTZ (** **)**> 选项卡。
2. 单击 <**RS-485/422**>。
3. 单击 <**▼ 显示**>。
4. 指定串行端口。可以设置连接到网络摄像机的控制器所使用的通信协议 (RS-485/422)。
   - 协议：选择与控制器相同的协议版本，从 SAMSUNG-T/SAMSUNG-E/PELCO-D/PELCO-P/PANASONIC/HONEYWELL/AD/VICON/GE/BOSCH 之中进行选择。
   - 摄像机ID：设置摄像机 ID (1-255)。
   - 波特率：设置 RS-485/422 通信速度。
5. 完成后，请单击 [**应用 (** 应用 **)**]。



▪ 对于该操作，网络摄像机和控制器必须正确连接。此外，控制器还必须设置一个串行端口来控制摄像机。

▪ 根据控制器或协议规范，可能会有不支持的功能。有关详细信息，请参阅下表。

每种协议支持的功能

协议	P 控制	P 移动速度	T 控制	T 移动速度	缩放控制	缩放移动速度	焦点控制	焦点控制速度	预设	备注
SAMSUNG-T	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	O (1~4)	O	
SAMSUNG-E	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	X	O	
PELCO-D	O	O (1~6)	O	O (1~6)	O	X	O	X	O	
PELCO-P	O	O (1~6)	O	O (1~6)	O	X	O	X	O	
PANASONIC	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	O (1~4)	O	
HONEYWELL	O	O (1~6)	O	O (1~6)	O	X	O	X	O	
AD	O	O (1~6)	O	O (1~6)	O	x	O	X	O	
VICON	O	O (1~6)	O	O (1~6)	O	x	O	X	O	
GE	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	X	O	
BOSCH	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	X	X	

设置屏幕

公司	协议名称	版本
AD	RS-422/RS-485 通信	修订版 B
BOSCH	AutoDome 协议	5/30/11
GE	Calibur ImpacNet（S485 协议）	修订版 4.01(05/21/2004)
HONEYWELL	ScanDomeII 协议	V1.05(02/11/2004)
PANASONIC	WV-CS950 协议	版本 4.0
PELCO-D	“D” 协议	版本 4，修订版 1(4/7/2004)
PELCO-P	“P” 协议	
SAMSUNG-E	Samsung 协议	版本2.3(2006/09)
VICON	RS-422 接收器通信协议	修订版 404(4/08/04)

视频与音频设置

视频设置

1. 从设置菜单，选择 <Video & Audio ( )> 选项卡。
2. 单击 <**视频设置**>。
3. 选择 <**视频源**> 模式。
   - 翻转/镜像：颠倒或反向显示摄像机中的视频。
   - 数字翻转：它限制了摄像机镜头的垂直屏幕导航范围。
4. 单击激活或取消激活模拟视频输出功能。
5. 选择显示设备对应的<**视频类型**>。
6. 选择传感器模式。
   您可以设置CMOS传感器每秒捕捉到的帧数。

> ▪ 请参考“**视频配置文件**”，了解基于模式设置的 <**视频配置文件**> 的帧率设置范围。（第 58 页）
>
> ▪ 如果传感器模式为50fps或60fps，则无法为<**背光**>模式选择<**宽动态**>。

7. 指定隐私区域。
8. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

设置加密区域

可以指定为了您的隐私将保护摄像机视频的某些区域。

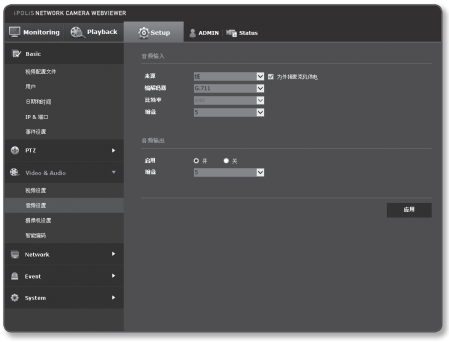
1. 将其设置为 <**开**>。
2. 选择要设置的隐私区域的图案和颜色。
3. 完成后，请单击 [**应用 (** 应用 **)**]。
4. 单击[**▼ 显示**]。
5. 将光标放在视频中的某个点上并将其拖动到所需位置。
   通过控制平移/倾斜，将设置区域移到屏幕中央。
6. 检查屏幕上指示的区域是否与要设置的区域一致，然后输入名称。如果不使用缩放指示限制功能，则选择 [**关**]，然后单击 [**确认**] 按钮。如果显示的区域与设置区域不同，则按 [**取消**] 按钮并进行重置。
7. 如果使用缩放指示限制功能，则选择 [**开**]，然后单击 [**确认**] 按钮。将设置隐私区域并显示一个弹出窗口。此时，将移动到您要设置的缩放位置进行缩放操作，然后单击 [**确认**] 按钮。若要取消隐私区域设置，则单击 [**取消**] 按钮并进行重置。

- 仅当未使用震荡补偿（DIS，数字图像稳定器（digital image stabilizer））且缩放低于 32x 时才能设置隐私区域。
- 对于应用缩放指示限制功能的隐私区域，会通过在 [**缩放**] 后面附加名称来显示。

音频设置

可以配置摄像机的音频源的 I/O 设置。

1. 从设置菜单，选择 <**Video & Audio (**)> 选项卡。
2. 单击 <**音频设置**>。
3. 设置音频输入值。
   - 来源：设置音频输入。
     - 线：将电缆连接到音频设备。
     - 外部麦克风：3.5 pi(¢) 单声道类型外置麦克风。
   - 为外部麦克风供电：如果连接的外部麦克风没有独立的电源，请选中此选项以将摄像机设置为向连接的外部麦克风供电。如果选择了 <**外部麦克风**>，则此选项可用。
   - 编解码器：指定音频编解码器。
     - G.711：一种音频编解码器标准，它使用 64 Kbps PCM（脉冲编码调制）编码。ITU 标准音频编解码器，对于在 PSTN 网络或通过 PBX 进行的数字语音传输而言已经足够。
     - G.726：ITU 标准音频编解码器，将可变比特率 40/32/24/16 Kbps 的 ADPCM（自适应差分脉冲编码调制）应用于 64 Kbps PCM 编码。
   - 比特率：如果使用 G.726 编解码器，则设置比特率以区分压缩比。
   - 增益：指定音频输入放大倍数。
4. 设置音频输出级别。
   - 启用：设置是否使用音频输出。
   - 增益：设置音频输出的放大值。
5. 完成后，请单击 [**应用 (** 应用)]。



设置屏幕

摄像机设置

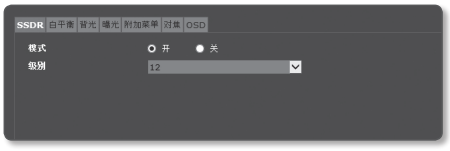
可以根据摄像机所在的环境更改摄像机设置。

1. 从设置菜单，选择 <**Video & Audio (** **)**> 选项卡。
2. 单击 <**摄像机设置**>。
3. 根据需要配置以下各项的设置：SSDR、白平衡、背光、曝光、附加菜单、对焦 和 OSD。
4. 完成后，请单击 [**应用 (** **应用** **)**]。
   - 如果在更改设置之后经过一定的时间未按 [**应用 (** **应用** **)**] 按钮（超时：240 秒），则不会应用您的更改。

SSDR 设置

在明暗差异非常大的场景中，您可以单独增加黑暗区域的亮度以调整总亮度。

1. 选择 <**SSDR**>。
2. 将 <**模式**> 设置为 <**开**>。
3. 根据需要配置 <**级别**> 设置。
   - 级别：调整动态范围的级别。



白平衡设置

在任何照明条件下，可以基于白色校正图像颜色。

1. 选择 <**白平衡**>。
2. 选择 <**模式**>。

- 自动追踪白平衡：自动校正摄像机视频的颜色。使用水银灯/钠灯时，无法使用ATW。
- 手动：可以手动调整摄像机视频的红色和蓝色增益。
- 自动白平衡：根据当前照明条件和屏幕模式进行优化，校正摄像机视频的颜色。要获得当前照明的最佳条件，请将摄像机的焦点对准白纸，然后按 [**设置**] 按钮。如果更改照明环境，应该相应地调整这些设置。
- 室外：根据室外环境进行优化，自动校正摄像机的视频颜色。
- 室内：根据室内环境进行优化，自动校正摄像机的视频颜色。
- MERCURY：图像会根据水银灯环境自动补偿。

▪ 在自动白平衡模式中，如果要保留当前图像的白平衡级别，请单击 [**设置**] 按钮。

▪ 在下列情况下，白平衡可能无法正常工作：
在这种情况下，请切换到“自动白平衡”模式。

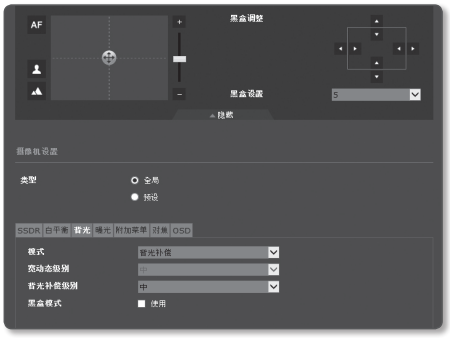
- 如果物体的周围环境条件超出测试校正范围
示例）清澈的蓝天，日落
- 如果物体的周围环境黑暗
- 如果摄像机的焦点直接面对荧光灯照明，或者如果将摄像机安装在照明变化的位置，白平衡操作可能会不稳定。

设置屏幕

背光补偿设置

可以手动在视频上指定想要的区域和设置要更清晰显示的区域。

1. 选择 <**背光**>。
2. 将 <**模式**> 设置为 <**背光补偿**>。
   如果选择BLC，PTZ控制屏上将显示盒调整屏幕和黑盒设置。
3. 选择各项并进行正确设置。
   - 背光补偿级别：可以更改级别以调整监视区域的亮度。
   - 黑盒模式：指定是否使用黑盒模式。
   - 黑盒调整：使用箭头按钮调节背光补偿框的大小和位置。
   - 黑盒设置：指定移动的像素单位。您可以使用 <**黑盒调整**> 以增加或减少像素。



宽动态设置

您可以设置为在明亮和黑暗区域都存在的场景中，显示物体的清晰图像。

1. 选择 <**背光**>。
2. 将 <**模式**> 设置为 <**宽动态**>。
3. 选择各项并进行正确设置。
   - 宽动态级别：指定宽动态灵敏度级别。

- 通过网络进行的数据传输最高速度可达 15 fps。
- 如果宽动态模式处于活动状态，则移动的物体可能会导致屏幕上有重影。

示例）

<**宽动态关**>

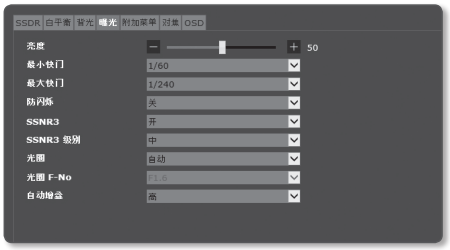
<**宽动态开**>

- 如果选择宽动态，则可能会遇到下列问题。因此，请将它设置为不使用。
  - 颜色的不自然变化，导到屏幕上的图像不自然
  - 图像明亮区域的噪点
- 因为宽动态功能的性能可能会因图像明亮区域的大小而异，建议优化安装角度以取得最佳性能。
- 在夜间操作时，在低对比度环境中，仅当进入光线超过特定区域时，才会激活此功能。
- 如果选择启用数字逐行扫描，则会自动将宽动态设置为固定。
- 为了达到最佳宽动态性能，建议将光圈模式设置为 <**自动**>。
- 如使用了用户背光补偿，由于可根据照明条件反复执行自动对焦操作，建议使用 <**一次性自动聚焦**> 或 <**手动**> 对焦模式。

设置屏幕

曝光设置

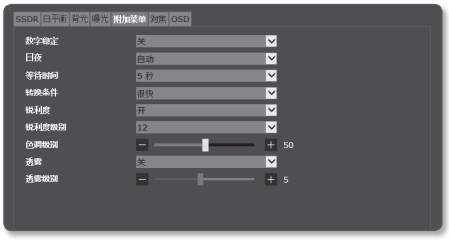
可以调整摄像机的曝光级别。



1. 选择 <**曝光**>。
2. 选择各项并进行正确设置。
   - 亮度：调整屏幕亮度。
   - 最小快门：手动设置最小快门速度。
   - 最大快门：手动设置最大快门速度。
   - 防闪烁：如果您遇到由于频率与环境照明不匹配导致屏幕闪烁的情况，请选择此功能。
   - SSNR3：指定是否使用降噪功能。
     - 当 AGC 模式设置为 <**关**> 时，不能使用 SSNR3。
   - SSNR3 级别：设置 SSNR3 级别。
   - 光圈：您可以根据偏好设置为自动或手动。
     - 自动：自动设置光圈以适应环境照明和快门速度。
     - 手动：光圈 F-No 需手动设置。
   - Iris F-No：如果将光圈模式设置为“手动”，请指定光圈的 F 数值。
     - 随着 F-No 增加，光圈缩小，因此屏幕会变暗；随着 F-No 减小，屏幕会变亮。
   - 自动增益 模式：选择自动增益控制模式。
     调整视频的增益值（即，具体地说，在低对比度场景中录制且亮度级别低于正常）以控制视频亮度。
     - 如果AGC模式设置为<**关**>，则无法使用 SSNR3，并且无法为日夜/夜间模式设置选择<**自动**>模式。

