网络摄像机
用户手册

SNB-6004F



CE

SAMSUNG

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. 请您用干布清洁本机器。
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. 本产品专门由所列出的标有“Class 2”的电源装置供电，并且额定交流电压为 24 伏（50/60 赫兹），最小电流为 0.4 A；或者额定直流电压为 12 伏，最小电流为 0.4 A。

概述

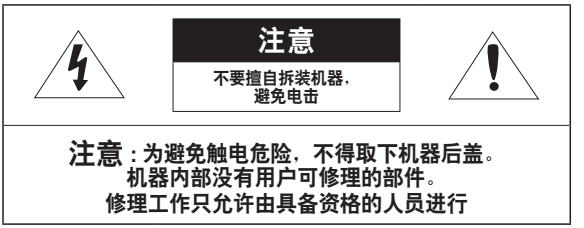
警告

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

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

为了避免造成人身伤害，必须按照安装说明牢固地把本设备固定在墙壁/天花板上。

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。

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。

产品内有害物质信息

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

○：部品中有毒有害物质含量在〈含量标准〉的标准值内。

×：部品中有毒有害物质含量超出〈含量标准〉的标准值。

本表格表明机器内部含有有害物质，数据是根据部件类型，由部件制作商提供并在三星内部验证后做成的。
某些部品包含的有害物质，按照现在的技术基准不能替代，三星一直在为改善此项而努力。

概述

请仔细阅读以下建议的安全预防措施。

- 请勿将本设备放置于不平的表面上。
- 请勿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。

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。

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产品特色

- **全高清视频质量**
- **多流**
  本网络摄像机可以同时使用不同的 CODEC、采用不同的分辨率和质量来显示视频。
- **基于 Web 浏览器的监视**
  使用互联网 Web 浏览器在本地网络环境中显示图像
- **警报**
  在发生事件时，视频发送到用户注册的电子邮件地址或 FTP 服务器，或者保存到微型 SD 卡或 NAS 中，或者向警报输出端子发送信号。
- **防拆检测**
  在视频监视上检测拆离尝试。
- **移动探测**
  从摄像机的视频输入检测移动。
- **智能视频分析**
  分析视频以从摄像机的视频输入检测指定条件的逻辑事件。
- **面部探测**
  从摄像机的视频输入探测面部。
- **音频探测**
  检测高于用户指定的特定音量的声音。
- **智能编解码器**
  采用自适应方式对摄像机视野的一部分应用编解码器，以提高用户指定区域的质量。
- **自动检测断开的网络**
  检测网络断开连接，检测到便触发事件。
- **符合 ONVIF**
  本产品支持 ONVIF Profile-S。
  有关详细信息，请参阅 www.onvif.org.

ONVIF
Driving network video through global standardization

概述

推荐 PC 技术规格

- CPU：英特尔酷睿 2 双核 2.4 GHz 或更高（使用 1920x1080@30 fps）
  英特尔酷睿 i7 2.8 GHz 或更高（使用 1920x1080@60 fps）
  - Web 插件针对 SSE 4.1 指令集进行了优化。
- 分辨率：1280X1024 像素或更高（32 位颜色）
- RAM：2GB 或更大
- 支持的操作系统 : Windows XP / VISTA / 7 / 8 / 8.1, MAC OS X 10.7 ~ 10.10
- 支持的浏览器 : Microsoft Internet Explorer（版本 8~11），
  Mozilla Firefox（版本 9~35），Google Chrome（版本 15~40），
  Apple Safari（版本 8.0.2（Mac OS X 10.10）、7.0.6（Mac OS X 10.9）、6.0.2（仅限 Mac OS X 10.8、10.7）、5.1.7）※ 仅限 Mac OS X
  - 只在桌面模式下支持 Windows 8。
  - 既不支持测试版，也不支持开发者版，仅支持在公司官方网站发布的正式版本。
  - 为了实现 IPv6 连接，建议使用 Window 7 或更高版本的操作系统。
  - 对于 Mac OS X，只支持 Safari 浏览器。
- 显存：256MB 或更大

  - 如果显卡的驱动程序未正确安装或不是最新版本，则视频可能无法正确播放。
  - 对于至少涉及 2 个监视器的多监视系统，播放性能可能会下降，具体视系统而定。

建议的 MICRO SD/SDHC/SDXC 存储卡规格

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

NAS 建议规格

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

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

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

概述

随机提供的物品

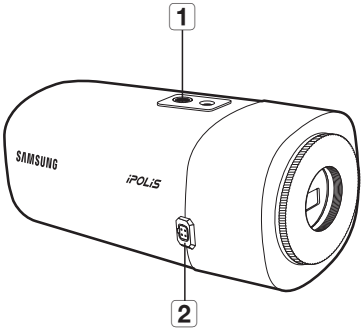
请检查产品包装内是否已包括摄像机和所有附件。

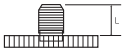
外观	项目名称	数量	说明
	摄像机	1	
	说明手册, Installer 软件 CD	1	
	简介	1	
	保修卡	1	
	用于测试显示器的电缆	1	用于测试摄像机至便携式显示设备的连接
	5 位置接线端子	1	用于警报输入/输出端子

- SFP 模块和光纤传输转换器可单独购买。
  请根据光纤传输速率选择 100 Base-FX 或 1000 Base-FX SFP/光纤传输转换器。

简图

前面



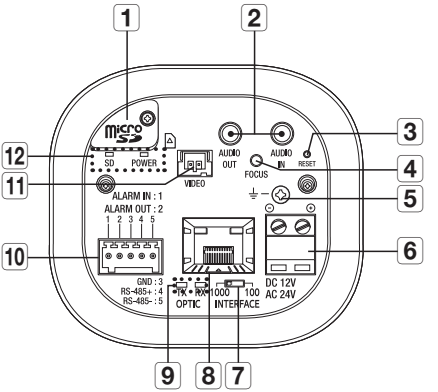
项目	说明
1 安装支架螺钉孔	用于将摄像机固定到安装支架上。 ■ 螺钉尺寸：这是用于将摄像机固定到支撑表面的螺丝的规格。 1/4 英寸 - 20 UNC 长度：4.5±0.2 毫米（ISO 标准）或 0.197 英寸（ASA 标准） 
2 自动光圈镜头连接器	用于电源和输出信号控制镜头光圈。

■ 用擦镜布或蘸有乙醇的布块轻轻擦拭透镜去除表面脏污。

■ 未随附安装支架。
有关使用安装支架的更多信息，请参阅产品的文档。

概述

背面



项目	说明	
1 **Micro SD 存储卡槽**	用于安装 Micro SD 存储卡。	
2 **音频输出端子**	AUDIO OUT	用于连接到扬声器。
	AUDIO IN	用于连接到麦克风。
3 **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。	
4 **焦点调整按钮**	该按钮会自动调节图像的焦点。	
5 **照明保护性接地端口**	用来在外部安全地断开照明电路以保护摄像机。	

