WISENET

网络摄像机
用户手册

PNP-9200RH

CE

网络摄像机
用户手册

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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（50/60 Hz），最小电流为 4.2 A。

警告

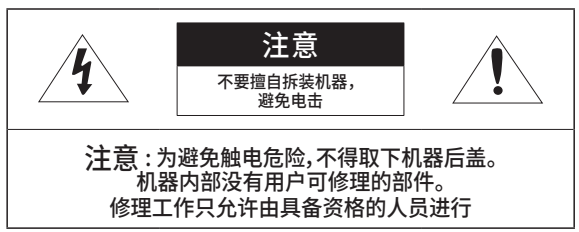
为防止火灾或电击等引起的破坏，不要把产品暴露于水中或潮湿处。请勿穿过设备上的通风栅格或其他开口插入任何金属物体。

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。

概述

CLASS I 构造

具有 CLASS I 构造的设备应连接到具有保护接地连接的电源插座。

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）。

断开设备

如果设备出现故障，请拔下其电源插头。并请致电当地的维修人员。

当在美国以外使用时，可以利用所用的 HAR 代码和许可代理机构的接待处。

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。

请将输入电源仅用于一部摄像机，并且不能连接其他设备。

ITE 只能连接到 PoE 网络，无需路由到外部工厂。

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)	多滇二苯醚 (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。

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。
- 请勿安装在暴露在直射阳光下、靠近供暖设备或非常寒冷区域的表面上。
- 请勿将本设备放置在传导物体附近。
- 请勿自行维修本设备。
- 请勿将一杯水放在产品上。
- 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。
- 在安装/拆卸摄像机时，请佩戴防护手套。
  产品表面温度较高，可能有烫伤的危险。

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：如果不遵照说明是否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。

在某些安装环境下，可能会发生无线通信干扰。
如果产品和附近的无线通信设备之间发生电磁干扰，建议增加与无线通信设备的距离或调整通信天线的方向。

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概述

推荐 PC 技术规格

- CPU：Intel(R) Core(TM) i7 3.4 GHz 或更高版本
- 支持的操作系统 : Windows 7、8.1、10、Mac OS X 10.9、10.10、10.11
- 无插件 web 查看器
  支持的 web 浏览器：Google Chrome、MS Edge
  支持的编解码器：视频 - H.264、MJPEG（最大 1M 15fps）
- 有插件 Web 查看器
  支持的 web 浏览器：MS Explorer 11、Mozilla Firefox、Apple Safari 9 ※ 仅支持 Mac OS X
- VGA ：如要以 30fps 帧率播放 4K (3840 x 2160) 分辨率视频，必须使用支持 3840 x 2160 分辨率和 4K/H.264 解码的 GPU

建议的 SD/SDHC/SDXC 存储卡规格

- 建议容量 : 4GB ~ 128GB (HS class)
- 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

NAS 建议规格

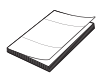
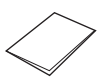
- 建议容量 : 200GB 或更高
- 同时访问 : 一套 NAS 可以同时接受最多十六个摄像机访问。
- 对于本摄像机，建议使用符合以下制造商规格的 NAS。

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

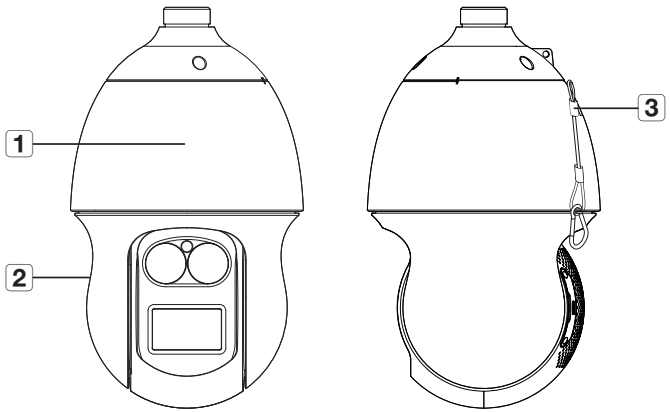
请检查产品包装内是否已包括摄像机和所有附件。
（配件因销售国家/地区而异。）

外观	项目名称	数量	说明
	主体	1	
	简介（可选）	1	
	保修卡（可选）	1	
	用于测试显示器的电缆	1	用于测试摄像机至便携式显示设备的连接
	六角螺钉	3	用于将安装基座安装在摄像机上
	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。

概述

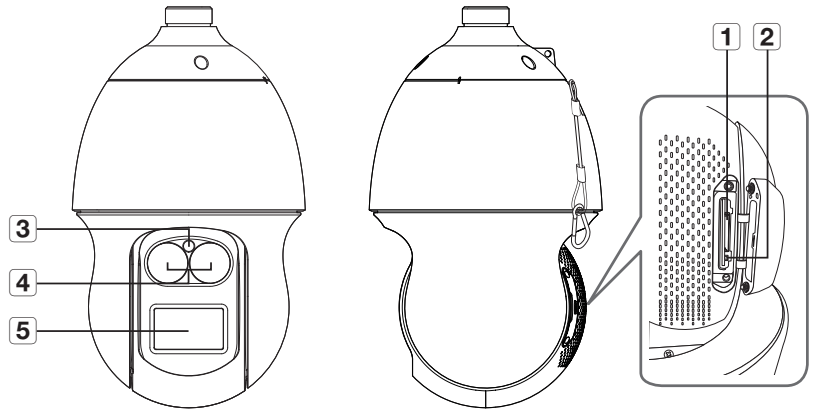
简图

外观



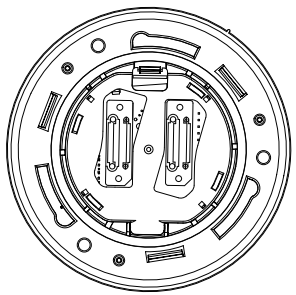
项目	说明
1 主设备	保护内置 PTZ 机械，避免阳光直射、飘雨或外部碰撞。
2 防护盖	用于保护镜头和装置的防护盖。
3 安全电缆	此电缆可防止产品在安装过程中跌落。

Inside

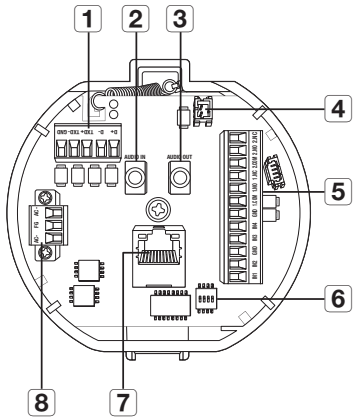


项目	说明
1 SD 内存卡槽	用于 SD 内存卡的卡槽。 有关 SD 存储卡插入位置的信息，请参阅 <**插入/拔出 SD 存储卡**>。(第 15 页)
2 重置按钮	该按钮会将所有摄像机设置恢复为出厂默认值。 按住约 5 秒钟可重启系统。 如果复位摄像机，则会调整网络设置，以便可以启用 DHCP。如果网络中没有 DHCP 服务器，则必须运行 IP Installer 程序更改基本的网络设置，如 IP 地址、子网掩码、网关等，然后才能连接到网络。
3 照明传感器	检测进入光线以控制红外 LED。
4 红外 LED	这些红外 LED 由照明传感器控制。
5 镜头	摄像机的镜头。

安装基座的底部视图



安装基座的内视图

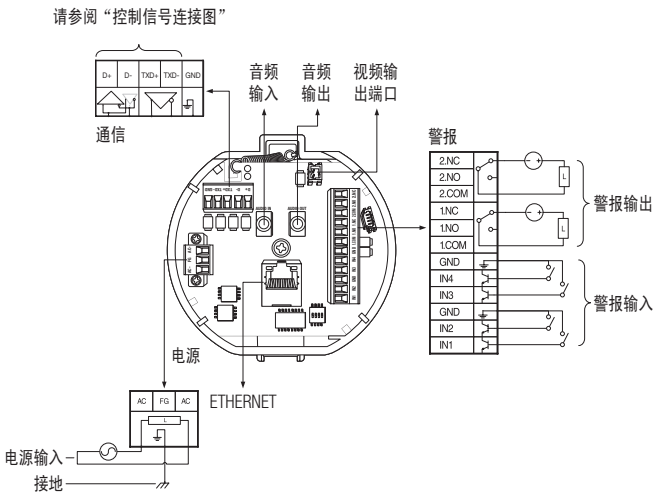


项目	说明
1 通讯端口	用于 RS-485/422 通信。
2 音频输入端口	用于连接音频输入线。
3 音频输出端口	用于连接音频输出线。
4 视频输出端口	模拟视频输出端口。（用于安装）
5 警报 I/O 端口	用于连接警报 I/O 线。
6 通信设置开关	设置通信协议 (RS-485/422) 并指明是否要终止。
7 网络连接	使用以太网线缆连接网络的端口。
8 电源端口	用于连接电源。

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。

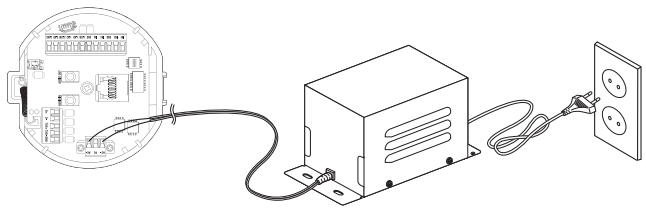


- 从设置菜单中选择常开。
  - 短路接触类型过程中或活动类型中处于“低”级别时，激活传感器输入。
- 从设置菜单中选择常闭。
  - 接触类型中打开或活动类型中处于高阻抗状态（打开收集器）时，激活传感器输入。
- 警报输出终端的最大容量为30V DC/2A、125V AC/0.5A和250V AC/0.25A。
- 连接警报输入和输出电缆时，请务必分别将一根电缆连接至一个端子。
- 要连接超过摄像机容量的产品，请使用额外的继电器设备。
- 如果电源线和GND线缆未正确连接到NC/NO或COM端口，可能会造成火灾或设备故障。

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。

额定功率	允许的输入电压	电流消耗
AC 24V	AC 22V~26V	6 A

- 环境温度 -50°C 或更低时，不能使用该产品。
- -50°C 时，根据安装区域，该产品可能无法解冻。
- 始终打开该产品，以便保持 -10°C 或更高的内部温度。
- 如果将该产品独自留在低温环境下，那么该产品可能需要长达 1 小时才能正常操作。
- 在 -40°C 或更低温度的环境中，红外线调光器的变焦速度可能会降低。
- 暴露在 -20°C 或更低温度的环境下一段时间之后，如果打开该产品，应重置时间。

[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

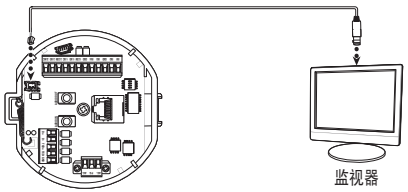
- 如上表中所示，您可能会遇到电压下降，具体视电线长度而定。 如果您使用极长的线来连接摄像机，则摄像机可能无法正常工作。
  - 摄像机工作电压：AC 24V±10%
  - 上图中的电压降测量值可能会因铜线的类型和制造商而异。

以太网连接

将以太网电缆连接到本地网络或互联网。

连接安装临视器

使用电缆连接摄像机背面的视频输出端子和安装摄像机的视频输入端子。



- 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

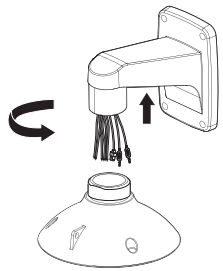
型号	项目
SBP-300WM1	墙上安装适配器
SBP-300WM	
SBP-300CM	天花板安装适配器
SBP-300LM	胸墙安装适配器
SBP-300KM	角落安装适配器
SBP-300PM	柱式安装适配器

- 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 13 页）

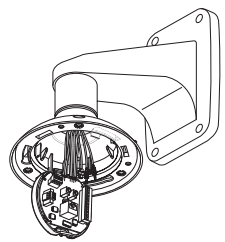
通过墙上安装适配器安装

▪ 固定安装基座和支架

1. 顺时针旋转支架以固定基座。



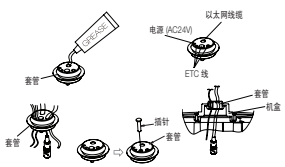
2. 如下图所示，轻按然后提起安装基座底部铰接的门的手柄。
请参阅第 10 页上的“**摄像机接线接口板**”，连接电线。

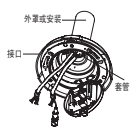


- 在安装完成之前，不要将摄像机连接到电源插座。在安装过程中供电可能会导致火灾或损坏产品。

检查电缆连接方法并进行安装。

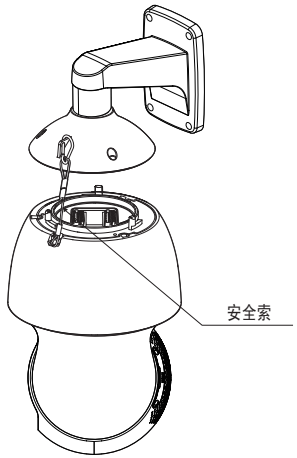
- 请注意，**套管**用于通过**管道**或**安装**在暴露于潮湿环境中进行安装，使用**套管安装机盒**可以防止湿气进入。
  - 在组装前将适量的油脂涂到**套管**上，然后将电缆穿过套管的每个孔。使用**插针**堵住没有电缆穿过的空孔。
  - 如下图所示，将**套管**组装到**机盒**内侧的顶部。然后，如图所示在**机盒**上均匀施压以将其牢牢地固定在**套管**上。



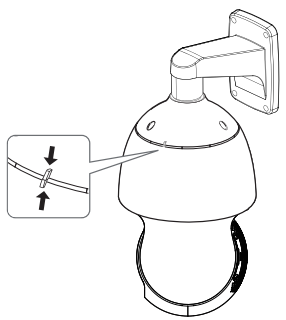


安装与连接

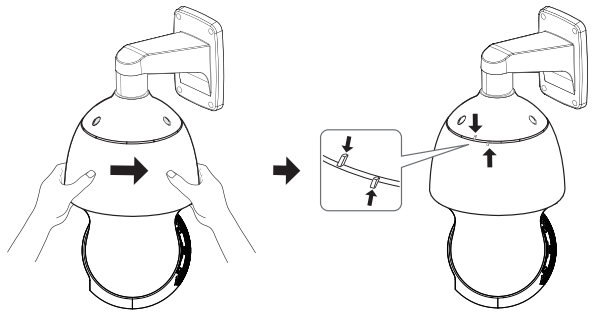
3. 将摄像机安全索连接至安装基座。



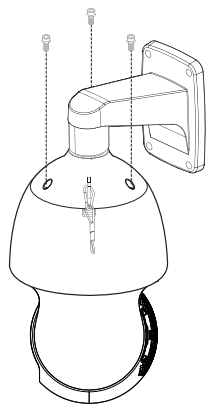
4. 装配摄像机和安装基座
通过对准安装方向导轨装配安装基座和摄像机。



5. 固定摄像机
如图所示，顺时针旋转摄像机的主机，即可将基准标记放置在上半部分和下半部分。



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。



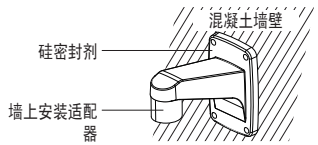
防水注意事项

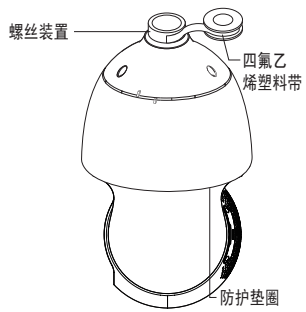
该型号是用于室外安装的集成外壳产品。

▪ 当主体与用于在墙上安装的壁挂结合时

1. 将墙上安装适配器安装在垂直墙壁上。如果安装在一个倾斜的墙壁上，湿气可能会通过外部电缆渗入主体。
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. 请确保当拆卸防护盖并安装到外壳主体上时，不要取下防护盖中的垫圈。
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。