附加菜单设置

1. 选择 <**附加菜单**>
2. 选择各项并进行正确设置。



- 数字稳定：自动补偿屏幕上发生的闪烁。
  - 如使用 VA/MD 和防拆检测，则无法使用数字稳定。
  - 如使用数字稳定，则无法使用数字变焦。
- 日夜：可以切换该模式以调整黑白及颜色。
  - 彩色：始终以彩色显示视频。
  - 黑白：始终以黑白显示视频。
  - 自动：在正常的白天时间以彩色模式显示，并在夜晚低对比度场景中切换为黑白模式。
    - 当 <**曝光**> 的 AGC 模式设置为 <**关**> 时，不能选择自动日/夜模式设置。
- 等待时间：这是为了能够在白天模式和夜晚模式之间切换，每个适用照明条件要保持的时间。
- 转换条件：指定触发顺序操作的照明时间间隔。
- 锐利度 模式：调整图像的总清晰度。
  如果选择了 <**开**>，您可以调整图像的清晰度。
- 锐利度级别：级别越高，图像轮廓变得越清晰和越清楚。
- 色调级别：调整图像的颜色等级。
- 透雾：可以在雾天或阴天改善图像。
  - 关：关闭透雾功能。
  - 自动：根据雾量自动补偿图像。要改善此功能的效果，调整<**透雾级别**>。
  - 手动：可以为图像手动设置补偿量。

- 如果雾天导致图像不清晰，可使用此功能

- 如果为透雾模式选择<**自动**>，透雾级别会随着雾量下降而下降。
  如果要在雾量下降时依然保持透雾级别，请选择<**手动**>。
- 请注意，如果透雾级别高、但雾量小，图像可能较暗。

- 透雾级别：调整透雾级别。

设置屏幕

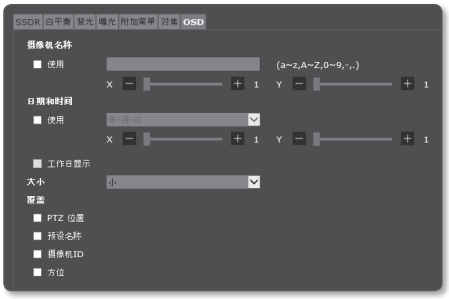
对焦设置

1. 选择 <**对焦**>。
2. 选择各项并进行正确设置。
   - 模式
     - 手动：将根据变焦系数手动调整焦点。
     - 自动：将根据变焦系数自动调整焦点。
     - 一次性自动聚焦：将在执行变焦操作之后执行自动聚焦一次。
   - 数字缩放：指定使用数字变焦。
     - 如使用数字变焦，则无法使用数字稳定。
   - 数字缩放限制：指定数字变焦的限制。
   - 缩放跟踪：使用平移/倾斜/缩放操作，指定对焦同步模式。
     - 关：仅变焦镜头将起作用。
     - 自动跟踪：它将控制（探测并校正）缩放操作以保持适合焦点。
     - 跟踪：缩放操作将由焦点跟踪指导。
   - 缩放速度：调整变焦跟踪速度。
   - 初始化镜头：重设镜头以防止在变焦模式中失去同步。
   - 转换条件：指定重设镜头的频率。
     - 您可以指定重设镜头的日期，重设将在自动聚焦模式中执行。 指定 1 到 7 天之间的时间，重设将从指定的日期开始，以 24 小时的间隔执行。

- 以下任何情况下，自动对焦功能可能无法正常使用:
  - 明亮灯光或闪光灯（如，霓虹灯）
  - 目标区域照度不足
  - 快门速度较慢
  - 物体较暗
  - 目标区域照度过高
  - 如果目标区域中有一个近距离物体和一个远距离物体
  - 如果没有触点间隙（天空、墙壁等）
  - 如果摄像机拍摄的是水平细线
- 在自动对焦模式中，因为摄像机聚焦在区域中央的物体上，不在中央位置的其他物体可能会变模糊。

OSD 设置

1. 选择 <**OSD**>。
2. 选择各项并进行正确设置。



- 摄像机名称：指定是否在屏幕上显示摄像机名称。
  - 最多可输入 15 个字符作为标题。
- 摄像机名称 X, Y：指定摄像机标题在屏幕上显示的坐标。
- 日期和时间：您可以设置日期和时间以及它们是否应显示在屏幕上。
- 日期和时间 X，Y：设置时间在屏幕上的显示位置。
- 工作日显示：您可以在屏幕中显示日期。
- 大小：设置屏幕中指示的 OSD 的大小。从小/中/大中进行选择。
- PTZ 位置：在屏幕上显示 PTZ 位置。
- 预设名称：指定是否在屏幕上显示预设名称。
- 摄像机ID：指定是否在屏幕上显示摄像机的 ID 号。
- 方位：该功能允许您指出在当前屏幕中所能看到的区域的方位。
  在屏幕的右下方会显示八个反映当前方向的罗盘方向：E/W/S/N/NE/NW/SE/SW。

- 如果可调整位置的项（摄像机标题、日期和时间）与另一个固定的OSD项重叠，它可能无法正常显示。
- PTZ 位置显示在屏幕的左下角，它无法移动到其他区域。当在屏幕上放置其他项目时会使用此信息。

设置方位

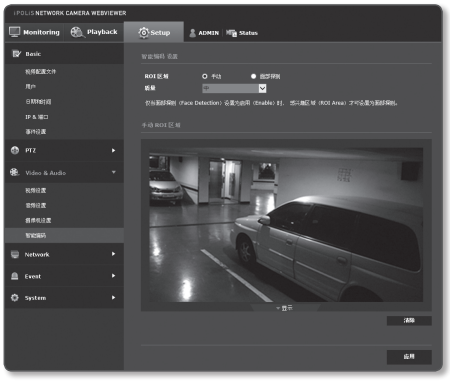
1. 单击 [**▼ 显示**]。
2. 将摄像机视图的中心指向北方并按 [▲] 按钮之后，相应的方向将被保存为北方。

设置屏幕

智能编码

设置来自摄像机的所需视频进入区域作为 ROI 区域，并指定该区域的探测灵敏度。

1. 从设置菜单，选择 <**Video & Audio (** **)**> 选项卡。
2. 单击 <**智能编码**>。
3. 选择 ROI 区域。
   - 手动：指定要手动监视的 ROI 区域。
   - 面部探测：如果在监视屏幕上识别到面部，则此项处于活动状态。



   - 仅当满足下列条件时，面部探测功能才可用：
     - 面部定位在从顶部偏左或右 ±45 度的位置。
     - 面部旋转的有效范围是垂直 ±30 度，水平 ±60 度。
     - 面部的最小尺寸是20X20，此时分辨率为320X240。

   - 仅当激活某个面部探测事件时，才能将感兴趣的区域设置为面部探测。有关面部探测事件的详细信息，请参阅 “**面部探测**”。（第 110 页）

4. 选择 ROI 区域质量。
   感兴趣的区域将以指定的质量显示。
5. 如果通过 <**手动**> 来设置感兴趣的区域，则用鼠标选择所需区域并拖动该区域。
   - 最多可以指定 5 个独立的区域。
6. 若要取消该区域的所有设置，请单击 [**清除 (** 清除 **)**] 按钮。
7. 完成后，请单击 [**应用 (** 应用 **)**]。

   - 如果在 <**视频配置文件**> 中将智能编解码器设置为 <**关**>，则它不活动。（第 58 页）

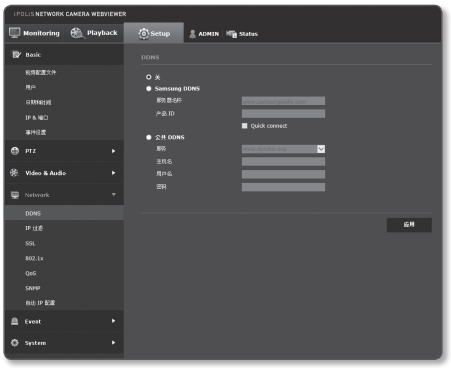
网络设置

DDNS

DDNS 是动态域名服务的缩写，该服务将摄像机的 IP 地址转换成一般主机名，以便用户可以轻松记住它。

▪ 您只有在接通互联网时才能使用DDNS服务。

1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**DDNS**>。
3. 选择 <**DDNS**> 连接类型。
4. 根据所选类型键入 DDNS 项目。
   - Wisenet DDNS：如果使用 Hanwha Techwin 提供的 DDNS 服务器，请选择此项。
     - 产品 ID：输入向 Wisenet DDNS 服务注册的产品 ID。
     - Quick connect：当与支持 UPnP（通用即插即用）的路由器配合使用时，它会自动设置端口转发。



   - 公共 DDNS：使用公共 DDNS 服务器时，可从所提供的公共 DDNS 服务器中选择一个。
     - 服务：选择所需的公共 DDNS 服务的服务器。
     - 主机名：输入向 DDNS 服务器注册的主机的名称。
     - 用户名：输入 DDNS 服务的用户名。
     - 密码：输入 DDNS 服务的密码。
5. 完成后，请单击 [**应用 (** 应用 **)**]。

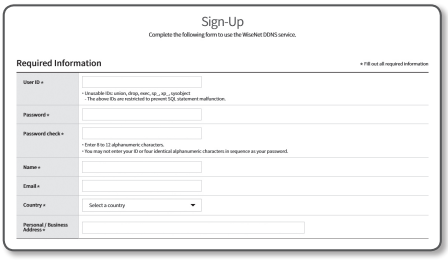
▪ 如果选择了 <**Quick connect**>，请确保选择 Wisenet DDNS 服务。

设置屏幕

注册 DDNS

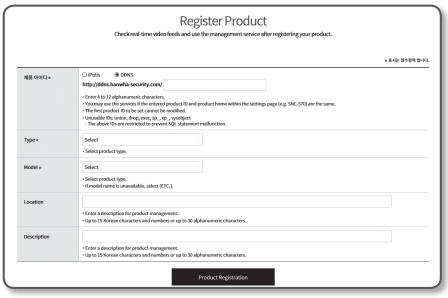
向 Wisenet DDNS 注册您的产品

1. 访问Wisenet DDNS网站(http://ddns.hanwha-security.com)并注册会员。

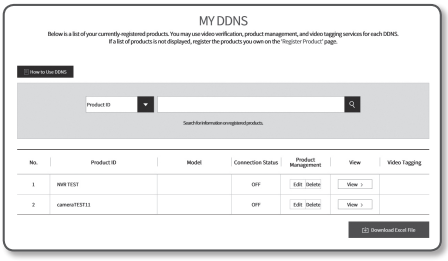


2. 从顶部的菜单栏，选择 <**MY DDNS**>。

3. 点击[**Register Product**]选项卡。
4. 输入产品 ID。

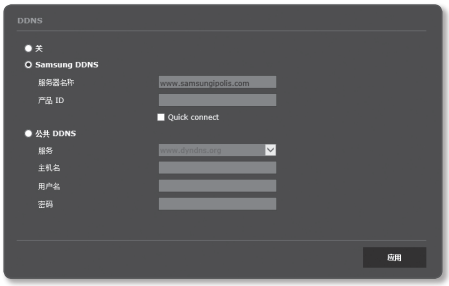


5. 指定<**Type**>和<**Model**>。
6. 指定产品位置及说明（如有必要）。
7. 单击 [**Product Registration**]。
   您可在列表中看到新注册的产品信息。



在摄像机设置中连接至 Wisenet DDNS

1. 从 DDNS 设置页面，将 <**DDNS**> 设置为 <**Wisenet DDNS**>。
2. 提供向 DDNS 网站注册产品 ID 时指定的 <**产品 ID**>。
3. 单击 [**应用 (** 应用 **)**]。
   成功进行连接后，屏幕上将显示消息 <**(成功)**>。