项目		说明	
6	电源端口	用于插入电源线。	
7	光纤传输速率控制开关	选择光纤传播速率。(100 Base-FX/1000 Base-X)	
8	SFP 光纤模块插槽	此插槽是通过 SFP 模块实现光纤传输连接的终端（LC 型）。	
9	光纤状态指示灯	TX/RX On	如果 SFP 模块已插入且已通过光缆连接至光纤连接器 即使未连接局域网线缆，状态指示灯可能依然会亮起。（第 131 页）
		TX/RX Off	此时 SFP 模块未插入
		TX On/RX Off	此时仅 SFP 模块已插入，但未连接线缆
10	警报 I/O 端口	ALARM IN	用于连接警报输入传感器或外部日夜传感器。
		ALARM OUT	用于连接警报输出信号。
		GND	用于连接地线。
		RS-485+	RS-485 数据线
		RS-485-	RS-485 数据线
11	测试显示器输出	用于测试监视视频输出的输出端口。使用测试监视器电缆来连接至移动显示器并检查测试视频。	
12	SD，电源指示灯	SD	开：插入了存储卡并且能正常使用。 闪烁 ：无法录制，空间不足或插入异常。 关：摄像机关闭、摄像机正在重新启动、没有插入存储卡或录制已关闭。
		POWER	开：电源已打开 关：电源已关闭

■ RS-485 端口只用于控制外部云台或解码器的旋转，不支持与外部RS-485控制键盘连接。

安装与连接

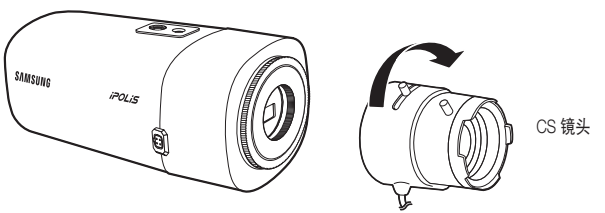
安装镜头

在安装前要断开电源。

- 产品包装不包括 C/CS 型镜头和 C 型支架转接器。
  本产品只能与百万像素镜头一起使用。

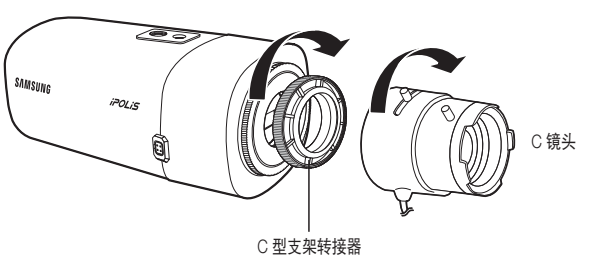
在摄像机上安装 CS 镜头

顺时针转动 CS 镜头以将其接上。



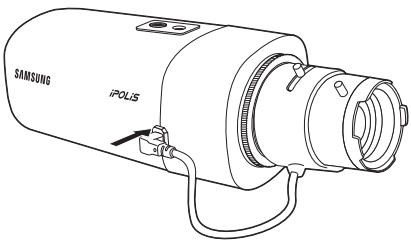
在摄像机上安装 C 镜头

顺时针旋转 C 型支架转接器，然后顺时针旋转 C 型镜头。



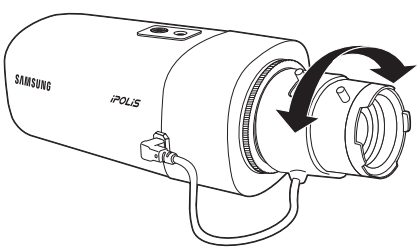
连接自动光圈镜头连接器

将镜头的光圈连接器插入摄像机连接槽。



对焦

选择要拍摄的目标，转动镜头的缩放杆以调整放大倍数，然后对焦镜头以使目标清晰显示。



■ 在使用镜头的缩放杆调焦后，按下摄像机背部的 [FOCUS] 按钮以将镜头调整得更清晰。

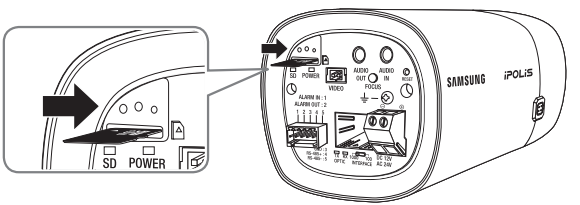
安装与连接

插入/取出 MICRO SD 存储卡

- 请先从摄像机拔下电源线，再插入 Micro SD 存储卡。
- 请勿在 Micro SD 存储卡倒放时用力插入。
  可能会损坏 Micro SD 存储卡槽。

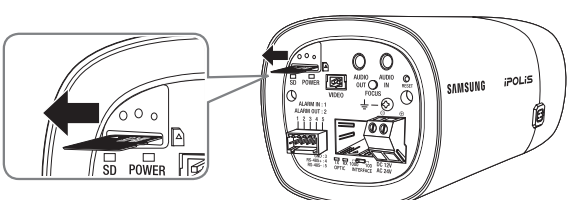
插入 Micro SD 存储卡

请按图中所示箭头方向推 Micro SD 存储卡。



取出 Micro SD 存储卡

轻轻地按压存储卡露在外面的一端，依图示的方式从拆槽中弹出存储卡。



- 太用力按 Micro SD 存储卡可能会导致存储卡从卡槽中松脱后猛然弹出。
- 移除微型 SD 存储卡之前，关闭摄像机或转到 <**存储器**>，关闭设备，然后按 [**应用 (** 应用 **)**] 按钮。（第 96 页）
- 如果关闭摄像机或取出 Micro 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 Micro 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。