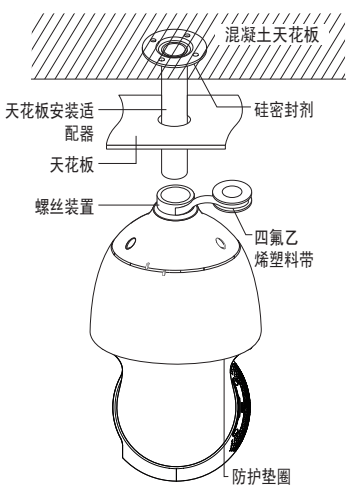




▪ 当主体与用于在墙上安装的天花板安装适配器结合时

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. 请确保当拆卸防护盖并安装到外壳主体上时，不要取下防护盖中的垫圈。
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。

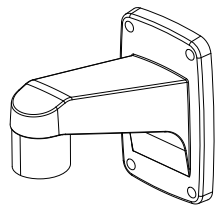
▪ 安装面不平时请特别注意，确保采取正确的密封措施。



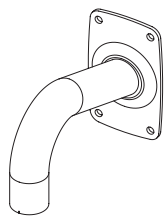
可选的安装附件

为了更方便安装，您可以购买可选的附件。

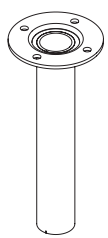
1. 如果将摄像机安装在墙壁上
   - 墙上安装适配器 (SBP-300WM1)



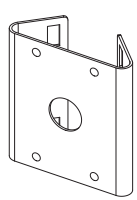
   - 墙上安装适配器 (SBP-300WM)



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

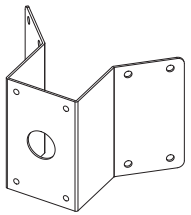


3. 如果将墙上安装适配器 (SBP-300WM/SBP-300WM1) 安装在长度至少为 80 mm 的圆柱上
   - 柱式安装适配器 (SBP-300PM)

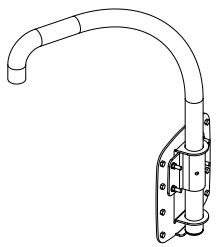


安装与连接

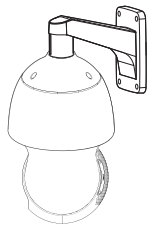
4. 如果将墙上安装适配器 (SBP-300WM /SBP-300WM1) 安装在墙角
   - 角落安装适配器 (SBP-300KM)



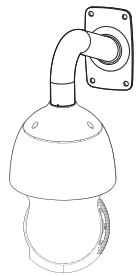
5. 如果安装在屋顶
   - 胸墙安装适配器 (SBP-300LM)



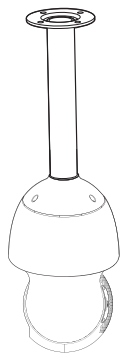
▪ **安装接头**



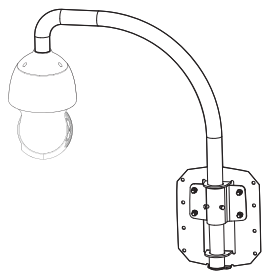
墙上安装适配器 (SBP-300WM1)



墙上安装适配器 (SBP-300WM)



天花板安装适配器 (SBP-300CM)



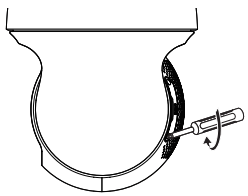
胸墙安装适配器 (SBP-300LM)

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。
- 不建议在下雨或极潮湿的天气期间移除 SD 存储卡。
- 当组装摄像机机身、防护盖以及 SD 固定架时，请拧紧螺钉以防湿气渗入。
- 当安装或拆卸 SD 存储卡时，请首先将主体放到地板上，以防发生部件损坏和掉落事故。

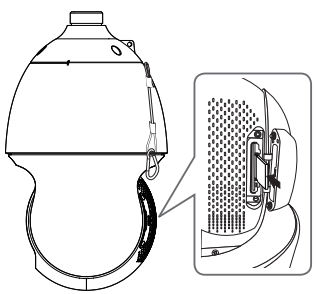
插入 SD 存储卡

1. 使用螺丝刀，通过按逆时针方向旋转松开 SD 固定架上的两个螺钉。



- 不要取下螺钉。

2. 向上拉起 SD 固定架并向箭头方向推动 SD 存储卡，如图所示。



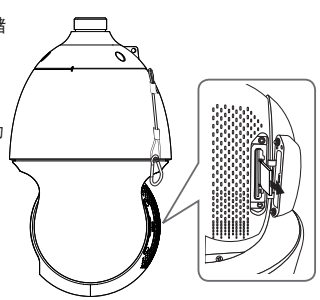
- 请勿在 SD 内存卡翻转时用力插入。否则，可能会损坏 SD 内存卡。

3. 插入 SD 存储卡后，按照与拆卸相反的顺序组装摄像机。

- 当组装摄像机时，请拧紧螺钉，以防湿气渗入。

拔出 SD 存储卡

轻轻地按压存储卡露在外面的一端，依图示的方式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插槽中弹出。
- 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**] 按钮。
(第 51 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(未包含)

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

本摄像机支持 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 ~ 128GB (HS class) 的存储卡与本摄像机配合使用。

存储卡的使用

SD 和 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。

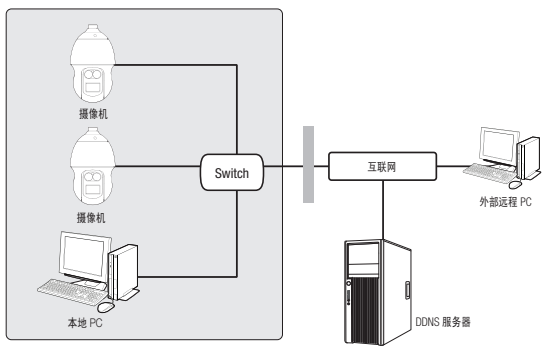
网络连接和设置

可根据您的网络配置来设置网络的设定。

在LAN环境下直接安装摄像机

连接局域网内的本地 PC 和摄像机

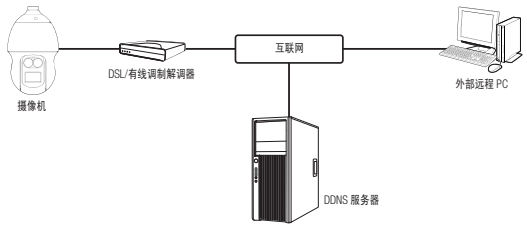
1. 启动本地 PC 上的Web浏览器。
2. 在浏览器地址栏中输入要访问的摄像机IP地址。



<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。
- 出货时, 摄像机被设置为DHCP服务器自动分配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 18 页)

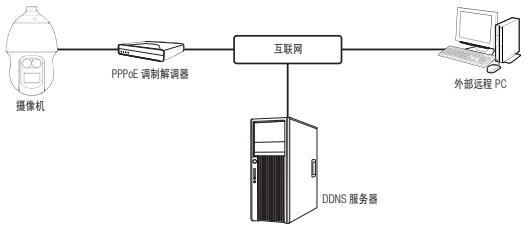
将摄像机直接连接至基于 DHCP 的 DSL/有线电视网调制解调器



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Web浏览器连接至 Web Viewer。
4. 移至 [**设置**] 页面。
5. 移至 [**网络**] – [**DDNS**] 并配置 DDNS 设置。
6. 移至 [**Basic**] – [**IP & 端口**]，并将网络类型设置为 [**DHCP**]。
7. 将摄像机与用户PC分开, 并直接连接到调制解调器。
8. 重新启动摄像机。

- 有关配置 DDNS 设置，请参阅“**DDNS**”。(第 47 页)
- 有关注册 DDNS 设置，请参阅“**注册 DDNS**”。(第 48 页)
- 有关配置IP类型设置，请参阅“**IP & 端口**”。(第 36 页)

直接将摄像机连接到 PPPoE 调制解调器

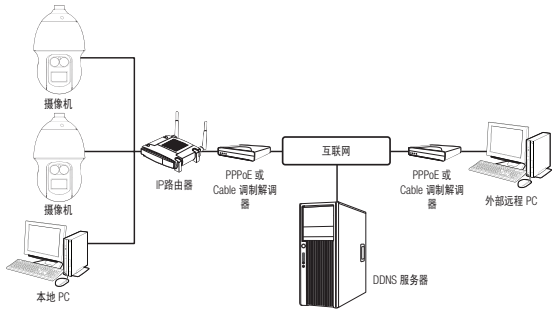


1. 直接将用户 PC 与网络摄像机连接。
2. 运行 IP Installer 并更改摄像机的 IP 地址，以便可以使用桌面上的 Web 浏览器连接至互联网。
3. 使用Web浏览器连接至 Web Viewer。
4. 移至 [**设置**] 页面。
5. 移至 [**网络**] – [**DDNS**] 并配置 DDNS 设置。
6. 移动到 [**Basic**] – [**IP & 端口**] 设置页面，将“IP 类型”设置为 [**PPPoE**]，然后输入网络服务的 ID 和密码。
7. 将摄像机与用户PC分开，并直接连接到调制解调器。
8. 重新启动摄像机。

- 有关配置 DDNS 设置，请参阅“**DDNS**”。(第 47 页)
- 有关注册 DDNS 设置，请参阅“**注册 DDNS**”。(第 48 页)
- 有关配置IP类型设置，请参阅“**IP & 端口**”。(第 36 页)

将摄像机与使用 PPPoE/CABLE 调制解调器的IP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。



配置与IP路由器连接的本地PC的网络设置

在配置连接到IP路由器的本地 PC 的网络设置时，遵循以下说明。

- 选择：<**网上**> → <**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IP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

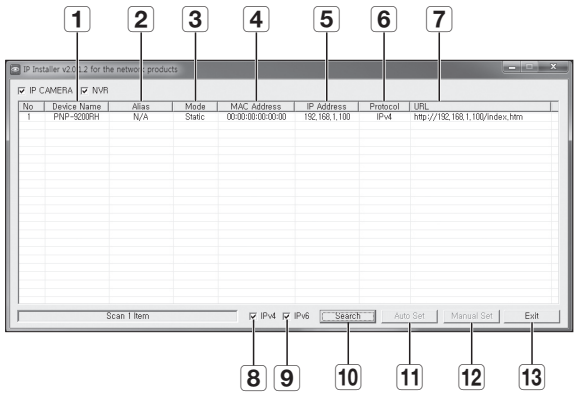
例2) 若IP路由器的地址 (LAN IP) 为 192.168.0.1
IP 地址：192.168.0.100
子网掩码：255.255.255.0
默认网关：192.168.0.1

例3) 若IP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IP路由器的地址，请参见产品文档。
- 如需IP路由器的正向端口的更多信息，请参阅“**路由器端口设置**”。(第 20 页)

网络连接和设置

IP安装器按钮的名称和功能



名称	功能
1 Device Name	已连接摄像机的型号名称。 单击此列标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	在<Static>、<Dynamic> 和 <PPPoE>中，显示现在的网络状态。
4 MAC(Ethernet) Address	已连接摄像机的以太网地址。 单击此列标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。 单击此列标可以按 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”。
7 URL	可从外部网络访问的DDNS URL地址。 若DDNS注册失败, 该列标将显示为摄像机的<IP Address>。
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。

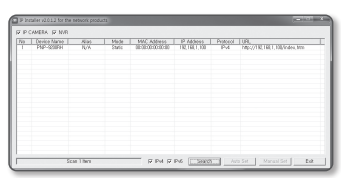
静态 IP 设置

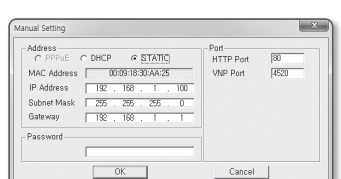
手动网络设置

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。
   摄像机的 <**IP Address**>、<**Subnet Mask**>、<**Gateway**>、<**HTTP Port**> 和 <**VNP Port**> 均显示为预设值。
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。



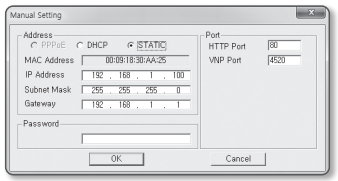


- 只有在未选中 DHCP 的情况下才能设置 IP 相关参数。

如果不使用IP路由器

若要设置 <**IP Address**>、<**Subnet Mask**> 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Web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，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 35 页）

6. 单击 [**OK**]。
   将完成手动网络设置。

如果使用IP路由器

- IP Address：输入IP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：IP路由器的 <**子网掩码**> 将是摄像机的 <**子网掩码**>。
- Gateway：IP路由器的 <**本地 IP 地址**> 将是摄像机的 <**Gateway**>。



- 设置可能因连接的IP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IP路由器的正向端口的更多信息，请参阅“**路由器端口设置**”。（第 20 页）

如果IP路由器连接了多个摄像机

分别设置摄像机的IP相关项目和Port相关项目。

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

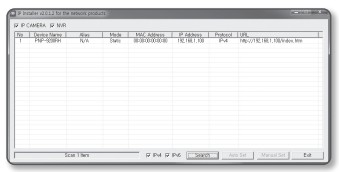
- 如果 <**HTTP Port**> 设置为除 80 以外的值，您必须在Web浏览器的地址栏中提供 <**Port**> 号，才能访问摄像机。
  例) http://IP address: HTTP Port
  http://192.168.1.100:8080

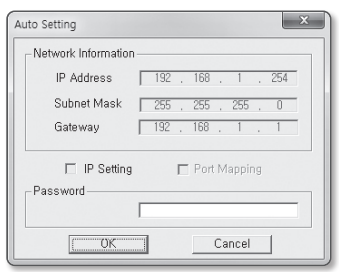
自动网络设置

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。
   显示自动搜索到的<**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，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 35 页）