在摄像机设置中配置公共 DDNS

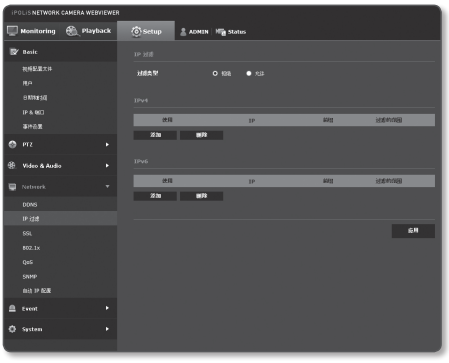
1. 打开 DDNS 设置页面并为 <**DDNS**> 选择 <**公共 DDNS**>。
2. 输入相应站点的主机名、用户名和密码。
3. 单击 [**应用 (** 应用 **)**] 按钮。
   如果正确建立连接，<**(成功)**> 将会出现。
4. 完成后，请单击 [**应用 (** 应用 **)**]。

▪ 要正确使用 DDNS 服务，需要 DDNS 设置和路由器的端口转发设置。
对于端口转发设置，请参阅 “**路由器端口设置**”。（第 43 页）

设置屏幕

IP 过滤

可以创建想要授予或拒绝访问权限的 IP 列表。



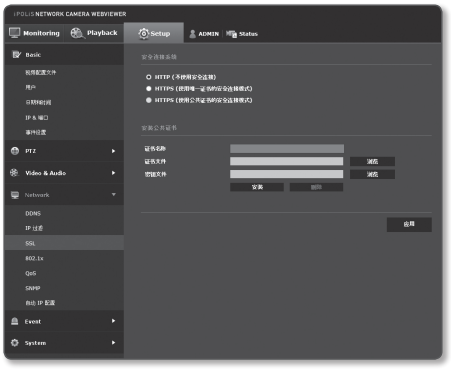
1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**IP 过滤**>。
3. 选择 <**过滤类型**>。
   - 拒绝：如果选择此项，将限制从添加至过滤列表的那些 IP 进行的访问。
   - 允许：如果选择此项，将只接受从添加至过滤列表的那些 IP 进行的访问。
4. 单击 [**添加 (** 添加)] 按钮。
   将会创建 IP 列表。
5. 提供想要授予或拒绝访问权限的 IP。
   输入 IP 地址和前缀时，可用的 IP 地址列表将出现在右侧过滤范围列中。

- 如果为 IP 过滤 选择了 <**允许**> 并且 <**IP & 端口**> 的 <**IPv6 设置**> 设为 <**使用**>，则应该分配当前计算机配置的 IPv4 和 IPv6 地址。
- 不能将用于当前设置的计算机的 IP 地址添加至 <**拒绝**>，应该将它添加至 <**允许**>。
- 只有设置为 <**使用**> 的 IP 地址才会显示在过滤器列中。

6. 从列表中选择要删除的 IP。
   单击 [**删除 (** 删除)] 按钮。
7. 完成后，请单击 [**应用 (** 应用)]。

SSL

可以选择安全连接系统或安装公共证书用于此目的。



1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**SSL**>。
3. 选择安全连接系统。
   - 若要使用 HTTPS 模式访问摄像机，您必须以 https://<Camera_IP> 形式键入摄像机的 IP 地址。如果未在 Internet Explorer 中以 HTTPS 模式配置 Web Viewer 设置，请按如下所示编辑 Internet 选项：<菜单 → 工具 → Internet 选项 → 高级 → 安全 → 取消选择 TLS 1.0 并选择 TLS 1.1、TLS 1.2>
4. 搜索要安装在摄像机上的公共证书。
   要将证书安装在摄像机上，需要提供证书名称（可由用户随意分配）、认证机构颁发的证书文件以及密钥文件。
   - 仅当安装了公共证书，<**HTTPS (使用公共证书的安全连接模式)**> 项目才会活动。
5. 完成后，请单击 [**应用 (** 应用)]。

安装证书

1. 输入证书名称。
2. 单击 [**浏览 (** 浏览)] 按钮,选择要安装的公共证书文件和密钥文件，然后单击 [**安装 (** 安装)] 按钮。

删除证书

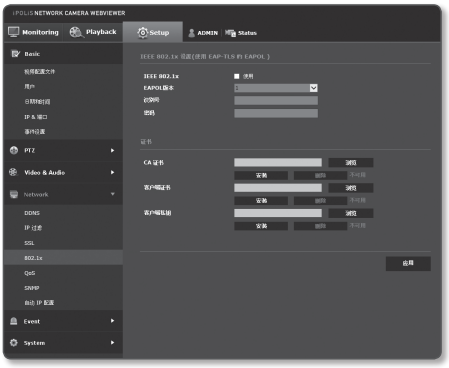
1. 单击 [**删除 (** 删除)] 按钮。
2. 要删除公共证书，应该在 <**HTTP** (**不使用安全连接**) > 或 <**HTTPS** (**使用唯一证书的安全连接模式**) > 模式下访问网络视频解码器。

设置屏幕

802.1x

连接网络时，您可以选择是否使用 802.1x 协议，然后安装证书。

1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**802.1x**>。
3. 设置 <**IEEE 802.1x 设置 (使用 EAP-TLS 的 EAPOL)**>。
   - IEEE 802.1x：指定使用 802.1x 协议。
   - EAPOL版本：选择版本 1 或 2。
   - 识别号：输入客户机证书 ID。
   - 密码：输入客户机专用密钥密码。如果密钥文件未加密，则不需要输入密码。



▪ 如果连接的网络设备不支持 802.1x 协议，那么即使您设置了该协议，它也不会正常执行。

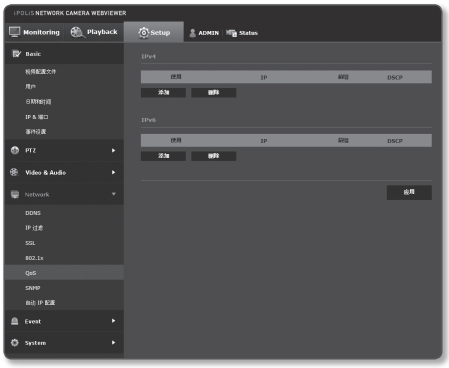
4. 安装/移除证书。
   - CA 证书：选择包含公共密钥的公共证书。
   - 客户端证书：选择包含客户端证书密钥的公共证书。
   - 客户端私钥：选择包含客户端私钥的公共证书。
5. 完成后，请单击 [**应用 (** 应用)]。

安装/删除与 802.1x 相关的证书

1. 按每个项目的 [**浏览 (** 浏览)] 按钮并选择要安装的证书。
2. 如果未安装任何证书，则会看到“不可用”出现在所选项目旁边。
3. 按 [**安装 (** 安装)] 按钮以开始安装，并在项目旁边显示消息“已安装”。
4. 按 [**删除 (** 删除)] 按钮以删除证书。

QoS

您可以指定优先级以确保特定 IP 的传输率稳定。



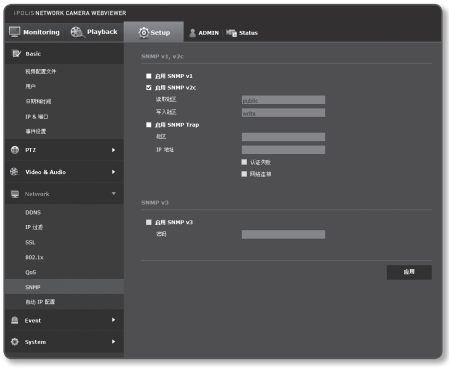
1. 从设置菜单，选择 <**Network (** **)**> 选项卡。
2. 单击 <**QoS**>。
3. 单击 [**添加 (** 添加 **)**] 按钮。
   将会创建 IP 列表。
4. 输入将应用 QoS 的 IP 地址。

   - 默认前缀对于 IPv4 是 32；
     对于 DSCP，默认值设置为 63。
   - 只能为设置为 <**使用**> 的 IP 地址设置优先级。

5. 从列表中选择要删除的 IP。
   单击 [**删除 (** 删除 **)**] 按钮。
6. 完成后，请单击 [**应用 (** 应用 **)**]。

SNMP

通过 SNMP 协议，系统或网络管理员可以监视远程站点上的网络设备，以及配置环境设置。



1. 从设置菜单，选择 <**Network (** **)**> 选项卡。
2. 单击 <**SNMP**>。
3. 指定 <**SNMP**>。
   - 启用 SNMP v1：SNMP V1 将处于活动状态。
   - 启用 SNMP v2c：SNMP V2c 将处于活动状态。
     - 读取社区：提供读取社区的名称，可在其中访问 SNMP 信息。
       默认名称为 <**public**>。
     - 写入社区：提供写入社区的名称，可在其中访问 SNMP 信息。默认名称为 <**write**>。
   - 启用 SNMP Trap：SNMP Trap用于将重要事件和情况发送到管理员系统。
     - 社区：输入用于接收消息的Trap社区名称。
     - IP 地址：输入消息将发送到的 IP 地址。
     - 认证失败：指定当社区信息无效时是否生成事件。
     - 网络连接：指定当网络断开后恢复连接时是否生成事件。

设置屏幕

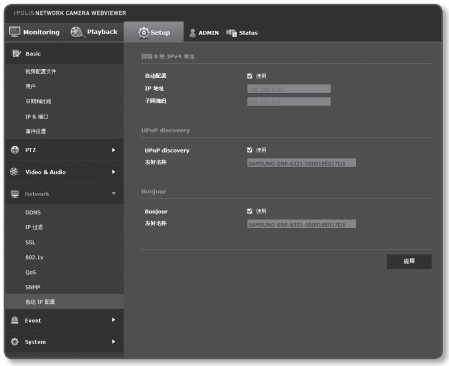
- 启用 SNMP v3：SNMP V3 将处于活动状态。
  - 密码：指定 SNMP V3 的默认密码。
    - 默认密码可能会向黑客线程公开，因此建议您在安装产品之后更改该密码。
      请注意，未更改密码导致的安全和其他相关问题，用户自己承担责任。
    - 密码长度应该为 8 – 16 个字符。

4. 完成后，请单击 [**应用 (** 应用 **)**]。

- 仅当安全连接模式是 HTTPS 时，才能设置 SNMP v3。
  请参阅“**SSL**”。（第 91 页）
- 如果您不使用SNMP v3，则可能出现安全问题。

自动 IP 配置

您可以自动设置可用于访问和摄像机搜索的IP。



1. 从设置菜单，选择 <**Network (** **)**> 选项卡。
2. 单击 <**自动 IP 配置**>。
3. 设置 <**链路本地 IPv4 地址**>。
   可以分配一个额外的 IP 地址以从链路本地网络访问摄像机。
   - 自动配置：指定“**启用**”或“**禁用**”链路本地 IPv4 地址。
   - IP 地址：显示所分配的 IP 地址。
   - 子网掩码：显示所分配 IP 的子网掩码。
4. 设置 <**UPnP discovery**>。
   可以在支持 UPnP 协议的客户端和操作系统中自动搜索摄像机。
   - UPnP discovery：指定“**启用**”或“**禁用**”UPnP 发现。
   - 友好名称：显示摄像机名称。
     友好名称的显示格式为 WISENET- <**型号名称**>-<**MAC 地址**>。

- 在基本支持 UPnP 的 Windows 操作系统中，连接到网络的摄像机会显示出来。

5. 设置 <**Bonjour**>。
   可以在支持 Bonjour 协议的客户端和操作系统中自动搜索摄像机。
   - Bonjour：指定“启用”或“禁用”Bonjour 发现。
   - 友好名称：显示摄像机名称。
     友好名称的显示格式为 WISENET- <型号名称>-<MAC 地址>。

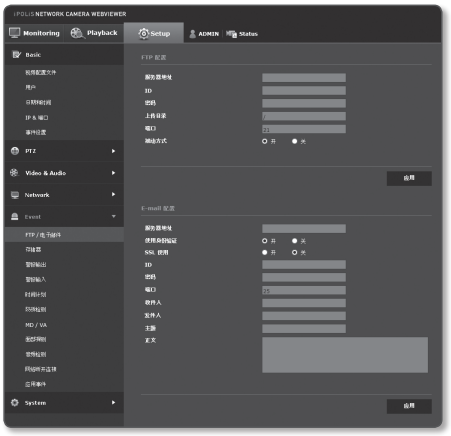
- 在默认支持 Bonjour 的 Mac 操作系统中，已连接的摄像机会自动显示在 Safari 网络浏览器的 Bonjour 书签中。
  如果 Bonjour 书签没有显示出来，请在“首选项”菜单中检查书签设置。