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

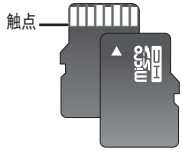
建立将 4GB ~ 64GB 的存储卡与本摄像机配合使用。

回放性能可能受存储卡速度的影响，因此，请使用高速存储卡。

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

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

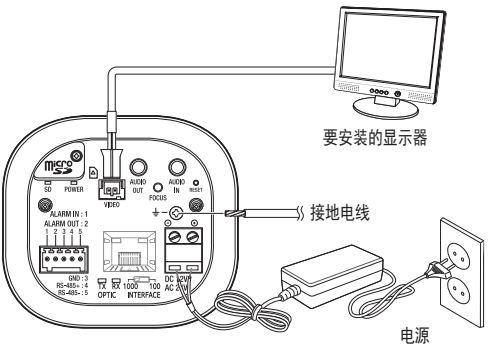
记忆卡组件



Micro SD/SDHC/SDXC

安装与连接

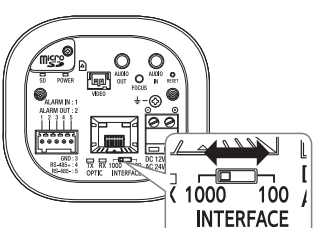
与其他设备连接



■ 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。

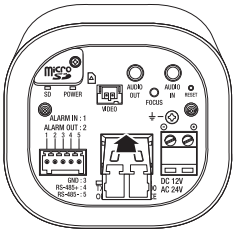
如何连接 SFP 模块

1. 使用摄像机背面的光纤传输速率控制开关选择光纤传输速率 (100/1000)。

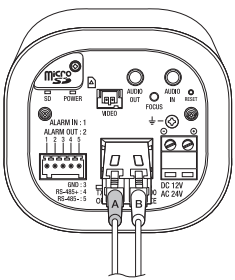


■ 出厂时，光纤通信传输速率开关被设置为 1000。

2. 插入适合当前速率的 SFP 模块。



3. 将 LC 型光缆一端（AB）连接至 SFP 模块。
4. 将光缆另一端（BA）连接至与 SFP 模块匹配的光纤转换器。



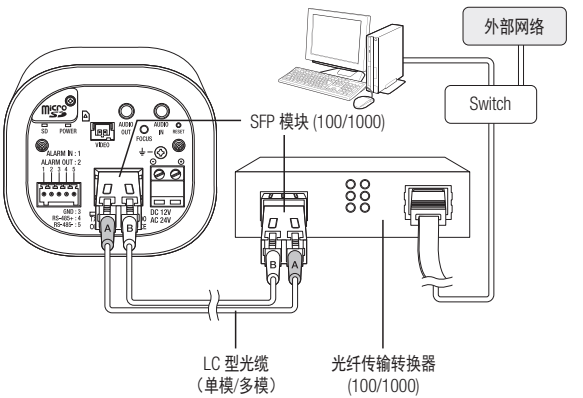
- SFP 模块、光缆和光纤传输转换器均可单独购买。
- 建议使用以下制造商生产的 SFP 模块。
  - Comnet、IFS、Skylane、AVAGO、CISCO
- 用光缆交叉连接 SFP 模块和光纤转换器（AB/BA）。

- 应仅在摄像机电源关闭时连接或断开 SFP 模块。
- 光纤传输速率的更改仅在摄像机重启后方可应用。
- 当摄像机正在运行时，请勿连接或断开 SPF 模块。
- 如果光缆弯折，可能无法建立通信连接。
- 请勿直视光缆，否则可能造成视力损害。

安装与连接

以太网连接

请通过 SFP 模块（LC 型）连接光纤传输线缆，然后连接至本地网络或互联网。



电源

使用螺丝刀将每股电源线 (+, –) 连接至摄像机的相应电源端口。

- 在连接电源线时，切勿弄反极性。
- AC24 可以通过非极性联合的方式连接。
- 如果要连接外部设备，则必须先关闭外部设备再继续进行。

每个型号的电源电缆规格

对于 DC 12V 输入:

股线类型 (AWG)	#22	#20	#18
电缆长度（最大）	20米	32米	50米
	24米	38米	60米

对于 AC 24V 输入:

股线类型 (AWG)	#22	#20	#18
电缆长度（最大）	34米	55米	88米

光纤传输以太网标准

项目	内含物
以太网：光纤传输	SFP（LC 型）
光纤传输：以太网物理层	100 Base-FX、1000 Base-X
光纤传输：默认速率	1000Mbps
光纤传输：以太网标准	支持 IEEE 802.3u、IEEE 802.3z

使产品接地

使用螺丝刀将接地线连接到位于电源输入端子上面的接地端子。

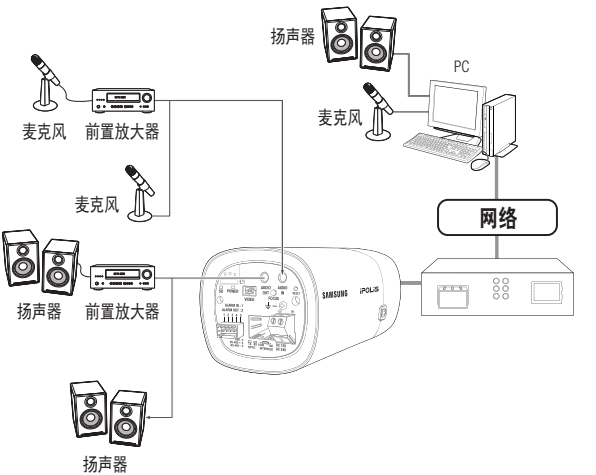
- 接地可让产品免遭电涌或闪电破坏。
- 接地时，请确保关闭产品的电源。

建议的接地电线

- 长度：不超过 3M
- 容量规格：18 AWG 或更大
  示例）UL1007 AWG 18/16、UL1015 AWG18/16/14/12 或 UL2468 AWG18/16/14

安装与连接

连接音频输入/输出



1. 将摄像机的音频输入端口连接至麦克风或麦克风连接至的扩音器的线性输出端口。

■ 由于内置了麦克风，可以使用内置麦克风而不是外置麦克风。

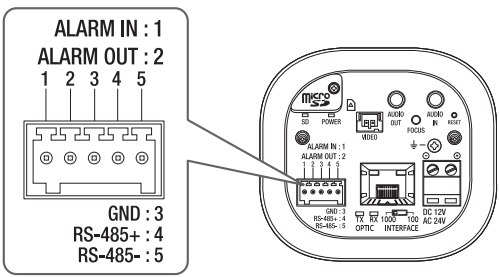
2. 将摄像机的音频输出端口连接至扬声器或扬声器连接至的扩音器的线性输入端口。

3. 检查音频输入的规格。

- **音频编解码器**
  - 音频输入：G.711 PCM（比特率：64kbps/采样频率：8kHz), G.726 ADPCM（比特率：16Kbps, 24Kbps, 32Kbps, 40Kbps/采样频率：8kHz)
  - 音频输出：G.711 PCM（比特率： 64kbps/采样频率：8kHz)
- **全双工音频**
- **音频输入**：单信号线路输入（最大2.4 Vpp）
- **音频输出**：单信号线路输出（最大2.4 Vpp）
- **线路输出阻抗**：600Ω

连接到 I/O 端口

将警报 I/O 信号连接到后面端口盒的相应端口。



- ALARM IN：用于连接警报输入传感器或外部日夜传感器。
- ALARM OUT：用于连接警报输出信号。
- GND：用于连接地线。
- RS-485+：RS-485 接收器 (+) 的通信端口。
- RS-485-：RS-485 接收器 (–) 的通信端口。