4. 单击 [**OK**]。
   将完成自动网络设置。

网络连接和设置

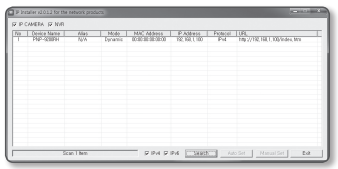
动态 IP 设置

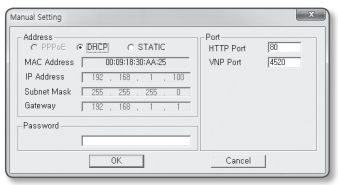
动态 IP 环境设置

- 动态 IP 环境示例
  - 如果连接了摄像机的IP路由器由 DHCP 服务器分配了 IP 地址
  - 将摄像机直接连接到使用DHCP方式的调制解调器时
  - 在LAN环境下, 从内部DHCP服务器获取IP时

检查动态 IP

1. 在用户的本地计算机上运行 IP Installer。
   获取<**Dynamic IP**>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**>。



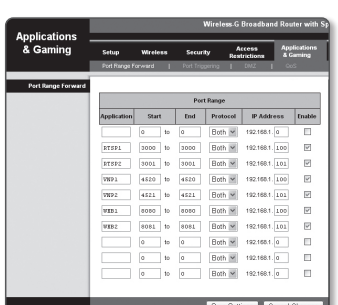


路由器端口设置

如果您安装了连接摄像机的IP路由器，就必须设置在IP路由器上前移的端口范围，以便远程 PC 可以其中的摄像机。

手动端口设置

1. 从IP路由器的 Setup 菜单中，选择 <**Applications & Gaming**> - <**Port Range Forward**>。
   关于第三方IP路由器端口转发的菜单位置和设置方法，请参阅各个IP路由器制造商提供的用户手册。
2. 对连接到IP路由器的每个摄像机选择 <**TCP**> 和 <**UDP Port**>。
   应当按照摄像机 web 查看器<**设置**> - <**Basic**> - <**IP & 端口**>中指定的端口数量设置要配置给 IP 路由器的各端口数量。



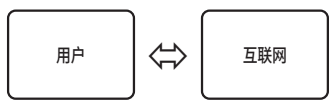
3. 完成后，单击 [**Save Settings**]。
   将保存设置。

- 以上样本说明基于 CISCO 的IP路由器。
- 设置可能因连接的IP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前移

- 在路由器的设置页面，可设置路由器的端口转发。
- 用户可以使用摄像机设置屏幕更改每个端口。

当摄像机 1和摄像机 2连接至同一路由器时：



IP路由器			
开始	结束	协议	IP 地址
3000	3000	TCP/UDP	192.168.1.100
3001	3001	TCP/UDP	192.168.1.101
4520	4520	TCP/UDP	192.168.1.100
4521	4521	TCP/UDP	192.168.1.101
8080	8080	TCP/UDP	192.168.1.100
8081	8081	TCP/UDP	192.168.1.101

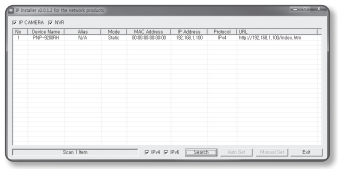
摄像机 1 (192.168.1.100)	
HTTP 端口	8080
设备端口	4520
RTSP 端口	3000

摄像机 2 (192.168.1.101)	
HTTP 端口	8081
设备端口	4521
RTSP 端口	3001

- 如果路由器支持 UPnP（通用即插即用）功能，无需额外路由器设置即可实现端口转发。
  在连接网络摄像机后，在“**设置 → 网络 → DDNS**”菜单中将 <**Wisenet DDNS**> 的 <**Quick connect**> 设置为 <**开**>。

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。
   Web浏览器将启动，并连接到摄像机。



■ 您也可以在Web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

在IP路由器外部的远程PC上，无法使用IP安装器。用户可利用摄像机的DDNS URL, 访问IP路由器内部的摄像机。

1. 您应该设置IP路由器端口范围前移，然后才能访问IP路由器网络中的摄像机。
2. 为了从外部的远程PC访问摄像机，启动浏览器后，在地址栏上输入DDNS URL地址或IP路由器的IP地址。
   例) http://ddns.hanwha-security.com/ID

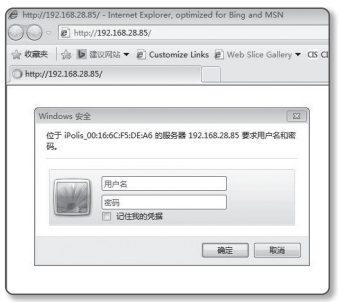
■ 有关注册 DDNS 设置，请参阅“**注册 DDNS**”。（第 48 页）

web 查看器

连接到摄像机

通常，您应该

1. 启动Web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Web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Web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。

▪ 在只有Local网的环境下，无法访问摄像机。

通过 UPnP 连接

1. 运行支持 UPnP 协议的客户端或操作系统。
2. 单击搜索到的摄像机名称。
   若是Windows操作系统, 单击在网络菜单上被搜索到的摄像机名称。
   - 登录窗口即显示出来。

通过 Bonjour 连接

1. 运行支持 Bonjour 协议的客户端或操作系统。
2. 单击搜索到的摄像机名称。
   若是Mac操作系统，在Safari的Bonjour选项卡上,单击被搜索到的摄像机名称。
   - 登录窗口即显示出来。

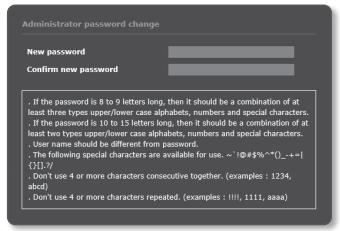
检查 DDNS 地址

如果摄像机直接连接到 DHCP 有线电视网调制解调器、DSL 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 <**网络**> - <**DDNS**> 设置为 <**Wisenet DDNS**>，在<**产品ID**>上输入已在DDNS服务器上所注册的产品ID。

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。

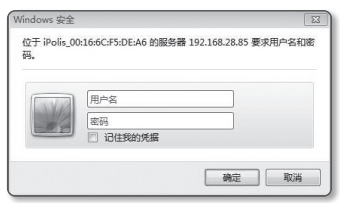


- 对于 8 到 9 位的新密码，必须至少使用下列 3 种类型：大写字母/小写字母、数字和特殊字符。对于 10 到 15 位的密码，必须至少使用上述两种类型。
  - 允许使用的特殊字符为：~`!@#$%^*()_-+=|{}[].?/
- 为了获得较高的安全性，建议您不要重复使用相同的字符作为密码，也不要使用连续的键盘输入作为密码。
- 如果您丢失了密码，可按住[**RESET**]按钮初始化该产品。因此请使用记事簿写下或记住您的密码以防丢失。

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。



- 因视频数据没加密，访问摄像机网络查看器时应格外注意。

- 如果您在完成输入之后选中“**记住我的密码**”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。

各浏览器插件支持规格

现有插件 web 查看器和新的无插件 web 查看器已嵌入一起。
因此，甚至可以在 Chrome 和 EDGE 等不支持插件的最新浏览器环境中使用 web 查看器。
由于浏览器环境不同，可能会出现以下区别。

- **Chrome、EDGE 浏览器**：虽然上述浏览器不支持插件，但嵌入无插件 web 查看器时，您依然可以使用 web 查看器。

- 由于无插件 web 查看器的性能不如有插件 web 查看器，其在监控高品质配置文件和播放保存的视频时可能会受到限制。使用有插件 web 查看器或智能查看器 (SmartViewer) 均可监控高品质配置文件及播放保存的视频。
  - 无插件 web 查看器：适用于无插件 web 查看器的最佳配置配件如下所示。
    H.264 - 1280x720 20fps
    H.265 - 800x600 30fps
  - 无插件配置文件生成条件：如所选的配置文件超过最佳无插件分辨率，将自动创建一个最佳分辨率配置文件并予以监视。
  - 无插件播放条件：以高清或更低分辨率录制的视频

- **IE、Firefox 或 Safari 浏览器**：即使您未安装现有的有插件 web 查看器，也可以使用 web 查看器。

- 如要流畅地监控/播放已保存的视频，必须安装插件。

web 查看器

安装 WEBVIEWER 插件

如要访问有插件 web 查看器并播放实时视频 (H.264/H.265) 或录制的视频，将弹出一条安装消息。此时，您需要安装 web 查看器插件，才能恰当使用该功能。

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。

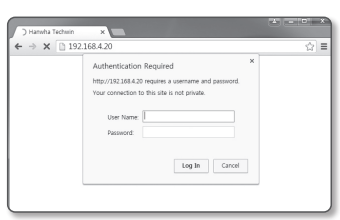
4. 如果已安装了旧版本的 Web 浏览器插件，屏幕会显示一个通知窗口以指示旧版本将被删除。
   在该通知窗口中单击 [**Yes**]。
5. 单击 [**OK**]。
   旧版本的 Web 浏览器插件即被删除。
6. 单击 [**Install**]，开始安装 Web 浏览器插件。
7. 单击 [**Finish**]。
   Web 浏览器插件即完成安装。

> ■ 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。

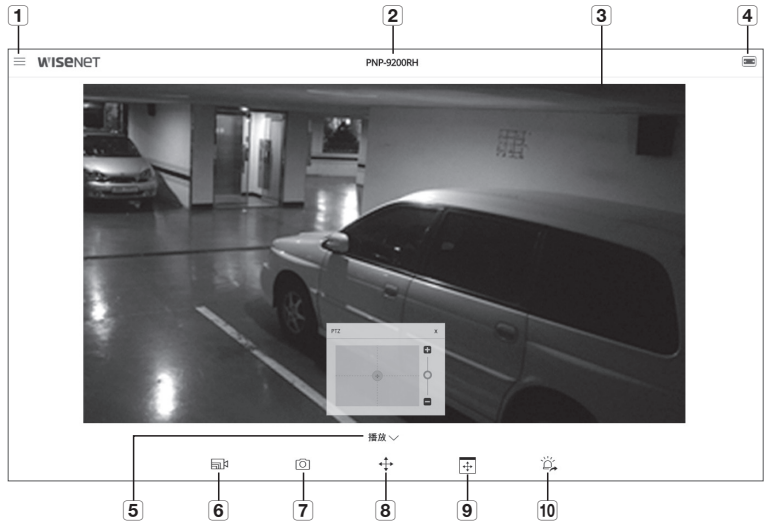
使用无插件 WEB 查看器

如果您使用 Google Chrome 或 MS Edge web 浏览器访问摄像机，无需另行安装插件即可实时控制摄像机图像。

1. 输入用户名和密码登录。
2. 成功登录后即显示摄像机实时视图屏幕。



使用现场屏幕 (无插件 WEB 查看器)



名称	功能	
1 设置	移至设置屏幕。	
2 摄像机型号名称	显示所访问的摄像机的型号名称。	
3 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。	
4 切换视图模式	屏幕调整 ( )	一种视图模式，摄像机视频尺寸将自动适应 web 浏览器尺寸。
	原始大小 ( )	以实际分辨率播放视频的视图模式。
	纵横比 ( )	调整纵横比以最适合分辨率的视图模式。
	全屏	双击视频屏幕，当前播放的视频将按照显示器大小全屏播放。
5 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。 ■ 如要搜索已录制的视频，移动至播放屏幕，将鼠标悬停在视频上然后双击。	

名称	功能	
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。 ■ 点击图标即可显示当前配置文件的名称。 ■ 如果在监视页面中播放视频，以下情况可能会发生残影。 - 由于配置文件变化，分辨率发生变化。 - 配置文件变化时，由于网络延迟，传入数据变慢。 - Web 浏览器窗口大小和位置发生变化。	
7 捕捉	将快照保存为 png 格式的图像文件。	
8 切换 PTZ 模式	将摄像机切换至数字变焦/PTZ 模式。	
	切换至数字变焦模式。	
	切换至 PTZ 模式。	
9 PTZ 控制	该功能可显示 PTZ 控制功能的控制面板。 平移和倾斜功能可在矩形区域内使用，而滑动功能可启用缩放操作。 此功能还可用于全屏模式下。	
10 警报输出	激活警报输出端口。	

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。
   捕捉到的图像将按照浏览器类型保存在指定文件夹中。

使用全屏

1. 将鼠标放在视频画面上，然后双击。
2. 这将使查看器使用全屏。
3. 要退出全屏模式，请按键盘上的 [Esc]。

控制 PTZ 的步骤

1. 切换至全屏。
2. 按底部 [ ] 按钮即可进入 PTZ 模式。
3. 通过第一页图标即可使用预设位、摆动、分组、巡视、追踪、跟踪、自动对焦和数字变焦功能。
4. 通过第二页图标即可使用拉近、拉远、放大、缩小、局部缩放、转至 1 倍、上一个 和后一个 功能。

控制移动 和光学变焦 的步骤

- 要使用 PT 功能移动屏幕，点击并向所需方向拖曳即可。
- 要进行光学放大/缩小，使用底部的 +/- 图标即可。

使用预设位的步骤

- 选择底部的预设位按钮，即可使用主页位置功能和预设位。
- 点击预设位 图标并选择主页位置，即可移动至主页设置。
- 如选择了已保存的某个预设位，将激活选定的预设位。
- 按 + 按钮，添加一个预设位。

使用序列的步骤

- 通过设置页面即可针对已保存的项目运行摆动、分组、巡视 或追踪。（第 37 页）
- 选择一个图标并点击一个项目，即可激活选定的功能。

使用跟踪功能的步骤

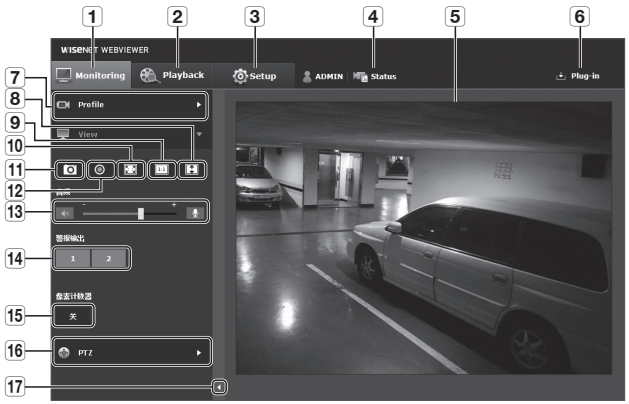
- 如选择了自动跟踪 (Auto Tracking) 功能，将启用自动跟踪模式，该模式将自动跟踪移动的物体。
- 如选择了手动锁定模式，将激活手动模式，点击某个物体即可进行跟踪。

使用局部缩放 的步骤

- 点击局部缩放 图标，屏幕中心位置将显示一个基准点。然后，在您想要放大的区域上拖曳某个区块即可。
- 要禁用局部缩放 功能，再次点击已激活（彩色的）局部缩放 图标即可。
- 点击 1x 图标即可将已放大的倍数切换至当前倍数。
- 使用上一个/下一个 图标即可移动至上一项或下一项设置。

web 查看器

使用现场屏幕 (有插件 WEB 查看器)