6. 完成后，请单击 [**应用 (** 应用 **)**]。

事件设置

FTP / 电子邮件

可以配置 FTP/电子邮件服务器设置，以便在事件发生时可以将使用摄像机拍摄的图像传输到您的计算机。



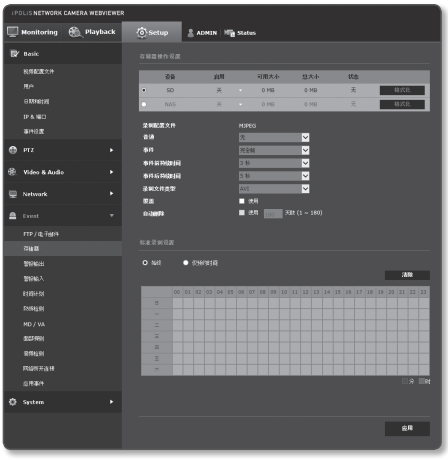
1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**FTP / 电子邮件**>。
3. 选择 <**FTP 配置**> 或 <**E-mail 配置**> 并输入/选择所需的值。
   - FTP 配置
     - 服务器地址：输入您将警报或事件图像传输到的 FTP 服务器的 IP 地址。
     - ID：输入用于登录 FTP 服务器的用户 ID。
     - 密码：输入用于登录 FTP 服务器的用户帐户密码。
     - 上传目录：指定警报或事件图像将传输到的 FTP 路径。
     - 端口：FTP 服务器的默认端口为 21；但是，可以根据 FTP 服务器设置使用不同的端口号。
     - 被动方式：如果由于防火墙或 FTP 服务器设置需要以被动模式连接，请选择 <开>。
   - E-mail 配置
     - 服务器地址：输入您将警报或事件图像传输到的电子邮件服务器的 IP 地址。
     - 使用身份验证：选择是否使用身份验证。
     - SSL 使用：指定使用 SSL。
     - ID：输入用于登录电子邮件服务器的用户 ID。
     - 密码：输入用于登录电子邮件服务器的用户帐户密码。
     - 端口：电子邮件服务器的默认端口为 25；但是，可以根据电子邮件服务器设置使用不同的端口号。
     - 收件人：输入电子邮件收件人的地址。
     - 发件人：输入电子邮件发件人的地址。如果发件人地址不正确，来自发件人的电子邮件可能会被电子邮件服务器分类为垃圾邮件，这样可能不发送。
     - 主题：输入电子邮件的主题。
     - 正文：为邮件提供文本。将警报或事件图像附加至准备的电子邮件。
4. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

存储器

您可以在设备上激活录制，选择录制条件，检查已保存数据占用的容量，对设备自身进行格式化。

1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**存储器**>。
3. 选择用来保存数据的设备。



- 如果设备正在正确录制数据，将显示“**录制**”。
- 如果看到“错误”消息，请检查下列事项：
  - 检查存储器，看它是否与设备连接。
  - 检查存储器中的文件，看它们是否损坏。
  - 检查存储器，看它们是否物理损坏。
- 如果按照下列指示操作之后“错误”消息未消失，请格式化 SD 卡。
  格式化之后，如果错误消息仍然存在，请更换 SD 卡。

在 SD 存储卡上进行录制

1. 检查存储卡的 <**可用大小**> 和 <**总大小**>。
2. 请检查已存储的数据，如果发现它们不重要，则单击 <**格式化**> 以格式化 SD 存储卡。
   - 如果 SD 存储卡以低于建议值的速度运行，可能会跳过某些帧。
     如需更多信息，请参阅“**推荐 SD/ SDHC/SDXC 存储卡 技术规格**”。（第 10 页）
   - 对于大容量的 SD 存储卡，格式化将相应变慢。
   - 将摄像机设置为较高分辨率、较高位速率或较高帧率时，数据流量会增大。
     如果数据流量较大，可能会跳过某个帧，但仍会将其全帧存储。
   - 发生跳帧时，将以最低每秒一幅图像的速度保存图像。
3. 指定存储操作。
   - 录制配置文件：将显示录制的配置文件的名称。
   - 普通：设置不发生事件时的录制类型。
   - 事件：设置发生的特定事件的录制类型。
   - 事件前持续时间：指定发生事件之前的某个时间点；将从这个时间点开始传输图像。最多可以指定发生事件之前 5 秒钟。
   - 事件后持续时间：指定发生事件之后的某个时间点；图像传输将在这个指定的时间点结束。最多可以指定发生事件之后 120 秒钟。

- 录制文件类型：指定所录制图像的文件格式。
  如果插入的 SD 卡用其他文件类型 (AVI/STW) 保存文件，需要在使用前将其格式化。
  - STW：Hanwha Techwin 的独特文件格式。
  - AVI：传统的 avi 格式。
- 覆盖：如果 SD 存储卡已满，这将删除旧数据并存储新数据代替。
- 自动删除：删除指定时间段的数据，不删除其他数据。
  可以设置的范围是 1 到 180 天。

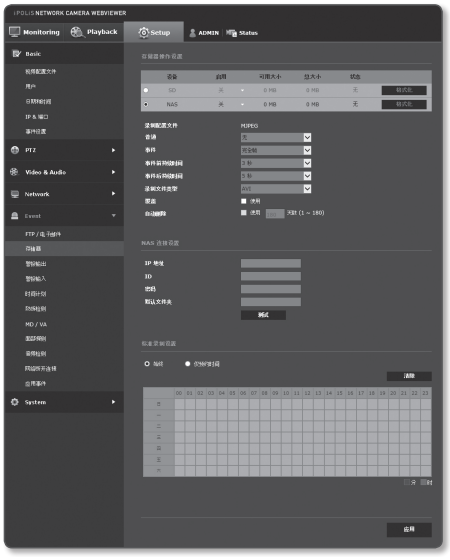
▪ 如果超出保留时间段，将自动删除相应数据并录制新数据。 数据一旦删除即无法恢复。

4. 指定 <**标准录制设置**>。
   - 始终：始终将录制的视频保存在 SD 存储卡中。
     ▪ 如果设置为始终，则激活时间无法更改。
   - 仅预约时间：仅在指定星期几的指定时间录制。
   - [清除(清除)]：清除选择选定的时间。
5. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

如果希望录制到 NAS 中

1. 设置保存操作和基本录制。



> ▪ 只有 NAS 符合建议规格，才能支持自动删除。

2. 输入在 NAS 中注册的信息。
   - IP 地址：为 NAS 分配的具有唯一性的 IP 地址。
   - ID：这是 NAS 中注册的一个 ID。
   - 密码：NAS 中注册的密码。
   - 默认文件夹：指定用来保存数据的 NAS 用户文件夹。
3. 单击 [**测试**] 按钮来查看是否可以成功连接到 NAS。

> ▪ 如果显示成功消息，则意味着您可以成功地将数据保存到 NAS 中。
>
> ▪ 如果显示失败消息，请检查以下方面。
>
> - 确认 NAS 的 IP 地址有效。
> - 确认 NAS 的 ID/密码有效。
> - 确认您可以访问使用 NAS 的 ID 指定为基本文件夹的文件夹。
> - 确认 NAS 的 SMB/CIFS 项已被取消选中。
> - 确认 NAS IP 地址和摄像机 IP 地址的格式正确。
>   Ex) NAS 和摄像机子网掩码的初始值是 255.255.255.0。
>   如果 IP 地址是 192.168.20.32，NAS IP 地址的范围应该是 192.168.20.1~192.168.20.255。
> - 检查是否作为其他用户尝试访问，而没有对所保存和使用的基本文件夹进行格式化。
> - 确认使用了建议的 NAS 设备。

4. 一旦完成设置，将 NAS 的设置从 <**关**> 更改为 <**开**>，然后单击 [**应用 (** 应用 **)**] 按钮。
5. 访问 NAS 来检查可用容量和总容量。
6. 如果没有足够的空间，则检查数据大小并单击 [**格式化**] 按钮以格式化连接到网页的 NAS 文件夹。
   - 由于网络访问错误，可能暂时无法保存到 NAS。
   - 将摄像机设置为较高分辨率、较高位速率或较高帧率时，数据流量会增大。
     如果数据流量较大，可能会跳过某个帧，但仍会将其全帧存储。
   - 发生跳帧时，将以最低每秒一幅图像的速度保存图像。

NAS（网络连接存储器）指南

- 在使用 NAS 时，可能会由于暂时的网络断开而无法保存数据。
- 如果设置允许同时连接和使用 SD 存储卡和 NAS，NAS 享有较高录制优先级。
- 如果通过将覆盖设置为 <**关**> 激活覆盖并且可用容量低于 10%，则将其保存在 SD 卡中。
- 如果正将数据保存到 NAS，在插入其他摄像机使用的 SD 存储卡时，可能无法保存数据。
- NAS 建议规格：请参阅“**NAS 建议规格**”（第 11 页）
- 如果在数据保存到 NAS 期间更改 NAS 保存设置，该更改将不会立即在系统中反映出来。
- 如果在数据保存期间移除 NAS 设备，或者网络断开，NAS 保存操作将异常终止。
- 根据经验，建议为每个摄像机使用一个 NAS 共享目录，而不应重复使用。

下面描述了如何按照 Synology NAS（建议产品之一）方法使用 NAS 保存数据。

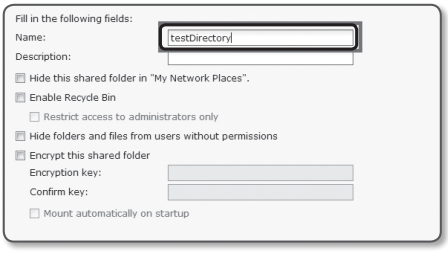
1. 作为管理员访问 Synology NAS。
   在本例中，NAS IP 地址设置为 [**192.168.20.253**]。

2. 如果作为管理员访问，将显示以下屏幕。
   单击 [**Control Panel**]。

设置屏幕

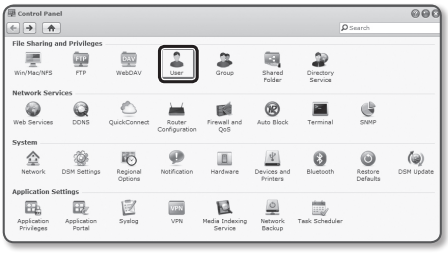
3. 在文件共享和权限菜单中单击 <**Shared Folder**>。

4. 单击 [**Create**] 按钮。
5. 在输入共享文件夹名称 (ID) 后，单击 [**OK**] 按钮来创建共享文件夹。
   在本例中，共享文件夹名称是 [**testDirectory**]。

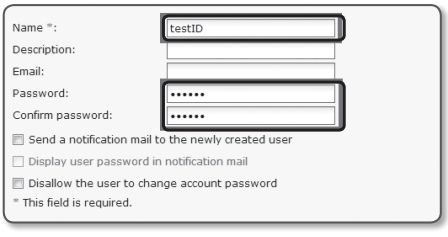


6. 在 Windows 中，针对 NAS 访问，如下设置共享文件夹的权限。
   选中管理员的 [**Read/Write**] 权限。

7. 在文件共享和权限菜单中单击 <**User**>。

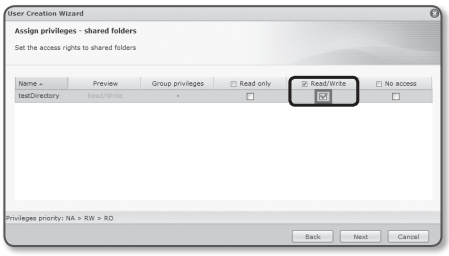


8. 单击 [**Create**] 按钮后，输入名称 (ID) 和密码。
   在本例中，名称 (ID) 设置为 [**testID**]，密码设置为 [**testID**]。



- 根据 NAS 建议，在使用 Netgear 的 NAS 设备时，不要分配要使用的容量。

9. 在 Windows 中，设置 NAS 访问的权限。
为第 4 步中创建的名称为“testDirectory”的共享文件夹，选中 [**Read/Write**] 权限。



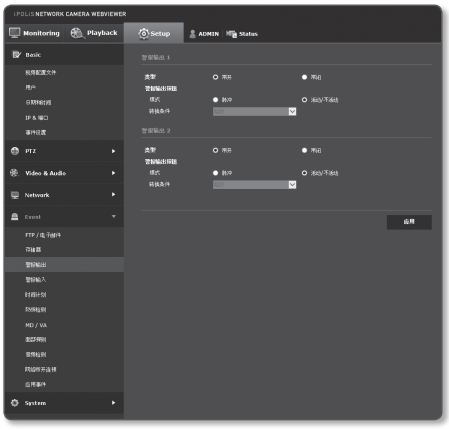
10. 至此 NAS 中的基本设置已完成。
将摄像机连接到实际 NAS。
如下所示，输入 NAS 连接设置项。