安装与连接

连接外部 RS-485 设备

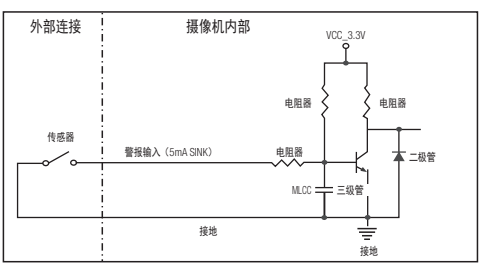
使用 [**RS-485 +, -**] 端口连接摄像机与外部设备。
您可以通过 RS-485 通信来控制摄像机的平移/倾斜操作。

- 对于 RS-485 通信，建议使用 GND 连接。如果您遇到通信故障，适当地连接 GND 引脚可以更正摄像机与外部设备之间的 GND 电平。

连接外接传感器

将传感器每根信号线（2 线）的一股线连接至 [**ALARM IN**] 端口，并将另一股线连接至 [**GND**] 端口。

警报输入线路图

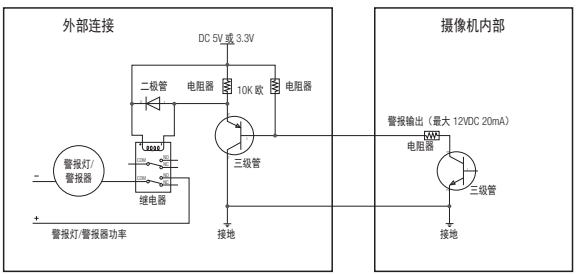


要连接警报输出

如果使用开路集电极方法连接超出电压和电流规格的设备（如闪光灯和警报器），它可能导致故障。

在连接超出电压和电流规格的设备时，参考下面的警报输出连接线路图。

警报输出线路图



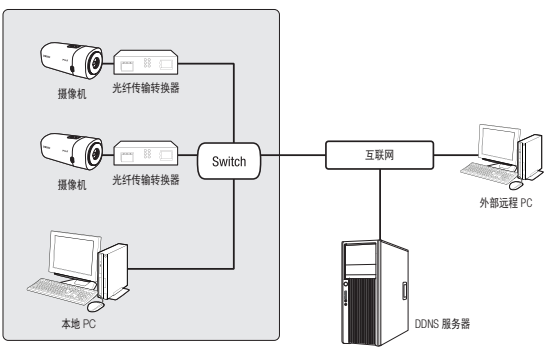
网络连接和设置

可根据您的网络配置来设置网络的设定。

将摄像头与局域网直接连接

连接局域网内的本地 PC 和摄像头

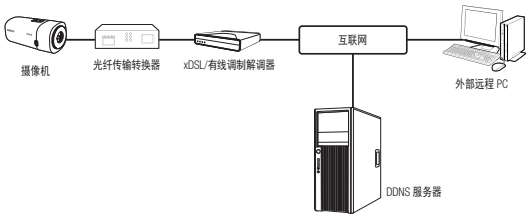
1. 启动本地 PC 上的网络浏览器。
2. 在浏览器的地址栏中输入 IP 地址。



<局域网>

- 在正确设置防火墙或端口转发前，局域网外部的远程互联网 PC 可能无法连接安装于内部网的摄像头。
  在此情况下，联系网络管理员解决问题。
- 在IP安装程序中，您可以使用初始密码“**4321**”来设置IP地址、子网掩码、网关、HTTP端口、VNP端口或IP类型。在更改网络接口后，为了提高安全性，请访问Web查看器并更改密码。
- 根据出厂默认值，会自动从 DHCP 服务器分配 IP 地址。
  如果没有可用的 DHCP 服务器，则会将 IP 地址设置为 192.168.1.100。
  要更改 IP 地址，请使用 IP Installer。
  有关 IP Installer 使用的详细信息，请参阅“**静态 IP 设置**”。（第 33 页）

将摄像机直接连接至基于 DHCP 的 XDSL/有线电视网调制解调器

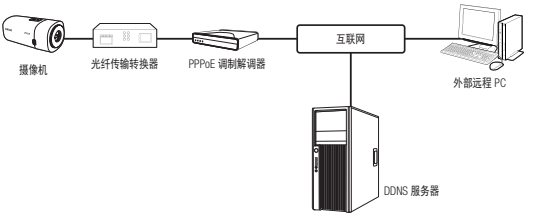


1. 直接将用户 PC 与网络摄像机连接。
2. 运行 IP Installer 并更改摄像机的 IP 地址，以便可以使用桌面上的 Web 浏览器连接至互联网。
3. 使用互联网浏览器连接至 Web Viewer。
4. 移至 [**Setup**] 页面。
5. 移至 [**Network**] – [**DDNS**] 并配置 DDNS 设置。
6. 移至 [**Basic**] – [**IP & 端口**]，并将网络类型设置为 [**DHCP**]。
7. 将摄像机（已从您的 PC 上拔下）直接连接至调制解调器。
8. 重新启动摄像机。

- 有关配置 DDNS 设置，请参阅 “**DDNS**”。（第 85 页）
- 有关注册 DDNS 设置，请参阅 “**注册 DDNS**”。（第 86 页）
- 请参阅 “**IP & 端口**” 部分，了解如何设置IP。（第 66 页）

网络连接和设置

直接将摄像机连接到 PPPoE 调制解调器

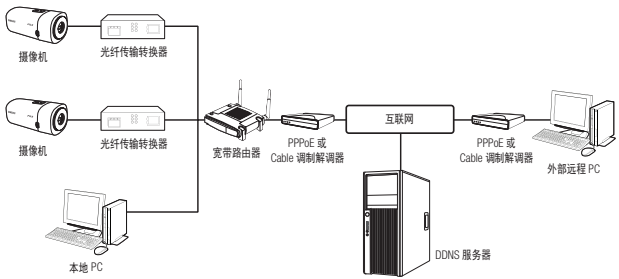


1. 直接将用户 PC 与网络摄像机连接。
2. 运行 IP Installer 并更改摄像机的 IP 地址，以便可以使用桌面上的 Web 浏览器连接至互联网。
3. 使用互联网浏览器连接至 Web Viewer。
4. 移至 [**Setup**] 页面。
5. 移至 [**Network**] – [**DDNS**] 并配置 DDNS 设置。
6. 转到 [**Basic**] - [**IP & 端口**] 设置页面，将网络类型设置为 [**PPPoE**]，然后输入网络服务的 ID 和密码。
7. 将摄像机（已从您的 PC 上拔下）直接连接至调制解调器。
8. 重新启动摄像机。