名称	功能
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 Web 查看器插件安装	安装 web 查看器插件可以播放实时视频或录制的视频。
7 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。 ! 如果在监视页面中播放视频，以下情况可能会发生残影。 - 由于配置文件变化，分辨率发生变化。 - 配置文件变化时，由于网络延迟，传入数据变慢。 - Web 浏览器窗口大小和位置发生变化。

名称	功能
8 屏幕优化	来自摄像机的视频尺寸将放大为与 Web 浏览器尺寸一样大。
9 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。
10 全屏	将当前视频切换至显示器的最大大小。
11 捕捉	将快照保存为 .jpg 格式的图像文件。
12 手动录制	用户可将视频保存在计算机中。
13 音频/麦克风控制	启动音频和麦克风，并调整音量。 ■ 只能控制音频音量。
14 警报输出	激活警报输出端口。
15 像素计数器	检查视频画面选定区域的图像像素。
16 PTZ	控制摄像机的平移/倾斜/缩放运动。
17 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。
   捕捉到的图像将按照浏览器类型保存在指定文件夹中。

■ 如在 Windows 7 或更高版本操作系统中使用 IE 浏览器无法捕捉屏幕，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** ( )]。

■ 将录制文件以 avi 文件格式保存在计算机中。指定路径然后保存视频。

使用全屏

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

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。

使用麦克风

单击 [**麦克风** ( )] 图标以激活麦克风。

■ Mac OS X 系统运行的 Safari 浏览器不支持该功能。

计算图像像素的步骤

1. 点击[**关**]图标激活该功能。
2. 在视频画面拖动鼠标以选择区域。
3. 检查视频画面选定区域的图像像素。

控制 PTZ

1. 按 [PTZ ( )] 选项卡。
2. 移动“移动屏幕”平板上的滚轮按钮 [ ] 即可移动摄像机方向，或者向上或向下移动 UI 右侧的工具条也可执行放大或缩小操作。



■ For further details on PTZ use, refer to “**PTZ setup**”. (page 37)

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 37 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 38 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 38 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 38 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 39 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 37 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 37 页）

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。

要使用自动跟踪功能

- ：在设置的跟踪时间运行自动跟踪操作。
  请参阅“**自动跟踪设置**”部分，了解具体设置方法（第 39 页）。

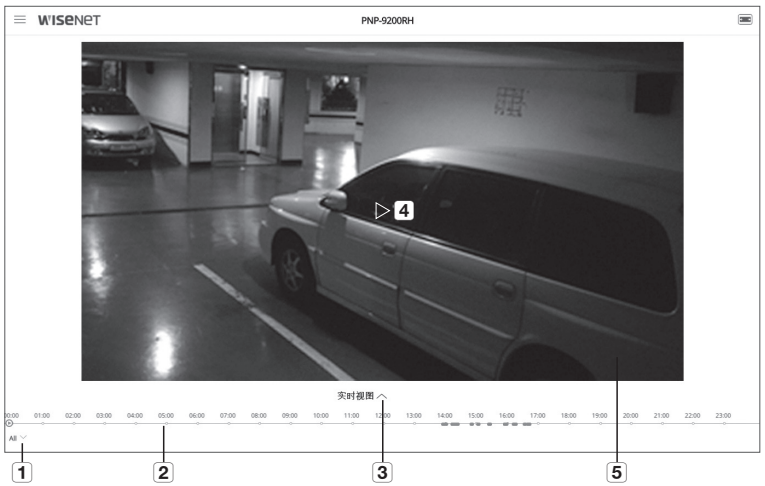
要使用锁定功能

右键单击某个视频，手动选择自动跟踪的物体。

播放录制的视频 (无插件 WEB 查看器)

- 在播放视频之前，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 51 页)
- 如要搜索特定日期录制的视频，移动至播放屏幕，将鼠标悬停在视频上然后双击。

事件搜索屏幕的名称及其功能



名称	功能
1 搜索事件设置	在搜索期间内，设置要搜索的事件类型。
2 时间条	移动时间条可播放所需时间的视频。
3 移动菜单	可在实时和播放录制视频菜单之间来回切换。
4 播放	播放/暂停播放视频。
5 全屏	双击视频屏幕，当前播放的视频将按照显示器大小全屏播放。

在按事件搜索后播放内容



1. 在实时屏幕上，点击[**显示 (** ﹀ **)**]按钮。
2. 如搜索日期当天录制了视频，则时间条上将显示相应的视频。
3. 如要执行特定事件搜索，点击时间条底部的[**全部**]按钮，选择事件类型。
4. 点击[**确认**]按钮。
   时间条上将显示搜索到的事件。
5. 点击[**播放 (** ▷ **)**]按钮。
6. 如要暂停播放视频，点击[**暂停 (** ⏸ **)**]按钮。

时间搜索屏幕的名称及其功能



名称	功能
1 设置	移至设置屏幕。
2 视频信息	显示所播放视频的时间信息。
3 播放速度	控制播放速度。

名称	功能
4 捕捉	将当前正在播放的视频以 jpg 格式保存为图像文件。
5 搜索日期设置	在日历中设定所需的时间和日期。 ■ 保存视频的数据将在日期下方圈出。
6 切换视图模式	切换屏幕上显示的图像的大小。
7 播放	播放/暂停播放视频。
8 移动播放间隔	点击 ◀◀/▶▶ 按钮可前移/后移 1 帧。
9 时间条	移动[时间条 ( )]可播放所需时间的视频。
10 搜索事件设置	设置要在搜索字段中搜索的事件类型。
11 搜索事件	显示所搜索事件的类型和时间。

在按时间搜索后播放

1. 在实时屏幕上，点击[显示 (﹀)]按钮。
2. 将鼠标放在视频画面上，然后双击。
   画面将变为全屏。
3. 点击[搜索 ( )]图标。



4. 在日历中，设置搜索日期、开始时间和结束时间。
   时间条上将显示搜索到的事件。
5. 如要执行特定事件搜索，点击时间条底部的[全部]按钮，选择事件类型。
6. 点击[播放(▷)]按钮。
   将从选定时间开始播放视频。
7. 视频在播放时，屏幕将显示当前播放视频的录制时间。
8. 向前和向后搜索视频和调整播放速度。
   - 如何移动播放间隔
     选择 ◀◀/▶▶ 按钮可前移/后移 1 帧。
   - 如何控制播放速度
     点击 1x、2x、4x 或 8x 按钮时，播放速度将相应提高。
     点击 -1x、-2x、-4x 或 -8x 按钮式，播放速度降至 -1x、-2x、-4x 或 -8x，反向播放速度增加。
9. 移动[时间条 ( )]的位置可播放选定时间的视频。

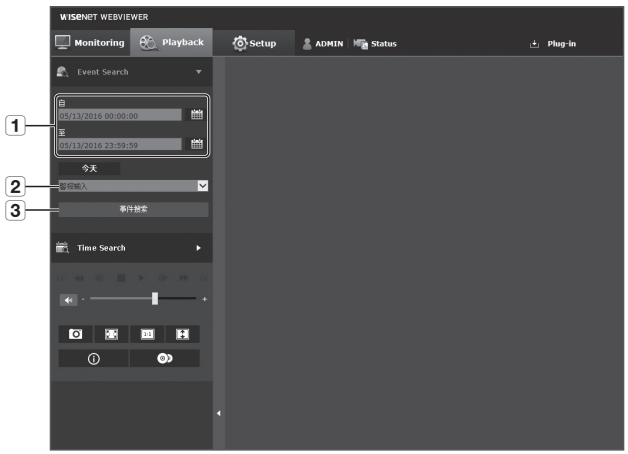


web 查看器

播放录制的视频 (有插件 WEB 查看器)

■ 在播放视频之前，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 51 页)

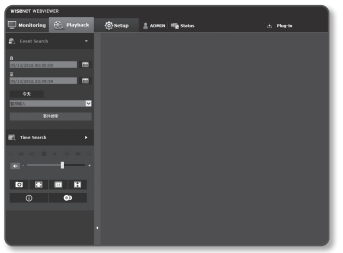
事件搜索屏幕的名称及其功能



名称	功能
1 搜索范围设置	对保存在SD储存卡或NAS的数据, 进行搜索日期和时间范围设置。
2 搜索事件设置	在搜索期间内，设置要搜索的事件类型。
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。



■ 若在搜索期间内，所保存的事件视频数量超过800个的话，您可搜索到的最后日期为事件录制数量超过800个的那一天。例如，您将搜索期间指定为10日到15日，而10日~11日所录制的事件视频数量超过了800个。此时,您只能搜索到截止11日的800个视频，无法搜索12日以后的视频。

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 (**)]。



时间搜索屏幕的名称及其功能



名称	功能
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 音频	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 屏幕优化	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。
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	指定时间段后，备份保存在SD储存卡或NAS的视频。 ■ 创建已保存视频的备份时，最多可以设置为 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，并且播放速度变快。
     选择 ◀◀ 按钮，播放速度将降至 -1x、-2x、-4x 或 -8X，反向播放速度增加。
   - 控制播放方向
     正向播放时，倍速显示在(▶▶)按钮上。逆向播放时，倍速显示在(◀◀)上。
   - 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 [时间条 ( )] 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。

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。
   备份的视频数据将备份到指定的路径中。

web 查看器

播放备份视频

备份的视频数据保存为 .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。

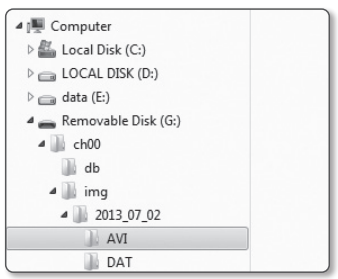
播放 AVI 文件

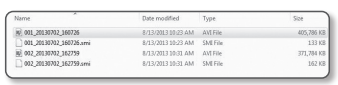
(1) SD 存储卡

1. 从摄像机取出 SD 存储卡。

- 在取出 SD 存储卡前，将“**设置 → 事件 → 存储器**”菜单中的 <**设备**> 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。



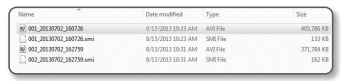


- 文件名以“**001_YYYYMMDD_HHMMSS.avi**”的格式开始，其中文件编号逐一递增。
  YYYYMMDD_HHMMSS 表示数据保存的开始时间。
- “**001_YYYYMMDD_HHMMSS.smi**”文件是一个字幕文件，只与AVI文件在同一个目录时，才能看到它。
- 每个 AVI 文件的最大录制时间是 5 分钟。
- 如果受损，SD 存储卡中的数据将无法在 Web Viewer 的 [**Playback**] 中播放。

(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，只与AVI文件在同一个目录时，才能看到它。
- 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

可通过网络配置基本的摄像机信息、PTZ、视频和音频、网络、事件和系统设置。

1. 在实时屏幕上，点击[**菜单 (** ☰ **)**]按钮。
2. 在菜单列表中，点击[**设置 (** ⚙ **)**]选项卡。
3. 设置屏幕将会出现。

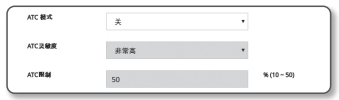
基础设置

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，保持已连接的视频: 即使已连接的配置文件设置发生变化，也会输出预设值。
     如果未选中，已连接的配置文件设置发生变化，会重新进行连接。
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 34 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: 对SD卡或NAS进行视频录制时所使用的配置文件。



6. 选择是否在视频中输入音频。
   选择<**音频输入**> 复选框即可在视频中输入音频。
7. 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。
     - 事件(MD) : 设定移动探测 (MD) 事件时被激活。事件发生时，帧速率将发生调整。
       如在周围区域未检测到任何移动，将输出最小帧数，节省带宽的使用。
     - 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	控制帧速率	控制压缩	事件(MD)
CBR	压缩	帧速率	帧速率

   - 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。

8. 完成后，请单击 [**应用**]。

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. 在<**视频配置文件**>中，点击<**添加**>按钮。
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。
   点击<**显示**>按钮即可显示详细内容。
   - 分辨率：设置 H.264/H.265 和 MJPEG 文件的视频大小。
   - 帧率：设置每秒的最大视频帧数。

▪ 由于摄像机传感器模式设置不同，可用的最大帧率也有所不同。

传感器	25 fps	30 fps
帧率	1~25 fps	1~30 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。恒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。

▪ 为比特控制设置恒定比特率之后，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：选择H.264/H.265编解码器时，设置从一个I-Frame到下个I-Frame间分配的帧数。(一个I-Frame+0~多个P-Frame)
- 配置文件：可以选择 H.264/H.265 配置文件方式。
- 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。

▪ 当比特率控制值为恒定比特率时，可使用此项。详细的设置项可在音频和视频选项卡中智能编码中配置。(第 47 页)

- 动态 GOV : 当 H.264/H.265 编解码器比特率控制为 VBR 时，视频组长度将自动变为最大动态视频组的设定值。
- 多播(SVNP): 设置是否使用SVNP协议。
  - IP地址: 输入可连接IPv4网络的IPv4地址。
  - 端口: 设置控制视频传送的端口。
  - TTL: 可设置SVNP数据包的TTL。
- 多播(RTSP): 设置是否使用RTSP协议。
  - IP地址: 输入可连接IPv4网络的IPv4地址。
  - 端口: 设置控制视频传送的端口。
  - TTL: 可设置RTP数据包的TTL。

▪ 若您将多播地址设置为224.0.0.0~224.0.0.255,多播功能有时在特定环境下无法正常启动。发生问题时，请变更多播地址。

什么是视频组长度?

GOV(Group of Video object planes、视频组)是用于 H.264/H.265 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-Frame仅包含与I-Frame相比发生变化(移动)的数据。

H.264/H.265 编解码器可设置GOV长度。
若用H.264/H.265编解码器设置录制配置文件，GOV长度将变为framerate/2。

什么是动态视频组 (GOV)?