11. 在输入项目 10 后，选中 <**开**>。

12. 单击 [**应用 (** 应用 **)**] 按钮。
通过使用 NAS 来完成保存。

警报输出

1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**警报输出**>。
3. 设置摄像机的警报输出类型。
   - 如果您更改警报输出类型，监视页面上的警报输出按钮和事件设置页面上显示的警报输出类型会相应地更改。
   - 类型
     - 常开：将传感器或警报输出设备“开路”状态视为正常,如果发生报警,变成“闭路”状态。
     - 常闭：将传感器或警报输出设备“闭路”状态视为正常,如果发生报警,变成“开路”状态。

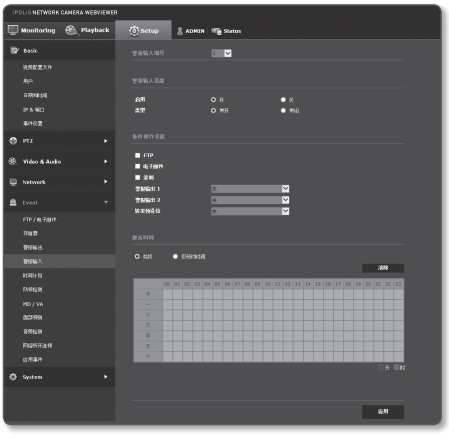


4. 设置警报输出按钮。
   - 模式：设置警报输出方式。
     - 以下是在禁用时单击警报输出按钮时操作之间的差异。
     - 脉冲：在持续时间（切换间隔）指定的时间段内激活，然后自动变成不活动。
     - 活动/不活动： 它保持为已激活，直到用户再次单击按钮以使它不活动为止。
   - 转换条件：如果模式设置为脉冲，则设置保持激活的警报持续时间：1 到 15 秒。
5. 完成后，请单击 [**应用 (** 应用 **)**]。

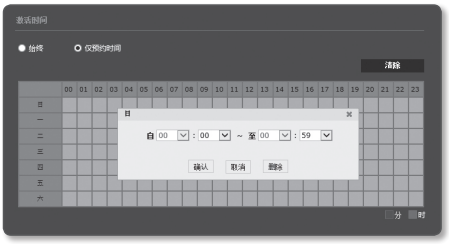
设置屏幕

警报输入

可以设置警报输入类型、激活时间和工作模式。



1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**警报输入**>。
3. 选择警报输入编号。
4. 设置是否 <**启用**>。
5. 选择类型。
   - 常开：它通常是打开的，但是如果关闭，将触发警报。
   - 常闭：它通常是关闭的，但是如果打开，将触发警报。
6. 指定 <**激活时间**>。
   - 始终：当警报发出时，将始终检查。当警报发出时，它将在运行的模式下激活。
     - 如果设置为 <**始终**>，激活时间将无法更改。
   - 仅预约时间：警报发出时，在一周指定的一天检查指定的时间长度。当警报发出时，它将在运行的模式下激活。
   - [清除(**清除**)]：重置全部设置。
   - 分：单击“激活时间”中的某个区域并以分钟为单位设置时间。
   - 时：在“激活时间 ”上拖动鼠标并以小时为单位设置时间。

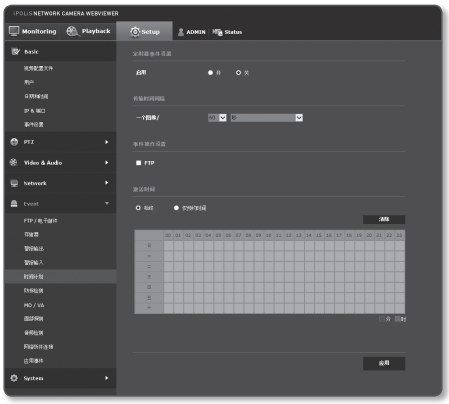


- 传输间隔设置值必须小于预设激活间隔才能成功进行图像传输。

7. 指定警报发出时将执行的操作。
   - FTP：在警报输入设置中指定使用 FTP 传输。
     - 有关详细信息，请参阅“**FTP / 电子邮件**”。(第 95 页)
   - 电子邮件：在警报输入设置中指定电子邮件传输的使用。
     - 有关详细信息，请参阅“**FTP / 电子邮件**”。(第 95 页)
   - 录制：在警报输入设置中指定录制的使用。
     - 在 <**存储器**> 中将 <**录制**> 设置为 <**开**>。(第 96 页)
   - 警报输出1/警报输出2：选择如果警报进入是否设置警报输出，并指定警报输出时间。
   - 转至预设位：在设置警报输入时，移动至指定的预设位置。
8. 完成后，请单击 [**应用 (** 应用 **)**]。

时间计划

可以设置为根据计划以特定间隔保存视频数据，而不考虑事件的实际出现情况。

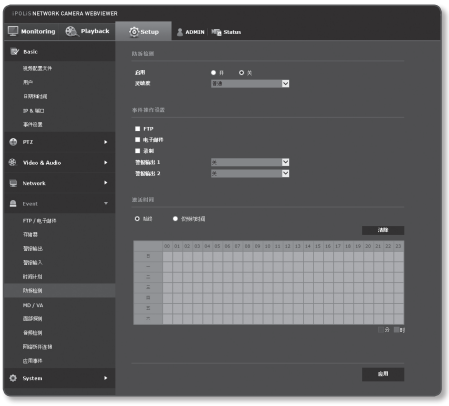


1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**时间计划**>。
3. 设置是否 <**启用**>。
4. 指定 <**传输时间间隔**>。
5. 指定 <**激活时间**>。
   - 始终：始终在设置的时间间隔内以运行的模式激活。
   - 仅预约时间：在指定的时间和日期定期以运行的模式激活。
6. 指定激活条件。
   - FTP：指定事件发生时 FTP 传输的使用。
     - 有关详细信息，请参阅“**FTP/电子邮件**”。(第 95 页)
7. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

防拆检测

您可以设置为检测拆离尝试并触发事件，例如摄像机取景框方向突然发生变化、镜头被蒙住以及视频的其他整个场景变化。



1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**防拆检测**>。
3. 设置是否 <**启用**>。

> ▪ 防拆功能启用时，DIS不能使用。

4. 设置防拆检测灵敏度。
   灵敏度越高，越能检测最小的拆离尝试。
5. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**> 的详细信息，请参阅 “**警报输入**”。(第 102 页)
6. 完成后，请单击 [**应用 (** 应用 **)**]。

> ▪ 在下列情况下，默认防拆检测功能可能无法正常工作：
> - 在简单背景或低照度以及夜晚情况下，可能会降低检测灵敏度。
> - 摄像机摇晃严重或照明激烈变化会导致错误地视为拆离。
> - 防拆检测可能会在拆离发生之后的一定时间（最多 5 秒）进行。
> - 一旦检测到拆离，摄像机将继续在特定稳定性时间（大约 5 秒）之后继续标准操作，在此稳定性期间不会执行任何检测。

MD / VA

可将动作探测和视频分析的事件设置为触发事件信号输出。

1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**MD / VA**>。
3. 设置是否 <**启用**>。

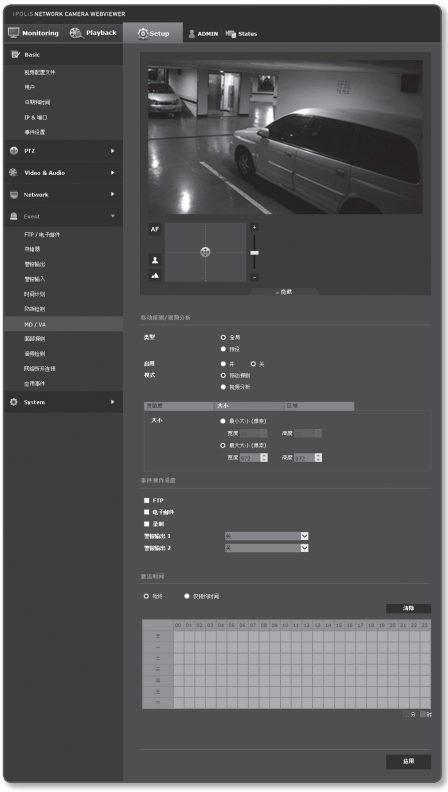
- 探测用户设置的区域中的对象移动。

4. 根据您的用途，从移动探测和智能视频分析中选择。
5. 设置 <**灵敏度**>、<**大小**> 和 <**地区**>。
   选择 智能视频分析时，还需要设置 <**分析**>。
6. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**> 的详细信息，请参阅 “**警报输入**”。(第 102 页)
7. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

要使用移动探测(MD)功能

1. 选择<**移动探测**>模式。
2. 选择从背景区分移动的敏感度。
   共有5个敏感度可选（非常低/低/普通/高/非常高）。
3. 选择待观察物体的大小。
   - 最小大小（像素）：要限制可观察到的最小移动，选择<**最小大小（像素）**>，输入宽度和高度。单位是像素，您可以选择大于等于32x32的任何值。
   - 最大大小（像素）：要限制可观察到的最大移动，选择<**最大大小（像素）**>，输入宽度和高度。单位是像素，您可以选择不超过1920x1080的任何值。

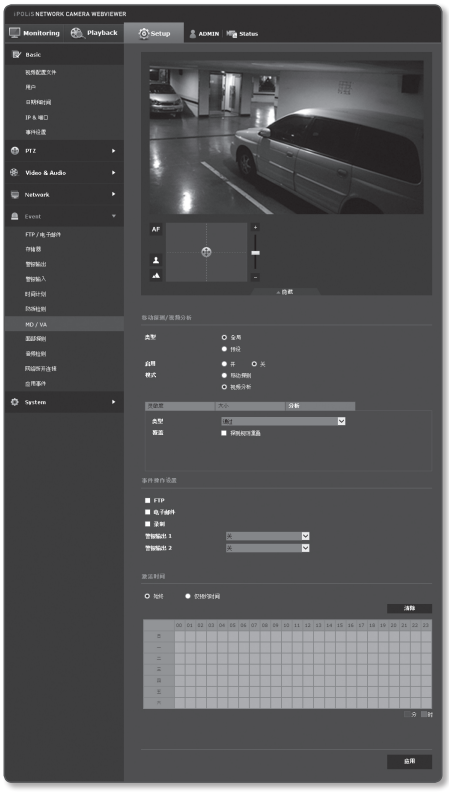


- 无法探测小于指定最小大小或大于最大大小的移动。为了避免大小噪点导致的意外探测，请根据环境相应地设置最小/最大大小。
- 请注意，相同位置处的相同移动在其检测大小方面可能会检测到不同；建议您在设置最小/最大探测大小时，考虑并包括允差。

4. 设置移动探测区域。
   您可以将区域拖到屏幕中。最多可设置4个区域。
5. 完成后，请单击 [**应用 (** 应用 **)**]。

- 不同于视频分析功能，移动探测功能在屏幕上不提供覆盖标记。监视屏幕一侧会显示一个黄色的框，操作功能则记录在系统日志中。

要使用智能视频分析(VA)功能



1. 选择<**视频分析**>模式。
2. 选择从背景区分移动的敏感度。
   共有5个敏感度可选（非常低/低/普通/高/非常高）。
3. 选择待观察物体的大小。
   - 最小大小（像素）：要限制可观察到的最小移动，选择<**最小大小（像素）**>，输入宽度和高度。单位是像素，您可以选择大于等于32x32的任何值。
   - 最大大小（像素）：要限制可观察到的最大移动，选择<**最大大小（像素）**>，输入宽度和高度。单位是像素，您可以选择不超过1920x1080的任何值。

   - 无法探测小于指定最小大小或大于最大大小的移动。为了避免大小杂讯导致的意外探测，请根据环境相应地设置最小/最大大小。
   - 请注意，相同位置处的相同移动在其检测大小方面可能会检测到不同；建议您在设置最小/最大探测大小时，考虑并包括允差。

4. 选择分析类型。
   - 通过：系统会探测物体通过预设线时的变化。
   - 进入/退出：系统会探测物体通过预设区域时的变化。
   - 出现（消失）：系统会探测物体在预设区域出现或消失时的变化。
5. 选择是否使用<**覆盖**>。
   - 探测结果重叠：通过视频指出探测结果。
6. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

设置视频分析规则

▪ 通过

1. 将类型设置为 <**通过**>。
2. 单击屏幕上的开始点和结束点，可设置基本线条。
   绘制区域时，右键单击鼠标可取消绘制的线条。
3. 选择所需规则
   - 右：检测在虚拟线上从左到右运动的移动。
   - 左：检测在虚拟线上从右到左运动的移动。
4. 单击 [**确认**]。
5. 要除去已定义的规则，请右键单击显示的虚拟线以打开弹出上下文菜单，然后选择 [**删除**] 按钮。

▪ 进入/退出

1. 将类型设置为 <**进入/退出**>。
2. 在屏幕上单击4个点，可设置基本区域。
   绘制区域时，右键单击鼠标可取消绘制的线条。
3. 选择所需规则
   - 进入：检测中心点从区域外部进入已定义区域的移动物体的移动。
   - 出去：检测中心点从已定义区域内部移动到外部的移动物体的移动。
4. 单击 [**确认**]。
5. 要除去已定义的规则，请右键单击区域的显示的虚内部线以打开弹出上下文菜单，然后选择 [**删除**] 按钮。