- 有关配置 DDNS 设置，请参阅 “**DDNS**”。（第 85 页）
- 有关注册 DDNS 设置，请参阅 “**注册 DDNS**”。（第 86 页）
- 请参阅 “**IP & 端口**” 部分，了解如何设置IP。（第 66 页）

将摄像头与使用 PPPoE/CABLE 调制解调器的宽带路由器连接

适用于小型网络环境，如家庭、SOHO 以及普通的商店。



配置连接到宽带路由器

在配置连接到宽带路由器的本地 PC 的网络设置时，遵循以下说明。

- 选择：<**网上**> → <**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) 若宽带路由器的地址 (LAN IP) 为 192.168.1.1
IP 地址：192.168.1.100
子网掩码：255.255.255.0
默认网关：192.168.1.1

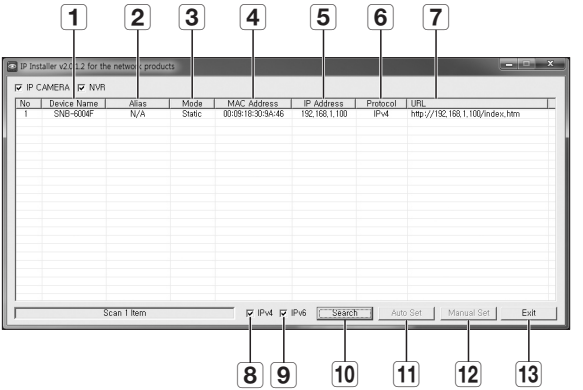
例2) 若宽带路由器的地址 (LAN IP) 为 192.168.0.1
IP 地址：192.168.0.100
子网掩码：255.255.255.0
默认网关：192.168.0.1

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

- 关于宽带路由器的地址，请参见产品文档。
- 如需宽带路由器的正向端口的更多信息，请参阅 "**路由器端口设置**"。(第 38 页)

网络连接和设置

在 IP INSTALLER 中使用的按钮



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

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

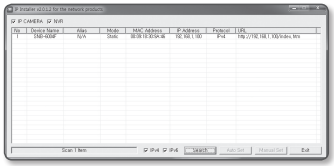
■ 对于 IP Installer，请仅使用在安装 CD 中提供的版本，或者最新版本（如果可以获得）。可以从 Samsung 网站下载最新版本。

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。

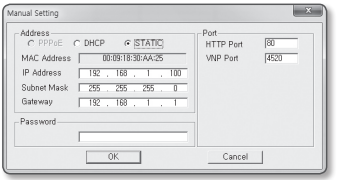
■ 对于以 IPv6 设置为基础的摄像机，这些按钮将呈灰色，因为摄像机不支持此功能。



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**> 显示在预设值中。

网络连接和设置

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

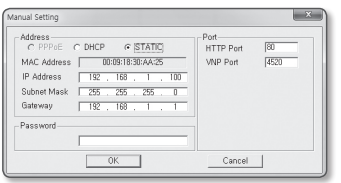


■ 只有在未选中 DHCP 的情况下才能设置 IP 相关参数。

如果不使用宽带路由器

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

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



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

■ 如果您要更改密码，请参考用户设置的“**管理员密码更改**”。(第 63 页)

6. 单击 [**OK**]。
   将完成手动网络设置。

如果使用宽带路由器

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



- 设置可能因连接的宽带路由器型号而异。
  有关详细信息，请参阅适用路由器的用户手册。
- 如需宽带路由器的正向端口的更多信息，请参阅 **“路由器端口设置”**。（第 38 页）

如果宽带路由器连接了多个摄像机

彼此清楚地配置 IP 相关设置和端口相关设置。

例)

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

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

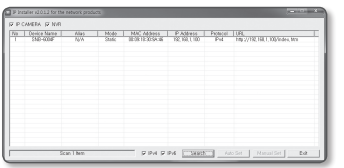
网络连接和设置

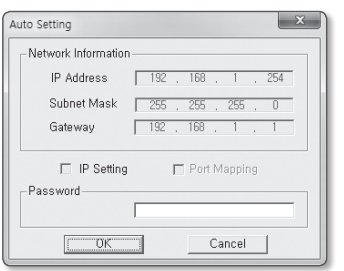
自动网络设置

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

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

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





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

■ 如果您要更改密码，请参考用户设置的“**管理员密码更改**”。（第 63 页）

4. 单击 [**OK**]。
   将完成自动网络设置。

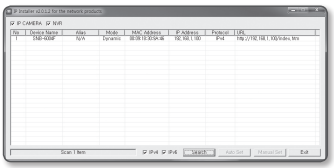
动态 IP 设置

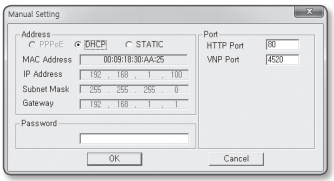
动态 IP 环境设置

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

检查动态 IP

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





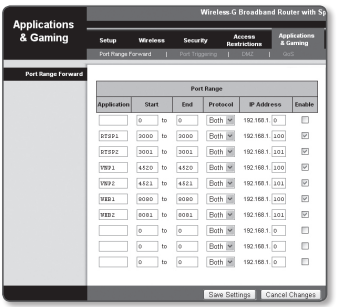
网络连接和设置

路由器端口设置

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

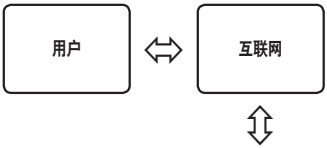


- 以上样本说明基于 CISCO 的宽带路由器。
- 设置可能因连接的宽带路由器型号而异。
  有关详细信息，请参阅适用路由器的用户手册。

设置多个网络摄像机的端口范围前移

- 您可通过配置网页在宽带路由器设备上设置 正向端口的规则。
- 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：



宽带路由器			
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

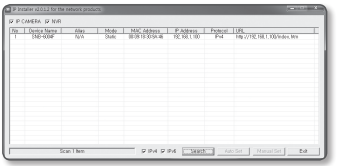
摄像机 2 (192.168.1.101)	
HTTP 端口	8081
设备端口	4521
RTSP 端口	3001

■ 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 “Setup → Network → DDNS” 菜单中将 <Samsung DDNS> 的 <Quick connect> 设置为 <**开**>。