动态视频组功能可使视频组按照视频情况在最小视频组长度设定值和最大动态视频组长度设定值之间自动变化。

在几乎没有移动事件的视频中，视频组以动态视频组设置值运行，此时整个视频的比特率将有所降低。检测到移动后会立即输出 I 帧，在移动消失之前，视频组均以视频组长度设置运行。

如使用该功能，视频的视频组将以最小视频组长度设置值运行。

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，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。
     - 大写、小写、数字和特殊字符中至少选3种类型。: 8 到 9 个字符。
     - 大写、小写、数字和特殊字符中至少选2种类型。: 10 到 15 个字符。
     - 密码应与 ID 不同。
     - 不得重复使用同一字母、特殊字符超过 4 次。
     - 不得使用 4 个或 4 个以上连续的字符。（例如：1234、abcd）
     - 不得重复使用字符 4 次或 4 次以上。（例如：!!!!、1111、aaaa）
     - 允许使用的特殊字符为：~`!@#$%^*()_-+=|{}[].?/
     - 进行出厂设置之后，会初始化管理员和用户密码。您需要重置密码。
     - 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，您先要重置密码后再次登录，才能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。
     - 音频输入/音频输出/警报输出：使用当前用户账户可以在实时模式下启用/禁用音频输入/音频输出/警报输出。
     - PTZ控制：选择 <**PTZ**>。
     - 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。

   - 若授权用户中有人要设置可用ONVIF的账户, 其功能将根据已设置的权限受到限制。

4. 完成后，请单击 [**应用**]。

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：设置以标准时间(GMT)为准的本地时区。
   - 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：手动设置摄像机的当前时间。
       选择<**与 PC 查看器同步**>复选框，web 查看器时间将被设置为运行此 web 查看器的计算机所显示的时间。
     - 与 NTP 服务器同步：与指定的服务器地址的时间同步。



4. 完成后，请单击 [**应用**]。

   - 如果您选择 <**与 PC 查看器同步**>，应该分别设置PC和摄像机的标准时区。

设置屏幕

IP & 端口



1. 从设置菜单，选择 <**Basic (☰)**> 选项卡。
2. 单击 <**IP & 端口**>。
3. 单击 <**IP 地址**>。
4. 配置 <**IPv4 设置**>。
   - IP 类型：选择 IP 连接类型。默认值为80(TCP)。
     - 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。
5. 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：输入并使用用户临时设置的IPv6地址和网关。

- ■ 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**] 以应用更改，并且浏览器将会退出。一小会之后，使用更改后的 IP 再次连接。

6. 单击 <**端口**>。



7. 在端口菜单的每个项目中键入所需信息。
   - ■ 设置端口时，不可使用端口0~1023和3702。
   - 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, Safari和Google Chrome浏览器上, 不应将HTTPS端口设置为 65535。)
   - RTSP：用于以 RTSP 模式传输视频，默认值为 554。
   - 使用 超时提示：连接到 RTSP 时，如果一段时间内没有响应，此功能会重置连接。
   - 设备端口：设置用于根据 Samsung 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。
  重新连接时，将重置的HTTP端口写在IP地址后面。
  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。

8. 完成后，请单击 [**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**]。

- ■ 如要配置详细的事件设置，点击所需类型即可。将重定向至详细设置。

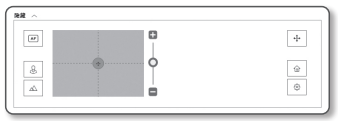
设置 PTZ

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(/)：调整屏幕对焦，以适应短距离或长距离需要。
   - 自动对焦( )：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。
- 可在编辑预设页面操作后模式下配置自动跟踪 和 MD/VA 功能叠加。

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. 在预设设置中单击您要移动的预设编号。

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**>模式下，您可以在激活预设位之后启用或禁用自动运行/跟踪/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。)
     - 跟踪 : 在跟踪时间下设置的时段执行自动跟踪操作。
     - 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 42 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 55 页)
2. 完成后，请单击 [**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。

设置屏幕

PTZ 顺序

1. 从设置菜单，选择 <PTZ (✣)> 选项卡。
2. 单击 <PTZ 顺序>。
3. 配置摆动、分组、巡视、跟踪和自动运行设置。



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 <**自 预设编号**> 和 <**至 预设编号**> 以指定摆动范围。



■ 在从开始时间预设位移动至结束时间预设位期间，此内容移动至屏幕右侧。
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 41 页）

4. 设置移动速度和切换时间。
5. 按下 [**设置**] 按钮。
   会根据模式保存第一个预设、第二个预设、速度以及切换时间。
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。

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**>。
   更改至跟踪设置菜单屏幕。
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。
   将保存所选跟踪编号。
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。
   保存已终止。
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

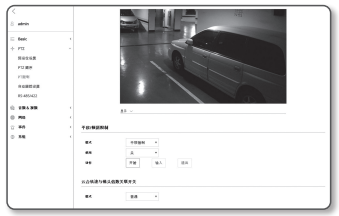
如果用户在特定时间内未在产品上执行任何操作，此功能将激活预先定义的顺序功能。



1. 选择 <**跟踪**>。
   更改至自动运行设置菜单屏幕。
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。

PT限制

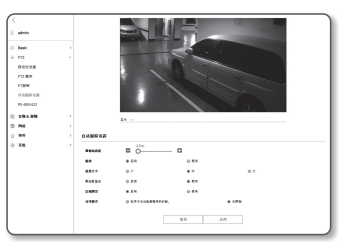
可以对平移或倾斜功能指定限制。



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。
   - 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。

自动跟踪设置

您可以根据安装环境将摄像机设置为自动跟踪或更改设置。



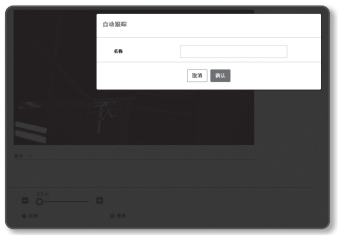
1. 从设置菜单，选择 <**PTZ (✣)**> 选项卡。
2. 单击<**自动跟踪设置**>。
3. 设置摄像机自动跟踪操作。
   - 摄像机高度：尽可能精确地设置高度可以实现正确的操作。（范围：2.5 米 - 30 米）
   - 缩放：选择是否在自动跟踪时包含缩放。
   - 保持大小：选择“缩放”时，它指定您希望跟踪物体在屏幕中保持的大小。
   - 指示灯显示：设置是否显示方形指示灯，它用于表示视频中跟踪的对象。
   - 区域激活：设置是否激活您之前设置的自动跟踪区域。在此区域无法使用自动跟踪 (Auto Tracking) 功能。
   - 自动模式
     - 无限制：开始自动跟踪，没有时间限制。当跟踪一个物体跟丢时，它会在原地待命，然后在探测到移动物体时重新开始跟踪。
     - 结束于无法检测物体的时候。：当自动跟踪跟丢物体时，它会结束自动跟踪。此时，即使探测到移动物体，自动跟踪也不会开始。

设置屏幕

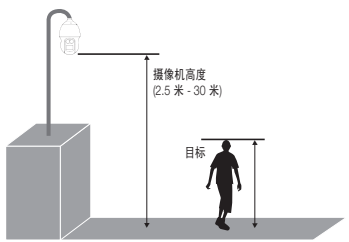
要设置自动跟踪区域

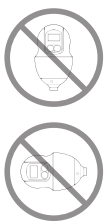
您可以设置要从自动跟踪物体中排除的区域。(最多可设置 8 个非探测区域。)

1. 单击 <显示>。
2. 鼠标单击图像，拖动即可设置所需区域。
3. 输入名称，单击 [确认]。



- 自动跟踪一般可用于以下情况。
  - 安装高度：大于等于 2.5 米，小于等于 30 米
  - 安装类型：室内水平安装并且不倾斜，或者室外吸顶式
  - 跟踪物体：直立行走、在水平面上移动的人（高度约为 170 厘米）





- 以下情况下，可能无法跟踪目标或导致错误操作。
  - 当拍摄区域有多个移动物体时
  - 当其他移动物体或设备将它隐藏起来或与之重叠时
  - 当移动物体与背景之间几乎没有差异时
  - 物体太小或太大
  - 物体移动太快或太慢
  - 当移动物体从安装的摄像机正下方通过时
  - 当移动物体的移动路线未以安装高度为标准时
  - 恶劣天气，如大风、下雪和下雨
  - 拍摄区域较暗时
  - 光线突然发生变化时
  - 摄像机方向或拍摄区域出现闪光时
  - 摄像机方向出现光线或反光时
  - 摄像机晃动造成视频抖动时
  - 当镜头盖和调光器盖被弄脏或潮湿时
  - 摄像机镜头轴发生变化时

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]。



- 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。

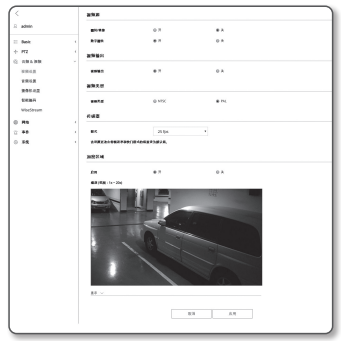
每种协议支持的功能

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	

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)

音频与视频设置

视频设置



1. 从设置菜单，选择 <**音频 & 视频 (** ⚙ **)**> 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. 选择“启用”或“禁用”模拟视频输出。
5. 选择视频类型。
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 33 页）

7. 指定隐私区域。
8. 完成后，请单击 [**应用**]。

设置加密区域

为了保护隐私，您可以设置摄视频中要隐藏的部分。



1. 将其设置为 <**开**>。
2. 完成后，请单击 [**应用**]。
3. 单击<**显示**>。
4. 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。
5. 查看屏幕上显示的区域是否与您想要设置的区域相匹配，然后选择一个名称和颜色。
   要禁用缩放阈值功能，选择 <**关**>。
6. 如果使用缩放指示限制功能，则选择 [开]，然后单击 [确认] 按钮。将设置加密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。若要取消加密区域设置，则单击 [取消] 按钮并进行重置。

■ 对于应用缩放指示限制功能的加密区域，会通过在 [**缩放**] 后面附加名称来显示。

设置屏幕

音频设置

可以配置摄像机的音频源的 I/O 设置。



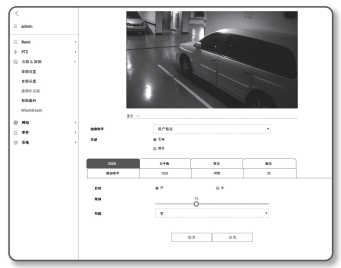
1. 从设置菜单，选择 <**音频 & 视频 (** ⚙ **)**> 选项卡。
2. 单击 <**音频设置**>。
3. 设置音频输入值。
   - 来源：设置音频输入。
     - 线：将电缆连接到音频设备。
     - 外部麦克风：使用外部麦克风。
   - 为外部麦克风供电：当外部麦克风未接通电源时，选中此复选框后，将通过摄像机为麦克风供电。在选择<**外部麦克风**>时，可对设置项进行配置。
   - 编解码器：指定音频编解码器。
     - G.711：使用64Kbps脉冲编码调制(PCM)音频编码法的音频编解码器标准。这是可用PSTN或PBX传输数码音频的格式, 属于ITU标准音频编解码器。
     - 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。
     - AAC：高级音频编码 的缩写，是继 MP3 格式之后的一项国际标准。使用当前的 G.711 或 G.726 编解码器时，可以使用采样率更高的音频。
   - 采样率：是指对模拟声道进行数字化处理时取样的次数。此值越高，音质越出色。
   - 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。

■ 如果声源的音量或增益值设置过度，可能会发生音质下降或振鸣。

4. 设置音频输出级别。
   - 启用：设置是否使用音频输出。
   - 增益：指定音频输出放大倍数。
5. 完成后，请单击 [**应用**]。

摄像机设置

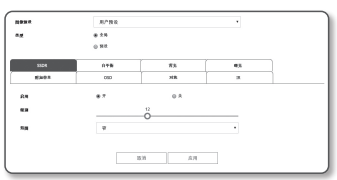
可以根据摄像机所在的环境更改摄像机设置。



1. 从设置菜单，选择 <**音频 & 视频 (** ⚙ **)**> 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：图像预设、SSDR、白平衡、背光、曝光、附加菜单、OSD、对焦、IR
4. 完成后，请单击 [**应用**]。
   - 如果在更改设置之后经过一定的时间未按 [**应用**] 按钮（超时：240 秒）设定值将回到变更前。

如果希望设置图像预设

用户可以轻松设置预设。
在配置的时间段内将运行所选择的图像预设模式，但在其他时间则反映在用户预设模式中配置的值。



1. 从图像预设中选择所需的模式。
   - 定义焦点：这是摄像机的出厂设置。选择此项来录制视频，着重于再现性。
   - 移动焦点：清晰录制移动物体。如果存在许多移动物体（例如在道路上或者博物馆等人多场所），应选择此项。

■ 在低照度环境中，噪音级别会增大，灵敏度会降低。

   - 降噪：如果需要在低照度环境中录制低噪音视频，应选择此项。
   - 调亮视频：此项可使整个视频中的黑暗区域变得更亮。

■ 但同时会降低视频对比度效果。

   - 移动焦点&降噪：当存在许多移动物体（例如在道路上或者博物馆等人多场所），或者需要在低照度环境中录制低噪音视频时，应选择此项。
   - 移动焦点&调亮视频：当存在许多移动物体（例如在道路上或者博物馆等人多场所），或者需要使整个视频中的黑暗区域变得更亮时，应选择此项。
   - Vivid（多媒体异步传输模式）视频：整个视频将以生动色彩显示。

■ 视频对比度降低，同时色彩再现性能有所下降。

   - 用户预设：如果您想用自己选择的设置来显示视频，则选择该选项。

■ 选择预设模式之外的其他模式时，无法设置快门速度、AGC、SSDR、SSNR 和色彩。

2. 设置图像特定预设位类型的摄像机项目。
   - 如将类型设置为<**预设**>，可以配置 SSDR、白平衡、曝光补偿、特殊项和对焦的设置。
3. 完成后，请单击 [**应用**]。

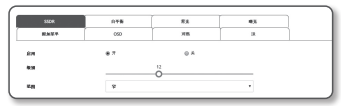
每种图像预设模式的初始设置

图像预设	最小快门	最大快门	自动增益	SSDR	SSNR	COLOR
定义焦点	默认 (1/5)	1/12000	默认 (高)	默认 (12)	默认 (12)	默认 (50)
移动焦点	1/30	1/12000	默认 (高)	默认 (12)	4	默认 (50)
降噪	1/15	1/12000	中	默认 (12)	默认 (12)	默认 (50)
调亮视频	默认 (1/5)	1/12000	默认 (高)	18	默认 (12)	默认 (50)
移动焦点&降噪	1/30	1/12000	中	默认 (12)	4	默认 (50)
移动焦点&调亮视频	1/30	1/12000	默认 (高)	18	4	默认 (50)
Vivid（多媒体异步传输模式）视频	默认 (1/5)	1/12000	默认 (高)	18	默认 (12)	90
用户预设	手动	手动	手动	手动	手动	手动

- 预设设置功能可帮助用户配置设置。如果您不想使用预设功能，请在使用前将其停用。
- 如图像预设发生变化，仅快门/AGC/SSDR/SSNR/色彩将重置为各型号对应的默认值。
- 在预设之间“**摄像机设置**”值不会改变。

设置 SSDR

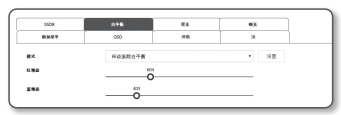
在明暗差异非常大的场景中，您可以单独增加黑暗区域的亮度以调整总亮度。



1. 选择 <**SSDR**>。
2. 将模式设置为<**开**>。
3. 配置必要的 <**级别**> 和 <**范围**> 设置。
   - 级别：调整动态范围的级别。
   - 范围：选择动态范围的幅度区域。

设置白平衡

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。
   - 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。
   - 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。若环境变, 应重新调整。
   - MERCURY：图像会根据水银灯环境自动补偿。
   - SODIUM：图像自动补偿给钠灯环境。