▪ 出现(消失)

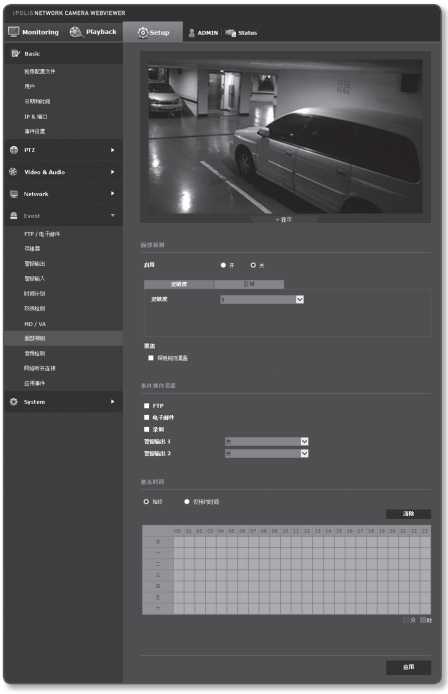
1. 将分析类型设置为 <**出现 (消失)**>。
2. 拖动图像的所需位置。
   拖动的灰色区域将被设置为感兴趣的区域。
   - 出现/消失：它会检测出现在区域中并且在未通过区域边界时保留一定时间段的出现物体，以及相反情况下存在于区域中的物体消失。
3. 如果您想删除现有规则，则用您的鼠标右键单击，然后单击 [**删除**] 按钮。

- 移动探测和视频分析不能同时使用。
- 在使用之前，设置最小和最大移动大小以适合探测所需的移动范围。
- 探测到的物体大小与实际大小可能会有差异，视其形状而定。
- 从屏幕顶部开始，最多可以显示 16 个物体。
- 如果摄像机拍摄到较近的对象，视频分析功能可能会变弱。
- 在以下情况下，移动探测和智能视频分析功能可能会下降或导致不正确的探测结果。
  - 拍摄对象的颜色或亮度与背景类似。
  - 摄像机视野边界区域周围的小活动。
  - 由于场景变化、照明快速变化或其他原因，多次移动随机连续发生。
  - 固定的对象在一个位置连续不断地移动。
  - 位置变化不大的移动，例如逐渐靠近摄像机或从摄像机中慢慢消失。
  - 移动的对象离摄像机太近
  - 对象隐藏在其他对象后面。
  - 2 个或更多对象重叠，或者 1 个对象被分成多个对象。
  - 对象速度太快（若要探测，一个对象应该在邻近的帧之间重叠）。
  - 由于太阳直射、照明或车灯等强光而出现反射 / 视线模糊 / 阴影。
  - 在大雪、大雨、大风或黎明 / 黄昏环境中。

设置屏幕

面部探测

可以设置为探测已识别的面部并相应地触发事件。

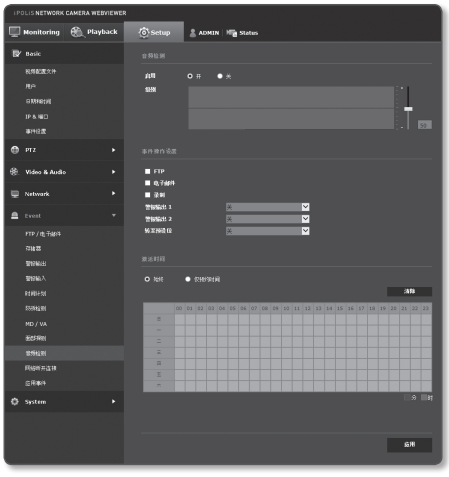


1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**面部探测**>。
3. 设置是否 <**启用**>。
4. 选择 <**灵敏度**> 选项卡以设置灵敏度级别。
   - 当灵敏度提高时，面部探测变得更靠近并且细腻。
5. 选择 <**区域**> 选项卡并在屏幕上拖动以定义所需的检测区域。
   - 您最多可以指定 4 个检测区域。
   - 绘制区域时，右键单击即可取消某个区域。
6. 要删除某个区域，右键单击它，然后从弹出菜单中选择删除[**确认**]。
7. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 102 页)
8. 完成后，请单击 [**应用 (** **应用** **)**]。

音频检测

可以设置为探测超过指定音量的声音并相应地触发事件。

1. 从设置菜单，选择 <**Event (**)> 选项卡。
2. 单击 <**音频检测**>。
3. 设置是否 <**启用**>。
4. 选择音频探测的音量。
   音量越低，可探测到的声音变化越小。



- 设计了自动探测级别，为的是将输入数据规范为介于 1 和 100 之间的值，并且探测大于该阈值级别的信号。它与 分贝 (dB) 级别无关。

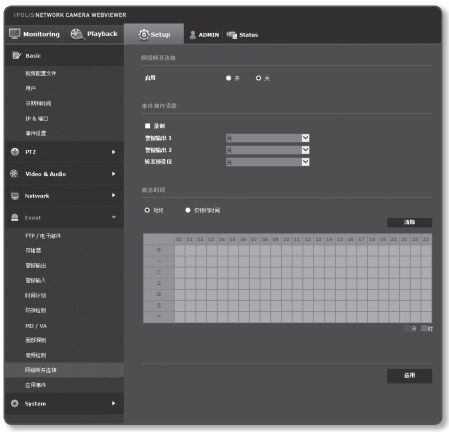
5. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 102 页)
6. 完成后，请单击 [**应用 (** **应用**)]。

- 如果探测到的音量太低，请在 <**音频设置**> 中将音频输入增益设置为较高级别。
- 当摄像机连接到音频输入设备时，可使用音频探测功能。

网络断开连接

当网络物理断开时，系统会将其视为要保存的一个事件。

1. 从设置菜单，选择 <**Event (**)> 选项卡。
2. 单击 <**网络断开连接**>。
3. 设置是否 <**启用**>。
4. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 102 页)
5. 完成后，请单击 [**应用 (** **应用**)]。

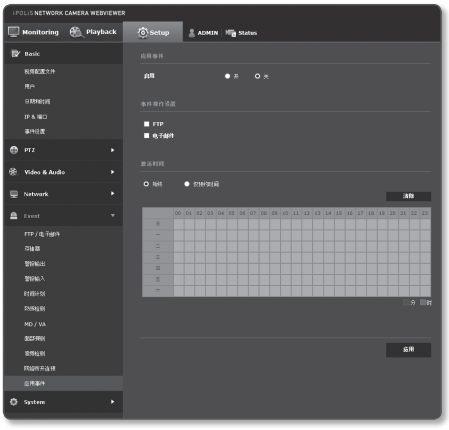


设置屏幕

应用事件

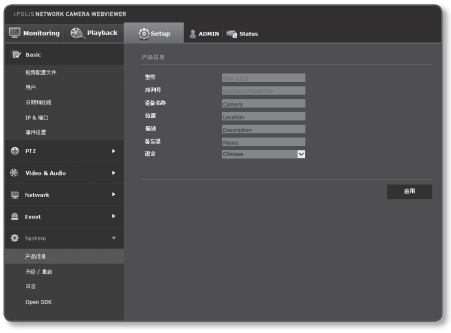
可以将系统设置为发生应用中已定义事件时生成信号。提供的事件信号因应用功能不同而异。

1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**应用事件**>。
3. 设置是否 <**启用**>。
4. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。（第 102 页）
5. 完成后，请单击 [**应用 (** **应用** **)**]。



产品信息

1. 从设置菜单，选择 <**System (**)> 选项卡。
2. 单击 <**产品信息**>。
3. 检查摄像机信息，或根据网络环境提供详细信息。
   - 型号：产品的型号名称。
   - 序列号：产品序列号。
   - 设备名称：提供将在现场屏幕上显示的设备名称。
   - 位置：指定安装摄像机的位置。
   - 描述：提供有关摄像机位置的详细信息。
   - 备忘录：提供有关摄像机的说明以便更好理解。
   - 语言：选择 Web 查看器 OSD 的首选语言。



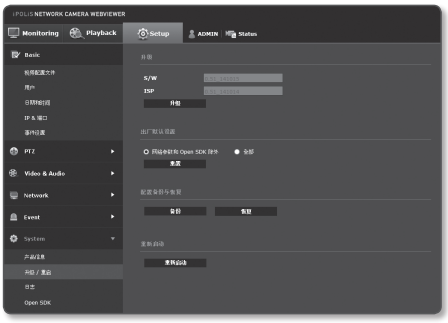
▪ 默认语言设置为 <**English**>。

4. 完成后，请单击 [**应用 (** 应用)]。

设置屏幕

升级 / 重启

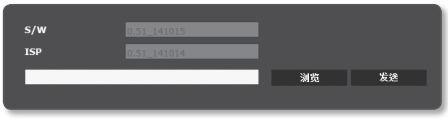
1. 从设置菜单，选择 <**System (** **)**> 选项卡。
2. 单击 <**升级 / 重启**>。
3. 选择所需的项目并进行适当设置。
   - 升级：执行系统升级。
   - 出厂默认设置：将系统重置为出厂默认值。
     - 网络参数之外：初始化除了网络设置、镜头设置以及开放 SDK 安装文件和内部设置之外的所有设置。
     - 全部：重置包括摄像机设置在内的所有设置。(但是，将不重置日志信息）



     - 如果重置摄像机，IP 寻址系统将默认为 DHCP。如果未找到 DHCP 服务器，将自动恢复之前的设置。
   - 配置备份与恢复：在执行恢复流程之前，备份当前的系统设置。备份或恢复之后，系统会自动重新启动。
   - 重新启动：重新启动系统。

执行升级

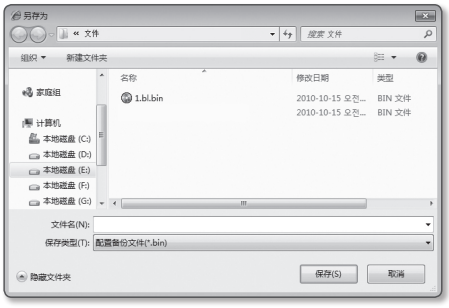
1. 单击 [**升级**]。
2. 单击 [**浏览**] 并指定要升级的文件。
3. 单击 [**发送**]。
4. “**升级**”对话框出现，其底部将显示进度。
5. 完成升级之后，浏览器将会退出，并且摄像机会重新启动。



- 升级过程大约需要 10 分钟。
  如果强行终止升级流程，升级将无法正确完成。
- 在重新启动系统期间，不能使用 Web Viewer 进行访问。
- 可以从 Hanwha Techwin 网站下载最新版本。

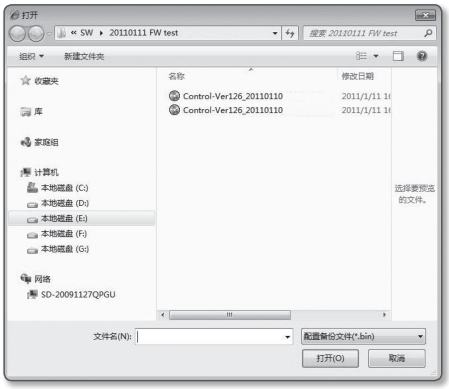
备份当前设置

1. 单击 [**备份**]。
   另存为对话框将出现。
2. 指定备份路径及正确的文件名，然后单击 [**保存(S)**]。
   备份文件将以“**.bin**”格式保存到指定的路径。



恢复备份设置

1. 要恢复备份设置，请单击 [**恢复**]。
2. 选择备份文件，然后单击 [**打开(O)**]。

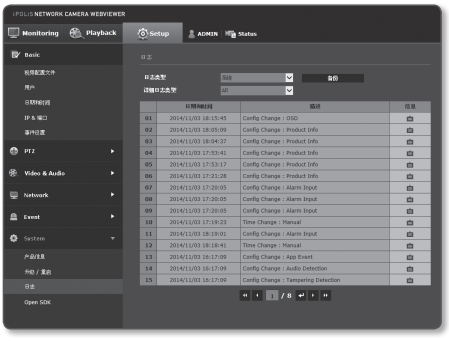


- 如果执行备份或恢复，Web 浏览器将关闭，且摄像机将重新启动。
- 如果您试图恢复其它型号上备份的配置文件，有些功能可能会失去作用，您需要手动更改设置。

设置屏幕

日志

可以检查系统日志或事件日志。

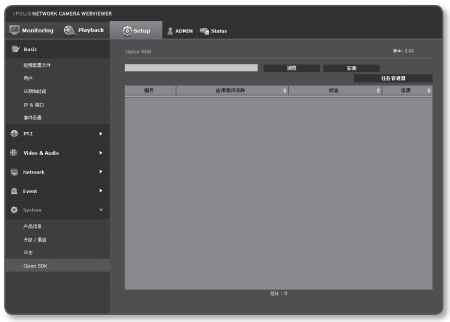


1. 从设置菜单，选择 <**System (** **)**> 选项卡。
2. 单击 <**日志**>。
3. 选择日志类型。
   - 系统：您可以检查系统日志，其中记录了所有系统更改，包括时间信息。
   - 事件：可以检查事件日志，包括时间信息。
4. 从右边的日志列表，选择要搜索的项目。
   - 如果在左上角的下拉列表中选择了 <**All**>，将显示适用日志类型的所有日志。
5. 如果一页无法显示所有可用的日志，请使用底部按钮以移至前一个、下一个或最后项目。
6. 单击 <**备份**> 按钮可将当前所选模式（系统、事件）的所有日志数据保存在浏览器 download 文件夹的“摄像机在型号名称-模式-摄像机中创建的时间戳值.txt”文件中。