网络连接和设置

从共享的本地 PC 连接到摄像机

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



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

从远程 PC 通过互联网连接到摄像机

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

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

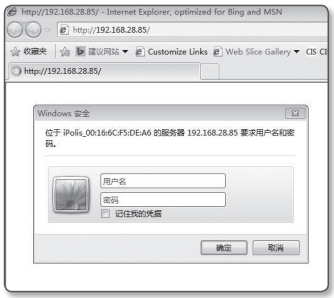
- 有关注册 DDNS 设置，请参阅 “**注册 DDNS**”。(第 86 页)

web 查看器

连接到摄像机

通常，您应该：

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



如果 HTTP 端口为除 80 以外的值

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

使用 URL

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

■ 在只有 LAN 的环境中将禁用网络连接。

web 查看器

通过 UPnP 连接

1. 运行支持 UPnP 协议的客户端或操作系统。
2. 单击要搜索的摄像机名称。
   在 Windows 操作系统中，从网络菜单中单击要搜索的摄像机名称。
   - 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. 单击要搜索的摄像机名称。
   在 Mac 操作系统中，从 Safari 的 Bonjour 选项卡单击要搜索的摄像机名称。
   - 登录窗口即显示出来。

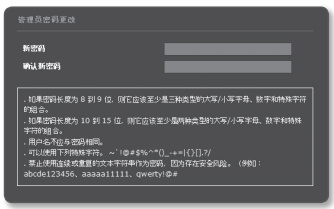
检查 DDNS 地址

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

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

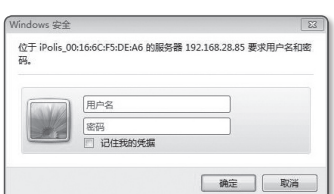


- 对于 8 到 9 位的新密码，必须至少使用下列 3 种类型：大写字母/小写字母、数字和特殊字符。对于 10 到 15 位的密码，必须至少使用上述两种类型。
  - 允许使用的特殊字符为：~`!@#$%^*()_-+={}[].?/
- 为了获得较高的安全性，建议您不要重复使用相同的字符作为密码，也不要使用连续的键盘输入作为密码。
- 如果您丢失了密码，可按住[**RESET**]按钮初始化该产品。因此请使用记事簿写下或记住您的密码以防丢失。

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。



- 访问摄像机 Web 查看器时，要特殊注意是否安全，检查一下图像数据是否加密。

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

web 查看器

安装 STW WEBVIEWER 插件

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

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

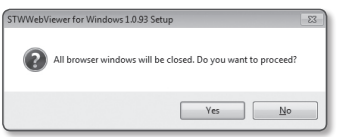


- 如果 Internet Explorer 浏览器中的插件安装文件下载状态停留在 99%，请在“工具 → SmartScreen 筛选器”中选择“释放 SmartScreen 筛选器”。

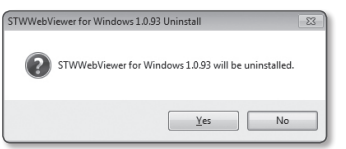
2. 在消息窗口中单击 [**Run**]。



3. 当通知窗口指示将关闭所有浏览器窗口时，单击 [**Yes**]。

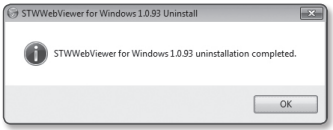


4. 如果已安装了旧版本的 Web 浏览器插件，屏幕会显示一个通知窗口以指示旧版本将被删除。
在该通知窗口中单击 [**Yes**]。



- 如果尚未安装任何 Web 浏览器插件，将跳过步骤 4 和 5。

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。



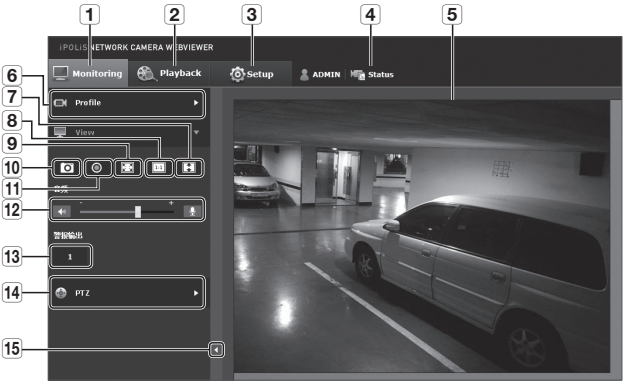
7. 单击 [**Finish**]。
STW Web 浏览器插件即完成安装。



- 在您的 Internet 浏览器中，如果在安装 STW 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。

web 查看器

使用现场屏幕



项目	说明
1 正在监视	移至监视屏幕。
2 播放	移动到您可以搜索 Micro SD 存储卡或 NAS 中保存的视频录制的屏幕。
3 设置	移至设置屏幕。
4 配置文件访问信息	您可以读取配置文件信息。
5 查看器屏幕	显示屏幕上的现场视频。 ■ 在 Viewer 屏幕中，可以使用鼠标滚轮来激活数码缩放。
6 配置文件类型	可以在 <**Basic**> 设置菜单下的 <**视频配置文件**> 中选择配置文件类型。 ■ 连接 Web Viewer 后，将会显示当前使用的配置文件的信息。
7 屏幕优化	来自摄像机的视频尺寸将放大为与 Web 浏览器尺寸一样大。

项目	说明
8 固定分辨率	不管在摄像机中配置的分辨率设置如何，系统都会将分辨率设置为 640x480。再按一次它会切换回默认分辨率。
9 全屏	将当前视频切换至显示器的最大大小。
10 捕捉	将快照保存为 .jpg 格式的图像文件。
11 手动录制	用户可以将他们的视频保存在微型 SD 存储卡中，也可以独自保存在 NAS 中。 ■ 要手动拍摄视频，请首先更改录制设置。请参阅 “**存储器**” 部分，了解如何设置录制（第 96 页）。
12 音频/麦克风控制	启用音频和麦克风音量控制。 ■ 只能控制音频音量。
13 警报输出	激活警报输出端口。
14 外部 PTZ	将外部 PTZ 连接到 RS-485 端子，并通过箭头键控制 PTZ 摄像机镜头方向。 ■ 仅当摄像机连接至与平移/倾斜兼容的接收器时，平移/倾斜操作才可用。
15 隐藏上下文菜单	左上角的上下文菜单将会消失，只留下菜单图标。

web 查看器

捕捉快照

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

- 如果您在 Windows 7 计算机上使用 IE8 时发生视频中断，请从“**工具 – Internet 选项 – 安全**”中取消选择“**启用保护模式**”。
- 如果 Windows 7 或 8 中的 IE 浏览器没有捕捉该屏幕，请使用管理员权限运行 IE 浏览器。