- 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。

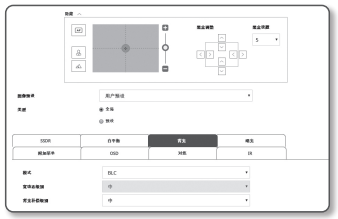
- 在下列情况下，白平衡可能无法正常工作：在这种情况下，请切换到“自动白平衡”模式。
  - 如果物体周围环境条件超出色温校正范围
    示例）清澈的蓝天，日落
  - 如果物体的周围环境黑暗
  - 如果摄像机的焦点直接面对荧光灯照明，或者如果将摄像机安装在照明变化的位置，白平衡操作可能会不稳定。

设置屏幕

设置BLC

用户可在视频上指定自己要的区域，并将此显得更加鲜明。

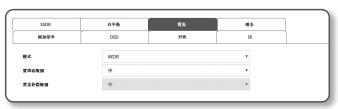
1. 选择 <**背光**>。
2. 将 <**模式**> 设置为 <**BLC**>。
   如果选择BLC，PTZ控制屏上将显示盒调整屏幕和黑盒设置。
3. 选择各项并进行正确设置。
   - 背光补偿级别：可以更改级别以调整监视区域的亮度。
   - 黑盒调整：使用箭头按钮调节背光补偿框的大小和位置。
   - 黑盒设置：指定移动的像素单位。您可以使用 <**黑盒调整**> 以增加或减少像素。



设置WDR

将在同时存在明亮和阴暗区域的场景中显示尖锐的物件图像。

1. 选择 <**背光**>。
2. 将 <**模式**> 设置为 <**WDR**>。
3. 指定 <**宽动态级别**>。



- 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。

设置曝光

可以调整摄像机的曝光级别。

1. 选择 <**曝光**>。
2. 设置各个项目。
   - 亮度：调整屏幕亮度。
   - 最小快门：最长曝光时间的限值。
     - 快门是用于设置传感器曝光时间范围的模式，该范围指定了电子快门移动的上限和下限。
     - 如果快门值低于传感器模式中指定的值，在黑暗条件下可以降低帧率。



   - 最大快门：最短曝光时间的限值。
   - 防闪烁：用于防止周围光线和频率之间不协调引起的屏幕闪烁。
   - SSNR
     - 开：视频噪点已消除。
     - 智慧 NR：当视频中出现移动物体时自动调整降噪级别，以提高可识别性。
   - SSNR 级别：调整降噪级别。
   - 光圈：选择在手动模式还是自动模式下使用摄像机镜头。
     - DC(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：选择自动增益控制模式。
     因在低照度环境下摄影而视频亮度低于特定值时，通过调整视频增益的控制感度，调整整个亮度。

- 根据快门的设置范围，图像曝光有可能饱和。
- 从启用 WiseNR 模式到应用/释放实际效果可能需要一段时间。
- WiseNR 模式启用后，视频的可识别性将提高，同时噪音可能会增加。
- 在噪点较少的明亮环境中，WiseNR 效果可能不明显。
- 设置 WiseNR 时，MD 功能将在内部使用，用于检测运动，检测依据是 MD 事件的执行情况。 如需了解更多信息，请参阅”**MD/VA**”（第 55 页）。

设置附加菜单

1. 选择 <**附加菜单**>。
2. 设置各个项目。



- 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。
  - ■ 如 <IR> 菜单模式设置为<**日夜**>，则无法配置日间/夜间模式设置项。
- 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：调整图像的总体锐利度。如果选择了<**开**>，您可以调整图像的锐利级别。
- 锐利度级别：级别越高，图像轮廓变得越清晰和越清楚。
- 伽玛值：调整图像的对比度。
- 色调级别：调整视频颜色的强度。
- 透雾：在有雾或多云天气时补偿视频。
  默认设置为 <**关**>。当视频在有雾天气看起来模糊时使用附加菜单项。
  - 关：禁用去雾功能。
  - 自动：调整 <**透雾级别**> 以增强效果。
  - 手动：用户手动设置每个图像的补偿量。

  ■ 如果去雾模式设置为 <**自动**>，其去雾级别与模糊程度成正比。如需保持去雾级别不变而不考虑模糊程度，可将去雾模式设置为 <**手动**>。

  ■ 如果在薄雾中手动去雾级别较高，图像可能变得过于黑暗。
- 透雾级别：控制去雾级别。

设置 OSD

1. 选择 <**OSD**>。
2. 设置各个项目。



- 摄像机名称：指定要显示在屏幕上的摄像机名称。
  - 选择<**使用**>复选框即可添加摄像机名称。
  - 预览：点击<**预览**>按钮查看屏幕上将显示的摄像机名称。
- 添加：点击<**添加**>按钮，共可添加 5 行内容，每行 15 个字符，共可添加 60 个字符。
- 摄像机名称 X、Y位置：指定显示在屏幕上的摄像机名称的位置。
- 日期和时间：设置屏幕上的时间显示和日期格式。
- 日期和时间 X、Y位置：指定在屏幕上显示时间的位置。
- 工作日显示：设置在屏幕上是否显示星期信息。
- 大小：将 OSD 大小设置为小/中/大。
- 颜色：将 OSD 颜色设置为白色/红色/蓝色/绿色/黑色/灰色。
- 透明：将透明度设置为不透明/透明度 1/透明度 2/透明度 3。
- 覆盖
  - 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。
- 覆盖图像：用户所选图像将显示在屏幕左上方。
  - 浏览 (...)：搜索并选择位图类型文件。
  - 上传：上传选定的文件。
  - 删除：删除选定的文件。

■ 适用文件要求包括 16 位（不支持 RGB565）或 24 位的位图文件，宽、高为 128 像素且文件大小为 52KB 及以下。

■ 若可调整位置的项目(摄像机名称、日期&时间)被固定的其他OSD项目所覆盖，有可能无法显示在屏幕上。

■ 如果您更改了语言，X-Y 坐标将予以初始化。
建议设置完语言之后再设置 X-Y 坐标。

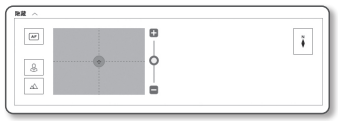
■ 屏幕顶端会显示 PTZ 坐标；此时无法更改位置。在您设置其他项目的位置时，请牢记这一点。

■ 使用 MJPEG 配置文件时，不会输出 OSD。

设置屏幕

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。



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。
  - 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。
  - 指定时间和日期即可对镜头进行初始化操作。可为接下来的 7 天设置初始化计划。可按照指定的时间或间隔激活镜头初始化功能。

- 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。

设置 IR

1. 选择 <IR>。
2. 设置各个项目。



- 模式：黑白模式下, IR LED亮起，因可防止视频中心的饱和现象, 在近距离也能识别被摄体。
  - 关：关闭红外线 LED。
  - 开：打开红外线 LED。
    使用时，特殊部件的日夜模式设置为黑白。
  - 日夜：根据日夜模式打开/关闭红外线。
    设置该模式时，不能设置特殊部件的日夜模式。
  - 传感器：根据光线传感器检测到的光通量来更改红外线和日夜模式。
    设置该模式时，不能设置特殊部件的日夜模式。
  - 时控：- 已定时：设置红外线的使用时间。
    设置该模式时，不能设置特殊部件的日夜模式。
- LED 开启档位： 当光通量低于 LED 使用级别时，打开 LED。可以设置 1 ~ 90。
- LED 关闭档位：当光通量高于 LED 使用级别时，关闭 LED。可以设置 11 ~ 100。
- LED 开启时间：设置红外线保持打开的时间。
- LED 最大功率：设置红外线的最高亮度。
- LED 电源控制：控制由于附近物体造成的屏幕亮度极限。
  如果设置为 <关>，则在屏幕达到亮度极限时不能控制 LED 输出。

- 当您将红外模式设置为 <开> 时，LED 点亮并且屏幕会自动设置为黑白模式。当您将红外模式设置为 <关> 时，LED 熄灭并且会自动设置日夜模式。
- 如果使用红外线调光器时改变变焦倍率，则红外线调光器会转到变焦倍率接口。
  但是，红外线调光器到变焦倍率的接口在低温时速度可能会很慢。
- 如果环境温度太高，则红外线 LED 可能会采取强制关闭措施以保护产品。

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 <**音频 & 视频 (**)> 选项卡。
2. 单击 <**智能编码**>。
3. 选择要监控的区域。
   点击并拖曳鼠标即可选择所需区域。
   - 最多可以指定 5 个独立的区域。
4. 设置图像质量。
   ROI区域将以指定的质量显示。
5. 要取消区域的所有设置，请单击 [**清除**] 按钮。
6. 完成后，请单击 [**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 33 页）

WiseStream

用于检测未发生大幅度运动环境下的视频复杂度并调整视频质量降低输出比特率的功能。
生成运动时变回至视频质量原始设置值，以防止视频信息丢失。

1. 从设置菜单，选择 <**音频 & 视频 (**)> 选项卡。
2. 单击 <**WideStream**>。
3. 选择智能流的亮度。
   - 关：将禁用智能流功能。
   - 低：小幅降低视频图像质量。当比特率设为“关”时，图像质量最多可降低 15%。
   - 中：中等幅度降低视频图像质量。当比特率设为“关”时，图像质量最多可降低 30%。
   - 高：大幅降低视频图像质量。当比特率设为“关”时，图像质量最多可降低 50%。
4. 完成后，请单击 [**应用**]。



- 出现以下情况时，智能流 (WiseStream) 功能可能出现故障。
  - 突然进行屏幕切换可能导致视频失真。
  - 不宜用于屏幕上显示过多移动和运动事件的环境下。

网络设置

DDNS

DDNS(动态域名服务)是Dynamic Domain Name Service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 <**网络 (**)> 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 Wisenet DDNS 服务器，请选择此项。
     - 产品 ID：输入向 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。



- 如果不使用支持UPnP功能的路由器、或不使用Quick connect而要使用DDNS的话，在路由器上手动设置端口转发。有关如何设置端口转发，请参阅 “**路由器端口设置**”。（第 20 页）

   - 公共 DDNS：在提供的公开网站中，使用公共DDNS服务器时，选择此项。
     - 服务：选择要使用的公共DDNS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 服务器的用户名。
     - 密码：输入 DDNS 服务器的密码。
5. 完成后，请单击 [**应用**]。

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

设置屏幕

注册 Wisenet DDNS

向 DDNS 注册您的产品

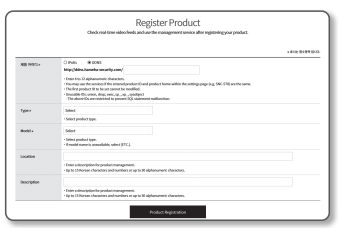
1. 访问Wisenet DDNS网站(http://ddns.hanwha-security.com)并注册会员。



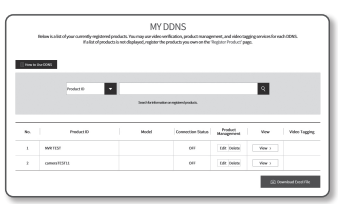
2. 从顶部的菜单栏，选择 <**MY DDNS**>。



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**]。
   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. 在DDNS设置页面，将<**DDNS**>项目设置为<**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**] 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**]。

■ 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 20 页）

IP 过滤

对于特定IP, 可创建允许或拒绝它的IP列表。

1. 从设置菜单，选择 <**网络 ( )**> 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，将只接受过滤列表的那些 IP 进行的访问。
4. 单击 [**添加**] 按钮。
   将会创建 IP 列表。
5. 输入要允许或拒绝的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**] 按钮。
7. 完成后，请单击 [**应用**]。

HTTPS

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 <**网络 ( )**> 选项卡。
2. 单击 <**HTTPS**>。
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**]。

安装证书

1. 输入证书名称。
2. 单击 [**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**] 按钮。

删除证书

1. 单击 [**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（使用自用证书的安全连接模式）**> 模式下访问网络视频解码器。

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 <**网络 ( )**> 选项卡。
2. 单击 <**802.1x**>。
3. 设置 <**IEEE 802.1x 设置**>。
   - IEEE 802.1x：指定使用 802.1x 协议。
   - EAP 类型 : 选择 EAP-TLS 或 LEAP。
   - EAPOL版本：选择版本 1 或 2。
   - ID ：在 EAP-TLS 中输入客户端证书 ID，在 LEAP 中输入用户 ID。
   - 密码：在 EAP-TLS 中输入客户端私钥密码，在 LEAP 中输入用户密码。如果它使用未加密的密钥文件，则无需在 EAP-TLS 中输入密码。

- 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。
- LEAP 是一种安全性较差的身份验证方法。仅在 EAP-TLS 不可用的情况下使用。

4. 安装/移除证书。
   只有 EAP-TLS 需要证书。
   - 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**]。

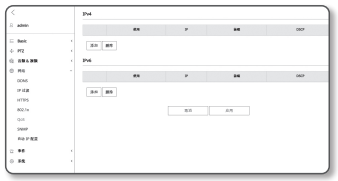
安装/删除与 802.1x 相关的证书

1. 按每个项目的 [**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**] 按钮以开始安装，并在项目旁边显示消息“已安装”。
4. 按 [**删除**] 按钮以删除证书。

设置屏幕

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 <**网络 (🌐)**> 选项卡。
2. 单击 <**QoS**>。
3. 单击 [**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**] 按钮。
6. 完成后，请单击 [**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 <**网络 (🌐)**> 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：为访问SNMP信息，输入只读社区名称。
       默认名称为 <**public**>。
     - 写入社区：为访问SNMP信息，输入只写社区名称。
       默认名称为 <**write**>。
   - 启用 SNMP v3：SNMP V3 将处于活动状态。
     - 密码：指定 SNMP V3 的默认密码。

       ▪ 默认密码有被泄露的风险, 建议安装产品后立即更改密码。
       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。

   - 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。
4. 完成后，请单击 [**应用**]。

   ▪ 仅当安全连接模式是 HTTPS 时，才能设置 SNMP v3。
   请参阅 “**HTTPS**”。(第 49 页)

   ▪ 如果您不使用SNMP v3，则可能出现安全问题。

自动 IP 配置

自动设置既能访问摄像机又能搜索的IP。



1. 从设置菜单，选择 <**网络 (🌐)**> 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 Web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**]。

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。

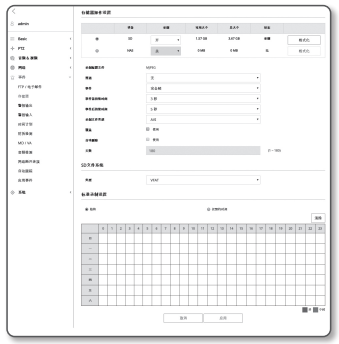
1. 从设置菜单，选择 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**FTP / 电子邮件**>。
3. 选择 <**FTP 配置**> 或 <**E-mail 配置**> 并输入/选择所需的值。
   - FTP 配置
     - 服务器地址：输入您将警报或事件图像传输到的 FTP 服务器的 IP 地址。
     - ID：输入用于登录 FTP 服务器的用户 ID。
     - 密码：输入用于登录 FTP 服务器的用户帐户密码。
     - 上传目录：指定警报或事件图像将传输到的 FTP 路径。
     - 端口：FTP 服务器的默认端口为 21；但是，可以根据 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 SMTP 地址。
     - 使用身份验证：选择是否使用身份验证。
     - TLS 使用：指定使用 TLS。
     - 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**]。