- 通过单击每个日志消息右侧的 [**信息 (** **)**]，您可以检查相应的日志消息的详细信息。
- 每页显示 15 个日志，最新的日志显示在顶部。
- 事件/系统日志列表最多可包含 1000 个日志；之后，每当创建新日志时，将删除最旧的现有日志。

Open SDK

用户可以在摄像机上安装应用程序来执行更多功能。



1. 从设置菜单，选择 <**System (**)> 选项卡。
2. 单击 <**Open SDK**>。
3. 单击[**浏览 (** 浏览)]按钮从用户文件夹选择 *.cap 文件。
4. 单击 [**安装 (** 安装)] 按钮可安装应用程序。
5. 列表中显示所安装应用程序的信息。
   - 卸载：删除已安装或运行中的应用程序。
   - 转至应用程序：转到每个应用程序的 Web 页面。
   - 启动：执行已安装的应用程序
   - 停止：终止正在运行的应用程序。
   - 健康：显示当前运行的应用程序的资源占用率、线程数和执行时间等。
   - 优先级：设置运行中应用程序的优先级。
     如果摄像机（包括主任务和应用程序）的总资源利用率超出 80%，将强制终止某个正在运行的应用程序。此时将使用用户设置的优先级，确定应首先停止哪个应用程序。
   - 自动启动：当摄像机的电源或主任务开始运行时，已经激活自动执行的指定应用程序将自动运行。
   - 任务管理器：显示摄像机中当前运行的应用程序的资源占用率。
     - 内存使用情况 (%)：这是每个应用程序的内存使用率。
     - CPU 使用情况 (%)：这是每个应用程序的 CPU 使用率。
     - 线程计数：这是每个应用程序创建的线程计数。
     - 持续时间：这是每个应用程序的总执行时间。
     - 终止任务：终止应用程序。
     - 使用情况总计：这是摄像机（包括主要任务和应用程序）的总资源占用率。

▪ 有关应用程序使用或安装的问题，请参阅 Techwin 开发人员网站。

设置屏幕

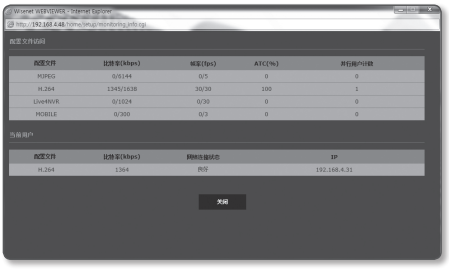
查看配置文件信息

配置文件访问

您可以检查配置文件信息。

1. 单击实时屏幕中的[**Status (** **)**]。

2. 将显示配置文件信息屏幕。



- 配置文件访问：显示新添加的配置文件的信息。
  - 配置文件：显示新添加的编解码器的信息。
  - 比特率(kbps)：显示实际比特率和设置的比特率。
  - 帧率(fps)：显示实际帧速率和设置的帧速率。
  - ATC(%)：显示 ATC 状态。
  - 并行用户计数：显示访问配置文件的并行用户数。
- 当前用户：显示有关用户访问 Web Viewer 的信息并显示监视视频。
  - 配置文件：显示用户访问的配置文件的名称。
  - 比特率(kbps)：显示当前比特率。
  - 网络连接状态：系统会显示网络是否正常工作。
  - IP：显示当前用户的 IP 地址。

▪ 要检查有关当前使用的配置文件的信息，请再次单击 [**Status (** **)**] 以刷新它。应用任何更改都需要一定的时间。

附录

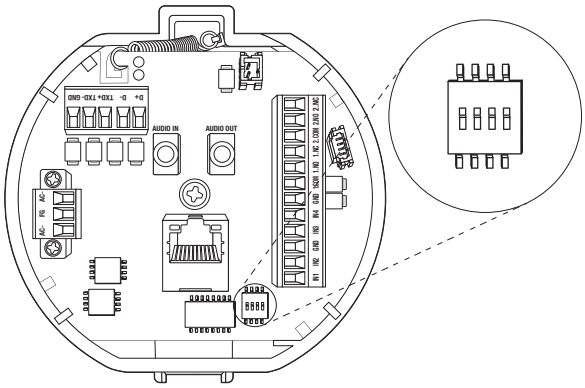
DIP 开关设置

如何设置协议和 ID DIP 开关

可以使用通信和 ID DIP 开关，来控制摄像机系统的各种设置。
在安装产品之前，请根据安装环境设置 DIP 开关。

1. 根据安装环境设置开关。 有关更详细的设置信息，请参阅下一页上的表。
2. 如果未完全打开/关闭开关，摄像机可能会功能异常；在完成设置之前，请仔细检查开关。
3. 请注意，使用带尖的工具进行操作时，可能会损坏开关。
4. 请注意，使用过大的力进行操作时，可能会损坏开关。

通信协议 DIP 开关 (SW1)



通信协议 DIP 开关设置 (SW1)

SW1

SW1 引脚编号	用途
1	设置传输协议 (RS-485/422)
2	终端设置 1
3	终端设置 2
4	保留

附录

• 通信方法设置

选择摄像机的通信方法。

	功能	ON	OFF
SW1-#1	传输模式开关	RS-422（4 线）	RS-485（2 线）

• 终端设置

为了防止摄像机和控制器之间的通信信号减弱，必须通过终端设置来设置线路末端的项目。

摄像机输入位置	SW1- #2	SW1- #3
路径最长的终端	ON	ON
路径上	OFF	OFF

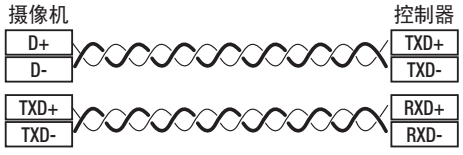
- 默认值是在每个设置表中加阴影。
- 要将第三方控制器与本产品配合使用，请与售后服务人员或技术部门联系。

摄像机布线

控制信号连接

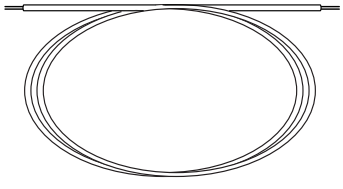
• RS-485 通信

• RS-422 通信



通信电缆

对于与控制器通信的摄像机，需要 RS-485/422 通信线。



- 建议使用长度在 30m 或以内的电线来进行连接。
- 摄像机不附带提供通信电缆。

附录

规格

项目		说明	
		SNP-6321	SNP-6321H
视频	成像设备	1/2.8" 2.38M CMOS	
	总像素数	1,952（水平）x 1,116（垂直），2.18M	
	有效像素数	1,944（水平）x 1,104（垂直），2.14M	
	扫描系统	逐行扫描	
	最低照度	彩色：0.3 Lux（1/30秒，F1.6, 50IRE, AGC High），0.005 Lux（2 秒, F1.6, 50IRE, AGC High） 黑白：0.03 Lux（1/30sec, F1.6, 50IRE, AGC High），0.0005 Lux(2sec, F1.6, 50IRE, AGC High) 彩色：0.15 Lux（1/30sec, F1.6, 30IRE）,0.0025 Lux(2sec, F1.6, 30IRE) 黑白：0.015 Lux（1/30sec, F1.6, 30IRE）,0.00025 Lux(2sec, F1.6, 30IRE)	
	S/N 比率	50dB	
	视频输出	CVBS：1.0 Vp-p / 75Ω 复合，720x480(N)，720x576(P)，供安装使用	
镜头	焦距(变焦比率)	4.44 ~ 142.6mm（光学 32X）	
	最大孔径比	F1.6（广角）/ F4.4（望远）	
	视野角度	水平：62.8°（广角）~ 2.23°（望远）/ 垂直：36.80°（广角）~ 1.26（望远）	
	最短物距	宽 1.5m，长焦 2m	宽 1.5m，长焦 1.9m
	聚焦控制	自动/手动/一次自动聚焦	
	镜头类型	直流自动光圈	
	安装类型	内置板类型	
平移/倾斜/旋转	平移范围	360°循环	
	平移速度	预设：700°/秒，手动：0.024°/秒 ~120°/秒	
	倾斜范围	210°（-15° ~ 195°）	
	倾斜速度	预设：700°/秒，手动：0.024°/秒 ~120°/秒	
	序列	预设 (255ea)、摆动、组 (6ea)、跟踪、浏览 (1ea)、自动运行、计划	
	预设准确度	±0.2°	
	方位	是 (E/W/S/N/NE/NW/SE/SW)	

项目		说明	
		SNP-6321	SNP-6321H
操作	摄像机标题	关/开（最多显示 45 个字符）	
	日夜	自动/彩色/黑白	
	背光补偿	关/背光补偿	
	宽动态	120dB	
	对比度增强	SSDR（关/开）	
	数字降噪	SSNRIII（2D+3D 噪音过滤）（关/开）	
	数字图像稳定器	关/开	
	透雾	自动/手动/关	
	移动探测	关/开（4个矩形区域）	
	隐私遮挡	通过“缩放阈值马赛克”选项进行关/开（矩形区域中的 32 个区域）	
	增益控制	关/低/中/高	
	白平衡	ATW/AWC/手动/室内/室外/汞	
	电子快门速度	最小值/最大值/防闪烁 (2 ~ 1/12,000sec)	
	数字变焦	16X	
	图像旋转	翻转：开/关 镜像：开/关	
	智能视频分析	篡改、虚拟用户线、进入/退出、显示/消失、音频探测、面部探测	
	警报 I/O	4 个输入/2 个输出	
	音频输入	可选（麦克风输入/线路输入）， 电源电压：2.5VDC (4mA)，输入电阻：大约 2K 欧姆	
	音频输出	线路输出（3.5mm 单声道插孔），最大输出级别：1 Vrms	
	串行接口	RS-485 - Samsung-T/E, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell	

附录

项目		说明	
		SNP-6321	SNP-6321H
操作	警报触发	移动探测、防拆、音频探测、面部探测、视频分析、警报输入、网络断开连接	
	报警事件	• 通过 FTP 和电子邮件上传文件 • 通过电子邮件、TCP 和 HTTP 发送通知 • 发生事件（警报触发）时进行本地存储器 (SD/SDHC/SDXC) 或 NAS 录制 • 外部输出	
网络	以太网	RJ-45（10/100BASE-T）	
	视频压缩格式	H.264 (MPEG-4 Part 10/AVC)，MJPEG	
	分辨率	1920x1080 / 1280x1024 / 1280x960 / 1280x720 / 1024x768 / 800x600 / 800x450 / 720x576 / 640x480 / 640x360 / 320x240 / 320x180	
	最大帧速率	H.264：所有分辨率下最大 60fps MJPEG： 1920x1080 / 1280x1024 /1280x960 / 1280x720 / 1024x768：最大 15fps 800x600 / 800x450 / 720x576 / 640x480 / 640x360 / 320x240 / 320x180：最大 30fps	
	Smart Codec	O	
	视频质量调整	H.264：压缩级别、目标比特率级别控制 MJPEG：质量级别控制	
	比特率控制方法	H.264：CBR 或 VBR MJPEG：VBR	
	流能力	多流（最多 10 个配置文件）	
	音频压缩格式	G.711 u-law /G.726 可选 G.726 (ADPCM) 8KHz, G.711 8KHz G.726：16Kbps、24Kbps、32Kbps、40Kbps	
	音频通信	双向	