如何手动录制视频

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

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

适合全屏

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

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

使用音频

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。

控制 PTZ

1. 按 [**PTZ (**)] 选项卡。
2. 当屏幕上出现 PTZ 图标条时，请使用方向按钮根据您的喜好调整摄像机角度、变焦系数或聚焦。



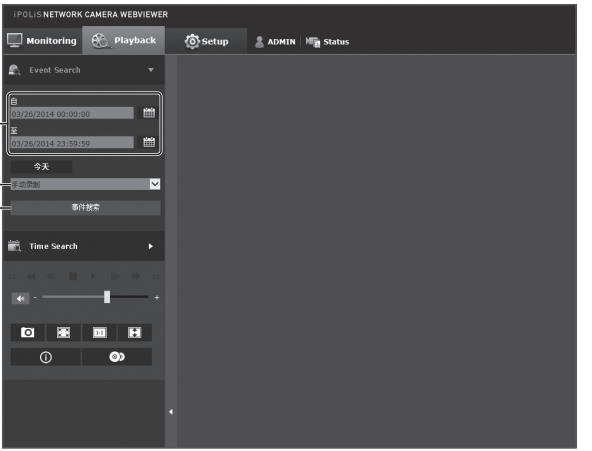
■ 有关 PTZ 使用的详细信息，请访问 "**外部 PTZ 设置**"。(第 82 页)

web 查看器

播放录制的视频

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

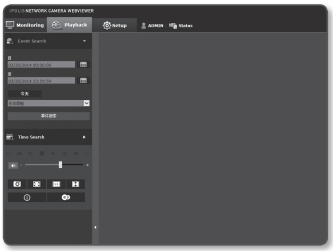
事件搜索屏幕的名称及其功能



项目	说明
1 **搜索范围设置**	为 Micro SD 存储卡或 NAS 中保存的数据设置搜索日期和时间范围。
2 **搜索事件设置**	设置想要搜索的事件类型。
3 **事件搜索**	运行事件搜索。

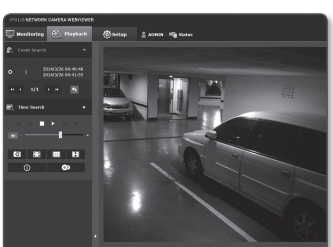
在按事件搜索后播放内容

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。



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

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



web 查看器

时间搜索屏幕的名称及其功能



项目	说明
1 时间条	通过移动时间条播放特定时间段的视频。
2 搜索日期设置	使用日历设置搜索日期。 ■ 如果这一天有数据保存到 Micro SD 存储卡或 NAS 中，则会在日历上将这一天标记为一个方框。
3 扬声器	若要收听录制视频中的语音信号（如果有），则需要在播放时激活语音信号图标。
4 屏幕优化	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。

项目	说明
8 视频信息	屏幕上将显示回放视频的时间数据。
9 备份	设置对保存在Micro SD内存卡或 NAS中的视频创建备份。 ■ 最多可设置为 5 分钟。

在按时间搜索后播放



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

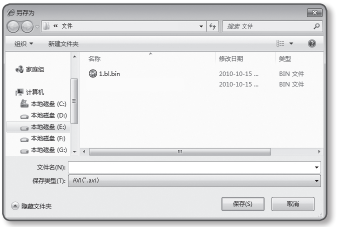
6. 先将 [**时间滑块 (▌)**] 移至视频的所需时间点再播放。
   包含标准录制文件的时间将以蓝色突出显示；包含事件录制内容的时间将以红色突出显示。

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。



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。

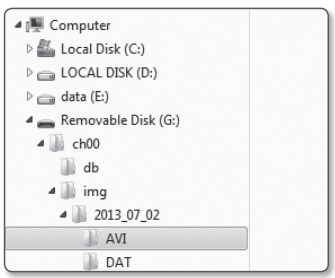
播放 AVI 文件

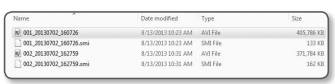
(1) Micro SD 存储卡

1. 从摄像机取出 Micro SD 存储卡。

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

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





■ 文件名以“**001_YYYYMMDD_HHMMSS.avi**”的格式开始，其中文件编号逐一递增。
YYYYMMDD_HHMMSS 表示数据保存的开始时间。

■ “**001_YYYYMMDD_HHMMSS.smi**”文件是一个字幕文件，如果它与关联 AVI 文件位于相同目录，就可以查看它。

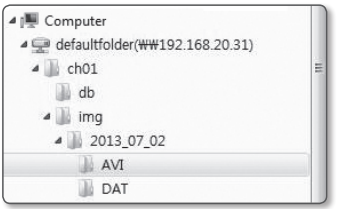
■ 每个 AVI 文件的最大录制时间是 5 分钟。

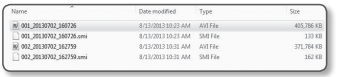
■ 如果受损，Micro SD 存储卡中的数据将无法在 Web Viewer 的 [**Playback**] 中播放。

web 查看器

(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 Micro SD 存储卡使用的目录结构相同。





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

设置屏幕

设置

在网络中，您可以设置关于摄像机、视频和音频、网络事件和系统的基本信息。

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

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

基础设置

视频配置文件

1. 从设置菜单，选择 <**Basic (** **)**> 选项卡。
2. 单击 <**视频配置文件**>。
3. 设置 <**视频配置文件连接策略**>。
   - 在更改配置文件设置时保持连接：即使在活动配置文件的设置发生更改的情况下，输出也使用相同的设置。
     如果未选中，则更改现有连接使用的配置文件会重设此类连接。



设置屏幕

4. 选择每个配置文件属性。
   如需更多信息，请参阅 **“添加/更改视频配置文件”**。（第 60 页）
5. 单击每个项目的输入框，并输入/选择所需的值。
   - 上下文菜单可能因所选的编解码器类型而异。
   - 默认配置文件：如果在使用 Web Viewer 时未选择配置文件，则会应用默认视频配置文件。
   - 电子邮件/FTP配置文件：将传送至指定的电子邮件或 FTP 站点的视频配置文件。
     - 只能将 MJPEG 编解码器设置为电子邮件/FTP 配置文件。
   - 录制配置文件：这是应用于视频录制的配置文件。
   - 音频输入：设置是否使用音频进行视频录制。
6. 根据您的情况，设置 ATC（自动传输控制）模式。
   - ATC 模式：它可以根据网络带宽的变化调整视频属性，以控制比特率。



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

比特率控制/ATC 模式	控制帧速率	控制压缩
CBR	帧速率	压缩

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

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

7. 选择“启用”或“禁用”裁切编码功能。
   如需更多信息，请参阅“**使用裁剪编码**”。（第 62 页）
   - 裁剪编码：只从全屏裁剪所选区域，然后以 <**配置文件设置**> 中指定的分辨率将其输出。
     该分辨率应不低于裁剪编码设置区域。
8. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

添加/更改视频配置文件

根据录制条件，可以添加或修改配置文件设置来适应不同的配置文件。

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

▪ “摄像机设置”中的 <**传感器**> 模式设置会改变最大可配置帧率。

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

- 压缩：指定视频的压缩率。
- 最大比特率：当比特率控制设置为 VBR 时设置视频的最大比特率。

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

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

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

- 编码优先权：可以将视频传输的优先级设置为帧速率或压缩。
- 视频组长度：当 H.264 编解码器被选择时指定一个视频序列中两个连续 I 帧之间的距离（按照多个帧）。(一个 I 帧 + 0)。
- 配置文件：可以选择 H.264 靠模方法。
- 熵编码：减少可能因编码引起的压缩损失。
- 智能编码：指定使用智能编解码器。

■ 当比特率控制值设置为 CBR 并且在“视频和音频智能编解码器”下进行配置时可以使用。(第 80 页)

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

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

什么是视频组长度?