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 <**事件 (** 🔔 **)**> 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**”。
- 如果显示“错误”信息，请检查以下各项：
  - 检查存储器，确认它已连接到设备。
  - 检查存储器中的文件，确认它们是否受损。
  - 检查存储器，确认它们是否受到物理损伤。
- 如按照说明操作后“错误 (Error)”消息未消失，请将 SD 存储卡格式化。
  格式化后，如仍然存在错误消息，请更换 SD 存储卡。
- 如未在设置中将按钮更改至’关闭’位置便移除 SD 存储卡，或将摄像机连接至不稳定的电源，SD 存储卡可能受损。

- 录制模式启动后重新连接时， 可同时连接的配置文件数量限为2个。

在 SD 存储卡上进行录制的步骤

1. 将 SD 存储卡单元设置为 <**开**>。
2. 单击 [**应用**] 按钮。
3. 检查存储卡的 <**可用大小**> 和 <**总大小**>。
   点击 <**格式化**> 按钮即可将 SD 存储卡格式化。
   - 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“**建议的 SD/SDHC/SDXC 存储卡规格**”。（第 6 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。
4. 指定存储操作。
   - 录制配置文件：显示要录制的配置文件名称。
   - 普通：以特定帧速率进行录制。
   - 事件：设置发生的特定事件的录制类型。

- 事件前持续时间：指定警报发出之前的时间点；从该时间点开始，将传输图像。 最多可以指定警报发出之前 5 秒。
- 事件后持续时间：指定事件发生后图像的传输时间。最长可保存事件发生120秒后的图像。
- 录制文件类型：指定所录制图像的文件格式。
  - STW：Hanwha Techwin独有的文件格式。
  - AVI：传统的 avi 格式。

■ 如果存储文件类型改变，那么现有数据将被格式化。

- 覆盖：如 SD 存储卡已满，将删除旧数据，从而更新存储新数据。
- 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。

5. 设置<**SD文件系统**>。
   - 类型： 摄像机支持 VFAT 和 ext4 SD 存储卡文件系统，该文件系统可由用户进行配置。
     （但为使ext4文件系统与Window o/s交互, 需要额外的应用程序。）

■ 如上述设置发生变化，现有数据将被格式化。

■ 对 ext4 文件系统的 SD 存储卡进行格式化可能需要 10 分钟的时间。

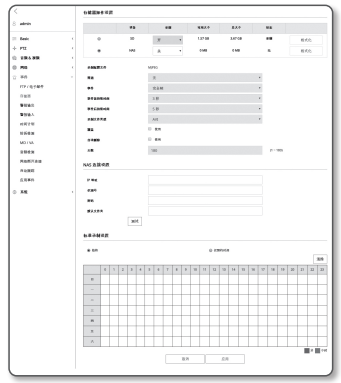
6. 指定 <**标准录制设置**>。
   - 始终：始终将录制的视频保存在 SD 存储卡中。
     ■ 如果设置为始终，则激活时间无法更改。
   - 仅预约时间：仅在指定星期几的指定时间录制。
   - [清除]：清除选择选定的时间。
7. 完成后，请单击 [**应用**]。

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分配的固有的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。
- 检查在未对已存或使用过的默认文件夹进行格式化前，是否以其他用户进行连接。
- 确认使用了建议的 NAS 设备。

4. 设置结束后，将 NAS 装置设置为 <**开**>。
5. 单击 [**应用**] 按钮。
6. 登录 NAS 并检查 <**可用大小**> 和 <**总大小**>。
   您可以通过单击 <**格式化**> 按钮来格式化在 NAS 连接设置中指定的默认文件夹。

■ 使用 NAS 时，如短暂的网络中断，则数据可能无法保存，建议您同时使用 SD 存储卡，以免丢失录制的图像。

■ 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

- 使用 NAS 时，如短暂的网络中断，则数据可能无法保存，建议您同时使用 SD 存储卡，以免丢失录制的图像。
- 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。
- 如通过将覆写功能设置为 <**关**> 将其激活为 NAS，且可用容量小于 1%，数据将保存在 SD 存储卡中。
- 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 6 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。
- NAS 保存只允许一台摄像机访问一个文件夹。不允许使用另一台摄像机登录，图像将不会保存。

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。

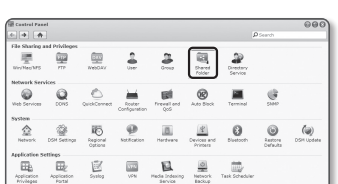
1. 以管理员(Admin)账户访问Synology NAS。
   在本例中，NAS IP 地址设置为 [**192.168.20.253**]。



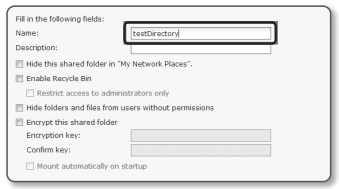
2. 如果作为管理员访问，将显示以下屏幕。单击 [**Control Panel**]。



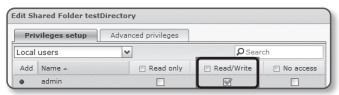
3. 在文件共享和权限菜单中单击 <**Shared Folder**>。



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。

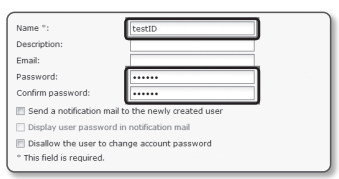


7. 在文件共享和权限菜单中单击 <**User**>。

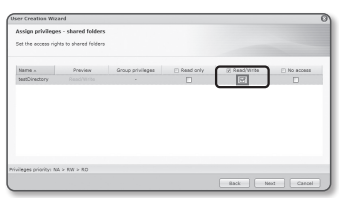


8. 单击 [**Create**] 按钮后，输入名称 (ID) 和密码。
   在本例中，名称 (ID) 设置为 [**testID**]，密码设置为 [**testID**]。

- 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。
   选中在第4阶段所创建的共享文件夹”testDirectory”的 [**Read/Write**]权限。

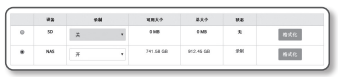


设置屏幕

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**] 按钮。
    通过使用 NAS 来完成保存。



警报输出

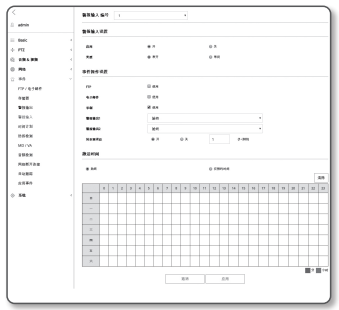
1. 从设置菜单，选择 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**警报输出**>。
3. 配置摄像机警报输出设置。
   - 如果您更改警报输出类型，监视页面上的警报输出按钮和事件设置页面上显示的警报输出类型会相应地更改。
   - 类型
     - 常开：如果将警报输出设备“开路”状态视为正常，当触发警报事件时，则变成“闭路”状态。
     - 常闭：如果将警报输出设备“闭路”状态视为正常，当触发警报事件时，则变成“开路”状态。
   - 模式：设置警报输出方式。
     - 以下是在禁用时单击警报输出按钮时操作之间的差异。
     - 脉冲：在持续时间（切换间隔）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。
4. 完成后，请单击 [**应用**]。



警报输入

可以设置警报输入类型、激活时间和工作模式。

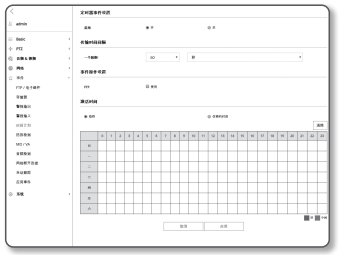
1. 从设置菜单，选择 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**警报输入**>。
3. 设置是否 <**启用**>。
4. 选择类型。
   - 常开：它通常是打开的，但是如果关闭，将触发警报。
   - 常闭：它通常是关闭的，但是如果打开，将触发警报。
5. 指定 <**激活时间**>。
   - 始终：当警报发出时，将始终检查。当警报发出时，它将在运行的模式下激活。
     - 如果设置为 <**始终**>，激活时间将无法更改。
   - 仅预约时间：警报发出时，在一周指定的一天检查指定的时间长度。当警报发出时，它将在运行的模式下激活。
   - [清除]：重置全部设置。
   - 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。
6. 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 51 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 51 页)
   - 录制：设备工作期间，可将警报设置为录制至 SD 存储卡或 NAS。。
     - 在 <**存储器**> 中将 <**设备**> 设置为 <**开**>。(第 51 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。
7. 完成后，请单击 [**应用**]。





时间计划

无论是否发生事件，均可在计划操作时间以固定时间间隔配置的传输图像设置。



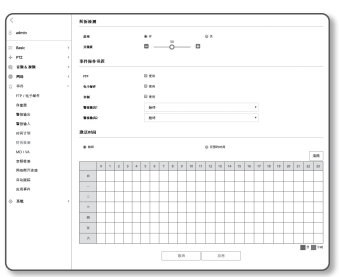
1. 从设置菜单，选择 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**时间计划**>。
3. 设置是否 <**启用**>。
4. 指定 <**传输时间间隔**>。
5. 指定 <**激活时间**>。
   - 始终：始终启动已设置的模式。
   - 仅预约时间：仅在指定的星期和时间启动已设置的模式。

> ■ 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。

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 51 页）
7. 完成后，请单击 [**应用**]。

防拆检测

可将摄像机设置为在侦测篡改时(例如,视频被遮挡或移动)，发出事件信号。

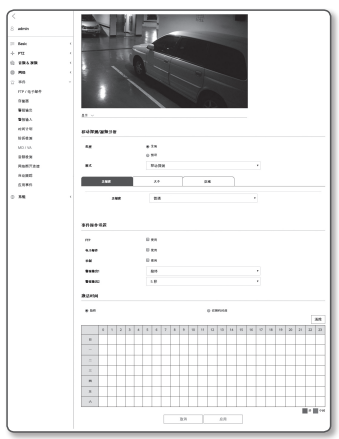


1. 从设置菜单，选择 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**防拆检测**>。
3. 设置是否 <**启用**>。
4. 设置防拆检测灵敏度。灵敏度越高，越能检测最小的拆离尝试。
5. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**> 的详细信息，请参阅 “**警报输入**”。（第 54 页）
6. 完成后，请单击 [**应用**]。

> ■ 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。
>
> ■ 如频繁生成错误警报，需逐渐降低灵敏度以减少错误警报数量。
> 如果选择较低灵敏度，则仅进行突然的篡改检测。
>
> ■ 如果使用较高灵敏度，即使是出现极小的变化，也可能会生成警报，但也可能会因物体或亮度发生变化而出现错误检测。

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 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**MD / VA**>。
3. 根据您的用途，从移动探测和智能视频分析中选择。
4. 设置 <**灵敏度**>、<**大小**> 和 <**区域**>。
   选择 智能视频分析时，还需要设置 <**分析**>。
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 54 页）
6. 完成后，请单击 [**应用**]。

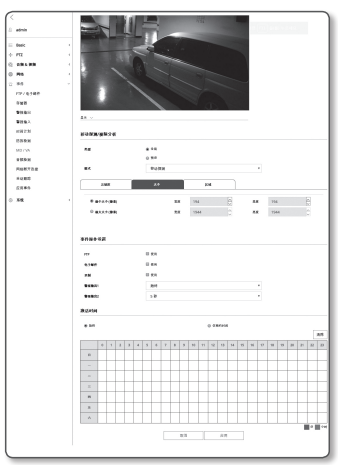
> ■ 相同的移动探测设置（灵敏度/大小/区域）适用于数字自动追踪模式。
>
> ■ 在使用之前，设置最小和最大移动大小以适合要探测的所需迁移动范围。
>
> ■ 物体的探测到大小与实际大小可能会有差异，视其形状而定。
>
> ■ 从屏幕顶部开始，最多可以显示 16 个物体。
>
> ■ 如果摄像机拍摄到较近的对象，视频分析功能可能会变弱。

- 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、照明或头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。

使用移动探测

它会探测满足灵敏度、大小和区域指定的所有条件的移动。

1. 选择移动探测模式。
2. 选择 <**灵敏度**> 选项卡以设置灵敏度级别。可以设置传感器的灵敏度以检测监视视频中脱离背景的移动。

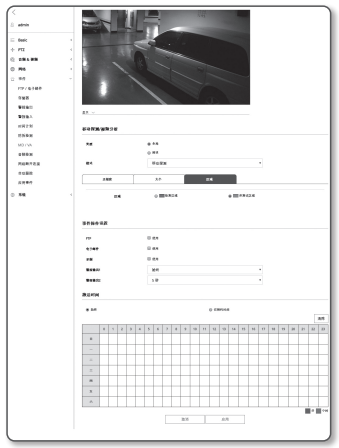


- 在可以清楚区分物体与背景的情况下，将此项设置为低灵敏度级别。在难以区分物体的相反情况下，如低照度环境中，请将此项设置为高级别。

3. 选择 <**大小**> 选项卡。
   您可以限制要探测的移动的最小/最大大小。
   - 最小大小（像素）：要设置被探测移动的最小大小，请选择 <**最小大小（像素）**>，然后使用鼠标指向屏幕上的位置并拖动至所需大小。
   - 最大大小（像素）：要设置被探测移动的最大大小，请选择 <**最大大小（像素）**>，然后使用鼠标指向屏幕上的位置并拖动至所需大小。

- 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 <**区域**> 选项卡。
   您可以指定屏幕上要包括到探测中或从探测中排除的区域。您最多可以指定 4 个区域。
   - 检测区域：将整个屏幕设置为从探测中排除，并将指定的区域添加为移动探测区域。使用鼠标在图像上选择 4 个顶点以指定探测区域。
   - 非测试区域：将整个屏幕设置为移动探测区域，并排除指定的区域作为不探测的区域。使用鼠标在图像上选择 4 个顶点以指定非探测区域。
5. 如要删除指定区域，在视频画面上单击鼠标右键，点击弹出窗口中显示的[**删除**]按钮。
6. 完成后，请单击 [**应用**]。