项目		说明	
		SNP-6321	SNP-6321H
网络	IP	IPv4、 IPv6	
	协议	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	
	安全	HTTPS（SSL）登录验证 分类登录验证 IP 地址过滤 用户访问日志 802.1x 身份验证方法	
	流方法	单播/多播	
	最大用户访问量	单播模式下 10 个用户	
	边缘存储	SD/SDHC/SDXC存储卡插槽用于支撑内存卡 - 可以下载在 SD/SDHC/SDXC 存储卡中录制的移动图像。 NAS（网络附加存储）	
	应用程序编程接口	ONVIF Profile S SUNAPI(HTTP API) SVNP 1.2 WISENET 摄像机应用程序平台	
	网页语言	英语、法语、德语、西班牙语、意大利语、中文、韩文、俄语、 日语、瑞典语、丹麦语、葡萄牙语、捷克语、波兰语、土耳其语、 罗马尼亚语、塞尔维亚语、荷兰语、克罗地亚语、匈牙利语、希腊语、 挪威、芬兰	
	Web 查看器	支持的操作系统：Windows XP / VISTA / 7 / 8, MAC OS X 10.7 支持的浏览器：Microsoft Internet Explorer (版本 8~11), Mozilla Firefox (版本 9~19), Google Chrome (版本 15~25), Apple Safari (版本 6.0.2(Mac OS X 10.8, 10.7 仅限), 5.1.7) * Mac OS X 仅限	
	中央管理软件	SmartViewer, SSM	

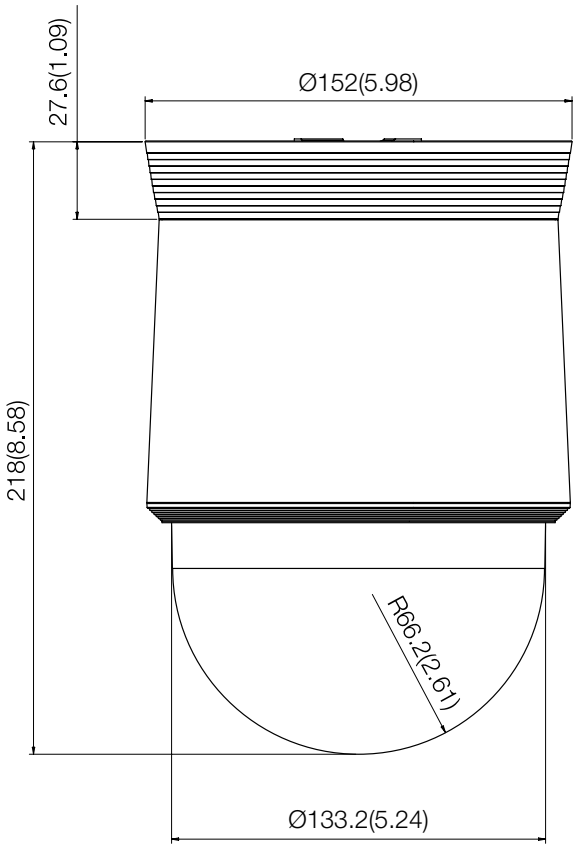
附录

项目		说明	
		SNP-6321	SNP-6321H
环境	工作温度/湿度	-10°C ~ +55°C (+14°F ~ +131°F) / 低于 90% RH	交流 24V：-50°C ~ +55°C (-58°F ~ +131°F) / 低于 90% RH PoE+：-30°C ~ +55°C (-22°F ~ +131°F) / 低于 90% RH
	贮藏温度/湿度	-30°C ~ +60°C (-22°F ~ +140°F) / 低于 90% RH	
	进入保护	-	IP66
	抵抗破坏	当与 SHP-3701H（IK10 外罩）组合时可用。	IK10
电气	输入电压/电流	交流 24V±10%，PoE+（IEEE802.3at，Class4）	
	功耗	最大 20W	PoE+：最大 25W（AC24V，加热器关闭；PoE，加热器打开） AC 24V：最大 65W（AC24V，加热器打开；PoE ，加热器打开）
机械	颜色/材料	象牙白/塑料+金属	
	尺寸(直径 x 高)	直径 152.0 x 高 218.0 毫米	直径 223.4 x 高 293.6 毫米
	重量	1.8 公斤	3.2 公斤

产品视图

▪ SNP-6321

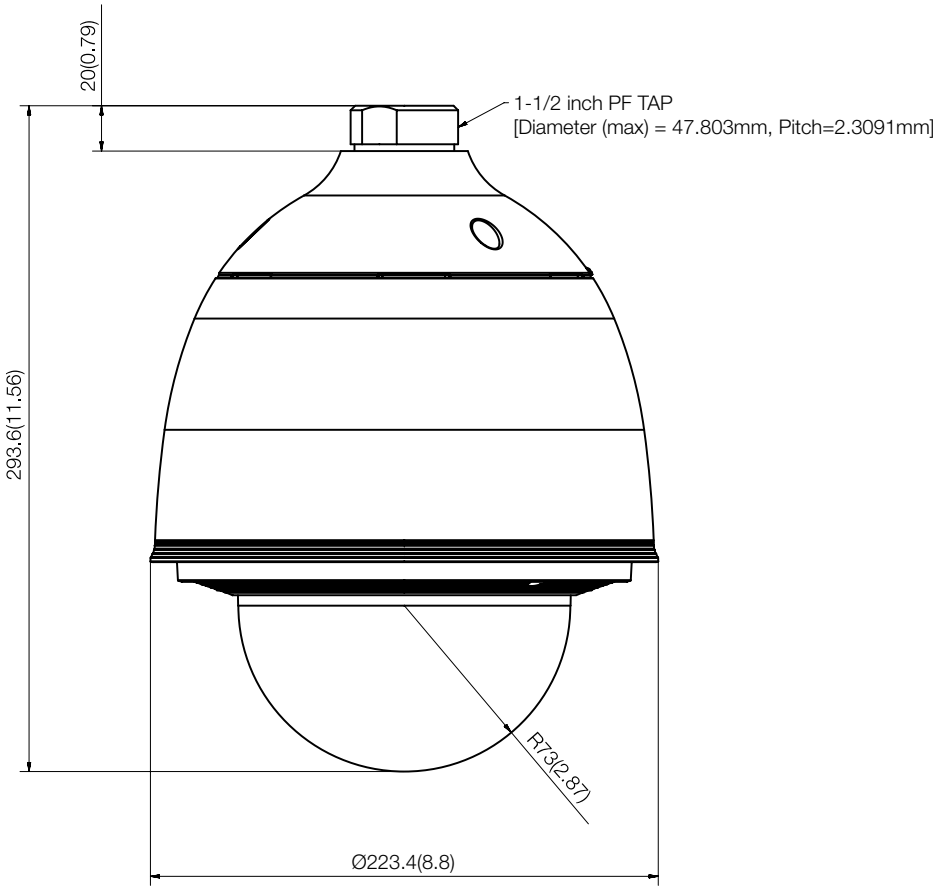
单位：毫米（英寸）



附录

▪ SNP-6321H

单位：毫米（英寸）



故障排除

故障	解决方法
无法使用网络浏览器访问摄像机。	• 检查摄像机的网络设置 是否正确。 • 检查网络缆线是否正确 连接。 • 若使用 DHCP 连接、检查摄像机是否能够 无故障地获得动态 IP 地址。 • 若摄像机与宽带路由器连接、确认是否 正确设置了端口转发。
查看器在监视期间断开。	• 已连接的查看器在摄像机或网络配置发生更改时会断开。 • 检查所有的网络连接。 • 若摄像机通过 PPPoE 网络进行连接，查看器在网络状况不佳的情况下可能会断开。
无法使用 IE 7.0 的选项卡浏览器连接系统。	• 由于共享了 cookie 数据，所以与新窗口或选项卡连接时可能出错。不要使用新窗口或选项卡，选择“文件 → 新建会话”
IP 安装程序未检测到连接至网络的摄像机。	• 关闭 PC 上的防火墙设置、再次搜索摄像机。
图像重叠。	• 检查是否将多个摄像机应当设置的不同地址设为了同一多播地址。 多个摄像机共享同一地址可能会导致图像的重叠。
无图像出现。	• 如果传输方法设置为多播，请检查摄像机所连接的 LAN 中是否有路由器支持多播。
<事件设置> 的 <MD / VA> 设置为 <开>，但是我没有收到通知电子邮件，即使分析事件已发生也是如此。	• 按以下顺序验证设置 ： A. 检查 <日期和时间> 设置。 B. <移动探测 / 视频分析> 应设置为 <启用>。 C. 检查 <事件操作设置> 菜单的 <电子邮件> 选项是否选择为使用。

附录

故障	解决方法
即使我未使用 <移动探测视频分析>，是否也可以定义事件规则?	• 是，可以。无论智能视频分析设置如何，您均可设置事件规则。
即使在产生智能视频分析事件时，在报警输出端口也找不到信号。	• 检查警报输出端口设置。
无法录制到 SD 内存卡。	• 检查内存卡是否有缺陷。 • 检查内存卡的写保护标签是否设置为“LOCK”。
插入了 SD 内存卡，但摄像机操作不正常。	• 检查是否以正确的方向插入内存卡。 不能保证本摄像机装置能正常使用由其他设备格式化的内存卡 • 在 <Setup> → <Event> → <录制> 菜单中，再次格式化内存卡。
无法格式化 SD 内存卡。	• 检查内存卡的写保护标签是否设置为“LOCK”。
无法录制到 NAS。	• 确认 NAS 中注册的信息正确无误。
系统报告 NAS 设置失败。	• 确认 NAS 的 IP 地址有效。 • 确认 NAS 的 ID/密码有效。 • 确认您可以访问使用 NAS 的 ID 指定为基本文件夹的文件夹。 • 确认 NAS 的 SMB/CIFS 项已被取消选中。 • 确认 NAS IP 地址和摄像机 IP 地址的格式正确。 Ex) NAS 和摄像机子网掩码的初始值是 255.255.255.0。 如果 IP 地址是 192.168.20.32，NAS IP 地址的范围应该是 192.168.20.1~192.168.20.255。 • 检查是否作为其他用户尝试访问，而没有对所保存和使用的基本文件夹进行格式化。 • 确认使用了建议的 NAS 设备。

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GPL SW

Component Name	License	URL
Base Kernel	GPL 3.0	
Busybox	GPL 2.0	http://www.busybox.net/downloads/snapshots
iproute2-3.1.0	GPL 2.0	
alsa-utils-1.0.24.2	GPL 2.0	
alsa-lib-1.0.24.1	GPL 2.0	
iptables-1.4.12.2	GPL 2.0	http://ftp.netfilter.org/pub/iptables
ethtool-3.2	GPL 2.0	
mtd-1.4.1	GPL 2.0	ftp://ftp.infradead.org/pub/mtd-utils
mii-diag-2.11	GPL 2.0	
rp-pppoe-3.10	GPL 2.0	http://www.roaringpenguin.com/pppoe/
wpa_supplicant-0.7.3	GPL 2.0	
bash-4.2	GPL 3.0	
zeroconf	GPL 2.0	

LGPL SW

Component Name	License	URL
gLibc	LGPL 2.0	
Inetutils	LGPL 3.0	

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Version 2, June 1991

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

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

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

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

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

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

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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.

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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.

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2. The Distributor of Modification may create the Modified Source Code based on the Source Code provided by T-Engine Forum and the Patch for Modification to be applied to create such Modified Source Code from the Source Code.

3. The Distributor of Modification shall, prior to the distribution, inform T-Engine Forum of and register a name and description of the Modified Source Code in such a way as specified by T-Engine Forum.

4. The Distributor of Modification shall determine the name of the Modified Source Code subject to the rules separately established by T-Engine Forum and publish an appropriate notice as required by the rules on the Patch for Modification and the Modified Source Code.

5. The Distributor of Modification may distribute the Modified Source Code to a third party, whether with or without payment, provided that the Distributor of Modification shall take the necessary measures to prohibit the third party from making the re-Distribution of the Modified Source Code.

6. Developer with the Patch for Modification. Provided, however, that the Distributor of Modification shall be obligated to confirm that the System Developer is the Source Code User duly licensed under Article 4.1.

7. The Distributor of Modification may perform the Vicarious Execution of Patch Processing for the System Developer.

8. The System Developer shall not distribute the Modified Source Code in further modified form to any third party as a stand-alone software product.

9. The System Developer may, under the same obligation as imposed in Article 4.5, make the Embedded Product available for the End User through use of the Patch for Modification distributed by the Distributor of Modification or the Derivative Works obtained through the Vicarious Execution of Patch Processing.

Article 6. Distribution and Registration of the Ported Source Code

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

1. The Hardware-dependent Part and/or Compiler-dependent Part; provided that the Source Code User and the System Developer shall inform T-Engine Forum of, and T-Engine Forum may publish, a method for distributing said Part(s) to third parties.

2. The Header File; provided that the Header File shall be distributed together with the Binary Code of the Ported Source Code.

2. Any member of T-Engine Forum may request T-Engine Forum to register and distribute, as an original source code for T-Kernel, the Ported Source Code on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.

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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.

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

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