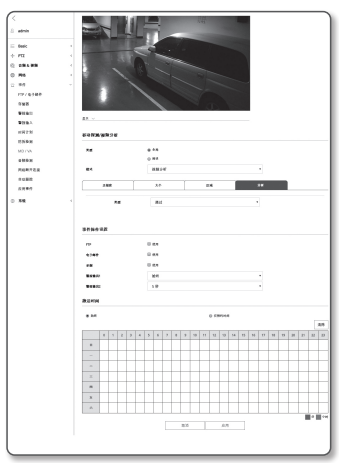


- 不同于视频分析功能，移动探测功能在屏幕上不提供覆盖标记。监视屏幕一侧会显示一个黄色的框，操作功能则记录在系统日志中。

使用智能视频分析

它会检测满足灵敏度、大小和区域以及事件条件规则指定的所有条件的事件。

1. 选择视频分析模式。
2. 设置 <**灵敏度**>、<**大小**> 和 <**区域**>。
   有关设置的详细信息，请参阅“**使用移动探测**”。（第 56 页）
3. 选择 <**分析**> 选项卡。
4. 选择视频分析类型。
   - 通过：探测通过用户设置的虚拟线的物体。
   - 进入/退出：探测进入或退出用户设置的区域的物体。
   - 出现（消失）：检测从用户定义区域或整个屏幕区域上出现或消失的移动。
5. 设置视频分析规则。
   有关设置的详细信息，请参阅“**设置视频分析规则**”。（第 57 页）
6. 完成后，请单击 [**应用**]。



设置视频分析规则

▪ 通过

1. 将类型设置为 <**通过**>。
2. 在屏幕上，单击虚拟线的首选起点和终点，然后一个弹出菜单将会出现。
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，单击四个顶点以定义检测区域，一个弹出窗口将会出现。
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。

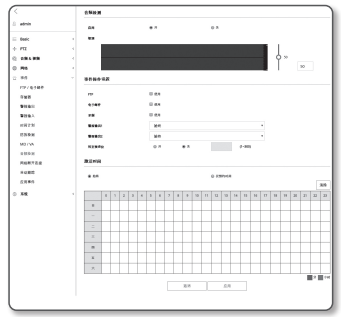
▪ 出现(消失)

1. 将分析类型设置为 <**出现 (消失)**>。
2. 在屏幕上，单击四个顶点以定义检测区域，一个弹出窗口将会出现。
3. 选择所需事件规则：
   - 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。
     在屏幕上，单击四个顶点以定义检测区域。
4. 单击 [**确认**]。
5. 如要移除所定义的规则，右击单击屏幕即可打开弹出式上下文菜单，选择[**删除**]按钮。

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 <**事件 (** 🚶 **)**> 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格为介于 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。

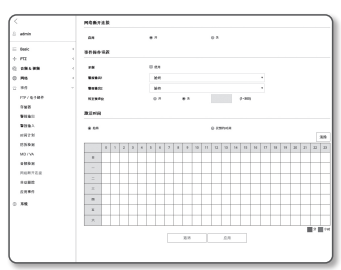
5. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅“**警报输入**”。（第 54 页）
6. 完成后，请单击 [**应用**]。

- 选择 <**音频 & 视频**> - <**音频设置**> 并为麦克风设置适当的音量作为音频输入源，以便音频探测功能能够正常工作。
- 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

断开网络连接时，将视作保存事件。

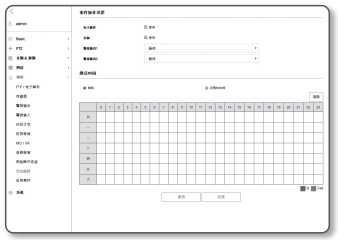
1. 从设置菜单，选择 <**事件 (** 🚶 **)**> 选项卡。
2. 单击 <**网络断开连接**>。
3. 设置是否 <**启用**>。
4. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅“**警报输入**”。（第 54 页）
5. 完成后，请单击 [**应用**]。



设置屏幕

自动跟踪

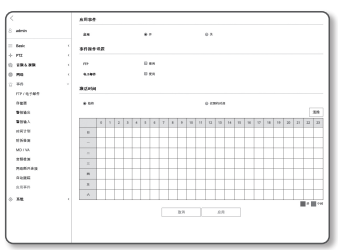
可以将系统设置为激活自动跟踪功能时生成事件信号。



1. 从设置菜单，选择 <**事件 (** 🔔 **)**> 选项卡。
2. 单击 <**自动跟踪**>。
3. 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 54 页）
4. 完成后，请单击 [**应用**]。

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 <**事件 (** 🔔 **)**> 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 54 页）
5. 完成后，请单击 [**应用**]。

系统设置

产品信息



1. 从设置菜单，选择 <**系统 (** ⚙ **)**> 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 <**中文**>。

4. 完成后，请单击 [**应用**]。

升级 / 重启



1. 从设置菜单，选择 <**系统 (** ⚙ **)**> 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：重置为出厂默认值：对所有设置信息进行初始化，包括将摄像机设置为出厂重置状态。（但不对日志进行初始化。）
     - 排除设置：选择<**网络参数和 Open SDK 除外**>复选框将对除网络设置和 Open SDK 之外的设置执行初始化操作。
       - 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 [浏览 (...)] 并指定要升级的文件。
2. 单击 [**升级**]。
3. 将弹出显示升级状态的”**升级**”进度条。
4. 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。
- 在重启系统期间, 无法访问Web Viewer。
- 可以从 Hanwha Techwin 网站下载最新版本。

备份当前设置

1. 单击 [**备份**]。
2. “**.bin**”文件格式的文件的存储路径是”**Library**” -> “**Document**” -> “ **Downloads**” 。

恢复备份设置

1. 要恢复备份设置，请单击 [**恢复**]。
2. 选择所需的备份文件。

- 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。

日志

可以检查系统日志或事件日志。



1. 从设置菜单，选择 <**系统** (⚙)> 选项卡。
2. 单击 <**日志**>。
3. 选择日志类型。
   - 访问日志：查看含有用户访问和访问时间的日志信息。
   - 系统日志：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。
   - 事件日志：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。

- 每页显示 15 个日志，最新的日志显示在顶部。
- 每一日志包含最多 1,000 条记录，当保存记录达 1,000 条之后，生成最新记录时将删除最早的日志。

设置屏幕

状态

您可以检查配置文件信息。



1. 从设置菜单，选择 <**系统 (** ⚙ **)**> 选项卡。
2. 单击 <**状态**>。
3. 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：它表明网络是否工作正常。
     - 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 [**更新**] 以刷新它。
应用更改需要一些时间。

▪ 点击[**菜单 (** ☰ **)**] - [**状态 (** 3 **)**]选项卡即可查看配置文件访问状态。

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 <**系统 (** ⚙ **)**> 选项卡。
2. 单击 <**Open SDK**>。
3. 单击 [**浏览 (** ... **)**] 按钮从用户文件夹选择 *.cap 文件。
4. 单击 [**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：将重定向至每一应用程序的应用页面。
   - 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。

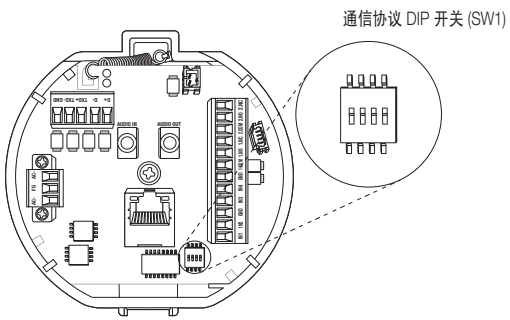
附录

DIP 开关设置

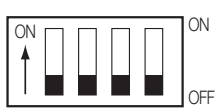
如何设置协议和 ID DIP 开关

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

• **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

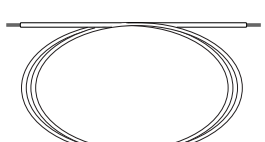


• RS-422 通信



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

故障排除

故障	解决方法
在 Safari 上通过 HTTPS 访问无插件 web 浏览器时，将不会播放任何视频。	• 在初次访问 https 时出现的验证演出窗口中，点击"查看验证证书"然后选择"连接至指定 web 查看器 IP 时始终信任"复选框。 • 如在下列消息窗口中选择"下一步"之后，web 查看器依然无法播放视频，请按命令键 + Q 退出 Safari 浏览器，再次访问并执行上述步骤。
无法使用Web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IP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。
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> 的 <MD/VA> 设置为 <启用> 但我未收到任何电子邮件通知，甚至发生了分析事件也是如此。	• 按以下顺序验证设置 ： A. 检查 <日期和时间> 设置。 B. <MD / VA> 应设置为 <启用>。 C. 检查 <事件设置> 菜单的 <电子邮件> 选项是否选择为使用。
即使我未使用 <MD / VA>，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。

故障	解决方法
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。
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 <设置> → <事件> → <存储器> 菜单中，再次格式化内存卡。
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。 • 检查在未对已存或使用过的默认文件夹进行格式化前，是否以其他用户进行连接。 • 确认使用了建议的 NAS 设备。

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

LGPL SW

Component Name	License	URL
gLibc	LGPL 2.0	
Inetutils	LGPL 3.0	
neon-0.29.6	LGPL 2.0	http://www.webdav.org/neon/

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lighttpd-1.4.35	BSD 2.0	http://www.opensource.org/licenses/bsd-license.html
MiniUPnP Project Client	BSD 2.0	
pppd-2.4.7	BSD 2.0	http://opensource.org/licenses/BSD-3-Clause

lighttpd is a secure, fast, compliant, and very flexible webserver that has been optimized for high-performance environments. It has a very low memory footprint compared to other webservers and takes care of cpuload. Its advanced feature-set (FastCGI, CGI, Auth, Output-Compression, URL-Rewriting and many more) make lighttpd the perfect webserver-software for every server that suffers load problems. Simple Network Management Protocol (SNMP) is an Internetstandard protocol for managing devices on IP networks. It is used mostly in network management systems to monitor the devices attached to the network for conditions that need administrative attention. Net-SNMP is a suite of applications used to implement SNMP v1, SNMP v2c and SNMP v3 using both IPv4 and IPv6. For more additional information, send email to help.cctv@hanwha.com.

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- Version 1.1

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It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

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

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T-License [License Agreement for Source Code of T-Kernel]

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

Article 1. Scope of License Agreement

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

Article 2. Definition

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

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

3. "Hardware-dependent Part" means the part of the Source Code which depends on hardware and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.

4. "Compiler-dependent Part" means the part of the Source Code which depends on compiler and needs to be changed when the Source Code is ported and operated on the target hardware, and is designated and separated as such part.

5. "Header File" means the part of the Source Code which contains definitions necessary to develop application programs.

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

7. "Similar Hardware to T-Engine Hardware" means any hardware (including software which emulates hardware) other than that defined in Article 2.6 above, on which the T-Kernel can be operated.

8. "Ported Source Code" means a source program produced from the Source Code by modifying only its Hardwaredependent Part and/or Compiler-dependent Part to enable it to be operated on the T-Engine Hardware or the Similar Hardware to T-Engine Hardware. The Ported Source Code which is registered with T-Engine Forum shall be included in the Source Code.

9. "Modified Source Code" means a source program modified from the Source Code for the purpose of improving its performance, increasing or decreasing its function, and the like. The Ported Source Code shall not be included in the Modified Source Code.

10. "Binary Code" means an executable code form which is created by compiling programs, which include all or part of the Source Code or the Modified Source Code.

11. "Derivative Work" means the Modified Source Code or the Binary Code.

12. "Embedded Product" means any product which operates with executable code form of the Source Code, the Modified Source Code or the Binary Code loaded on its hardware.

13. "End User" means a consumer who uses the Embedded Product.

14. "System Developer" means any person who develops the Embedded Product by itself or has a third party develop the same, and provides, whether with or without payment, the End User with the Embedded Product.

15. "Distributor of Modification" means any person who produces the Modified Source Code and, whether with or without payment, distributes the same to any third party.

16. "Patch for Modification" means a difference, program, system, or the like in order to create the Modified Source Code from the Source Code or the Binary Code thereof.

17. "Vicarious Execution of Patch Processing" means vicarious execution service to create the Modified Source Code applying the Patch for Modification to the Source Code or the Binary Code thereof.

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2. to transmit a work to the general public through the Internet communication, broadcasting, and the like automatically in response to a request from the public; and

3. to distribute a copy of a work to the general public or a large number of specific persons.

Article 3. Copyright

1. The copyrights of the Source Code shall be owned by Ken Sakamura.

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1. As provided for in this Article, T-Engine Forum shall provide, and grant a license to use, the Source Code free of charge to any person who has taken the necessary procedure for registration as prescribed by T-Engine Forum and agreed to the T-License.

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2. to run the Source Code provided by T-Engine Forum hereunder for its own research, development and the like.

3. to run the Source Code modified in accordance with the provision of Article 4.3 (1) above for its own research, development and the like.

4. to distribute the Binary Code created from the Source Code provided by T-Engine Forum hereunder or from the Source Code modified in accordance with the provision of Article 4.3 (1) above.

4. In accordance with the license granted under Article 4.1 above, the System Developer may perform the following acts:

1. to perform any and all acts set forth in the Article 4.3 above.

2. to develop and manufacture the Embedded Product containing the Binary Code, and, whether with or without payment, provide the End User with the same and make the Binary Code available to the End User on the Embedded Product.

5. The Source Code User and the System Developer shall be obligated to give a notice that the Source Code is used, in such a way as separately specified by T-Engine Forum, when they use the Source Code or the Binary Code, or make the Binary Code available for the End User on the Embedded Product.

Article 5. Distribution of Modified Source Code

1. Any of A- members of T-Engine Forum may become the Distributor of Modification by obtaining the approval of T-Engine Forum through the registration procedure as prescribed by the Forum provided that only the department of the A- member which has taken the registration procedure may distribute the Modified Source Code in such a way as provided for in this Article as long as it holds the Amembership.

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

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

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

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

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

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

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

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

Article 6. Distribution and Registration of the Ported Source Code

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

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

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

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

3. Any member of T-Engine Forum who requests the distribution mentioned in the preceding paragraph shall accede to the following conditions:

1. The member shall confirm that the object hardware is the T-Engine Hardware or the Similar Hardware to T-Engine Hardware.

2. The member shall provide T-Engine Forum with a complete set of operational environment for the object hardware and T-Kernel free of charge when requesting the distribution.

3. The member shall submit test results of the Ported Source Code to T-Engine Forum when requesting the distribution.

4. In the event that T-Engine Forum accepts the request mentioned in Article 6.2, T-Engine Forum shall register and distribute the Ported Source Code as the Source Code for T-Kernel. Provided, however, that the Ported Source Code may be treated in the same way as the Modified Source Code until the time of registration hereunder.

5. The provision set forth in Article 3 shall apply to the Ported Source Code registered in accordance with this Article.

Article 7. Use for Other Purpose

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

Article 8. Limited Warranty

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2. In case of breach of this License Agreement by a member of T-Engine Forum, T-Engine Forum may take appropriate measures against the member; for example, the member is disqualified from membership, depending on what kind of breach has been committed by it.

3. Any legal dispute which may arise in relation to any breach of this License Agreement shall be subject to the exclusive jurisdiction of the Tokyo District Court.

Article 11. Governing Law and Language

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2. This License Agreement is executed in both Japanese text and English text provided that the Japanese text shall govern the interpretation and performance of this License Agreement.

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Iperf performance test

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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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