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

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

对于 H.264 编解码器，您可以决定视频组长度。

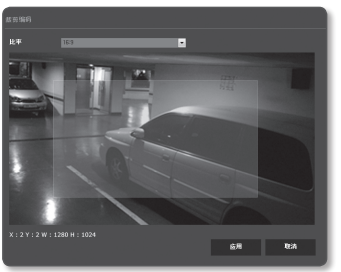
如果您使用H.264编解码器设置录制配置文件，则GOV长度将为帧率/2。

设置屏幕

使用裁剪编码

1. 选择 <**使用**>。
2. 单击 <**设置区域**>。
   “裁剪编码区域设置”窗口将弹出。
3. 选择 <**比率**>。
   - 比率：设置用户指定区域的高宽比。
     - 16:9：高宽比设置为 16:9 并尽可能接近用户指定区域。
       可支持的大小范围为 426X240 到 1280X1024，可支持的输出分辨率为 320X180、640X360、800X450 和 1280X720。
     - 4:3：高宽比设置为 4:3 并尽可能接近用户指定区域。
       可支持的大小范围为 320X240 到 1280X960，可支持的输出分辨率为 320X240、640X480、800X600、1024X768 和 1280X960。
     - 手动：设置用户指定区域的高宽比。
       可支持的大小范围为 320X240 到 1280X1024，所有可支持的输出分辨率不受限制，但 1920X1080 除外。
4. 在屏幕上拖动光标以指定裁剪编码区域。

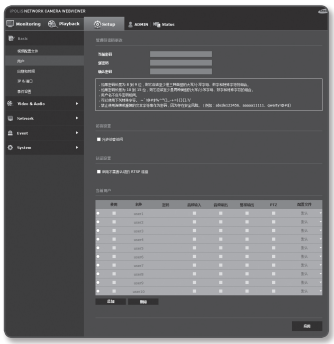




- 如果设置为 <**手动**>，由于裁剪编码区域和输出分辨率之间的高宽比不一致，输出图像可能与实际图像不同。
- 裁剪编码区域设置会根据 DIS 设置的变化而变化。如果 DIS 设置更改，请重置裁剪编码区域。

用户

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



- 出于安全考虑的原因，建议您的密码使用数字、大小写字母以及特殊字符的组合。
- 建议每三个月更改密码一次。
- 密码长度和限制如下所示。
  - 8 到 9 位字符：至少是大写、小写、数字和特殊字符中 3 种类型的组合。
  - 至少两种类型的大写字母、小写字母、数字和特殊字符的组合：10 到 15 个字符。
  - 密码应与 ID 不同。
  - 为了获得较高的安全性，建议您不要重复使用相同的字符作为密码，也不要使用连续的键盘输入作为密码。
  - 允许使用的特殊字符为：~`!@#$%^*()_-+={}[].?/
  - 在首次或者初始化后访问摄像机网页时，您将转到管理员密码设置菜单。
  - 在此菜单中，您需要先使用新密码再次登录，然后再使用摄像机网页菜单。

设置屏幕

- 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。
  ▪ 管理者可以设置音频输入/输出和警报输出。
  ▪ 配置文件：如果您选择了 <**默认**>，则您只能查看默认配置文件视频；如果选择了 <**全部**>，则您可以查看全部配置文件视频。

▪ 允许使用已注册ONVIF功能的用户限制为那些已授予许可权的用户。

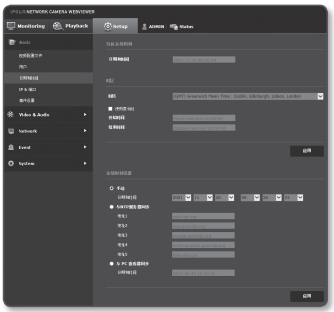
▪ 视频传输和更改视频信息：将配置文件设置为 <**全部**>，并设置 音频输入 和 音频输出。

▪ 视频传输、更改视频信息、视频输出：将配置文件设置为 <**全部**>，并根据偏好选择其余内容。

▪ PTZ控制：选择 <**PTZ**>。

4. 完成后，请单击 [**应用 (** 应用 **)**]。

日期和时间



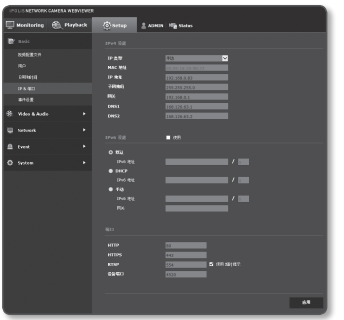
1. 从设置菜单，选择 <Basic ( )> 选项卡。
2. 单击 <**日期和时间**>。
3. 指定将应用于摄像机的时间和日期。
   - 当前系统时间：显示系统的当前时间设置。
   - 时区：指定本地基于 GMT 的时区。
   - 使用夏令时：如果选中将在指定的时间段内将时间设置成比当地时区早一小时。
     仅在应用夏令时的地区显示此选项。
   - 系统时间设置：指定将应用于您的系统的时间和日期。
     - 手动：手动指定时间。
     - 与 NTP 服务器同步：与指定的服务器地址的时间同步。
     - 与 PC 查看器同步：设置为连接计算机的时间。
4. 完成后，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

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

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



- IP 寻址系统将默认为 DHCP。如果未找到 DHCP 服务器，将自动恢复之前的设置。
- 完成编辑之后，单击 [**应用 (** **)**] 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。

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

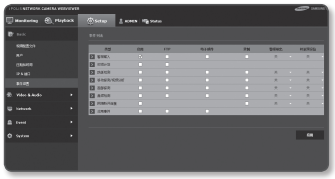
- 如果更改了 HTTP 端口，则浏览器会退出。
  此后，地址应该在 IP 后面包含新分配的 HTTP 端口。
  例) IP 地址：192.168.1.100，HTTP 端口：分配了 8080 → http://192.168.1.100:8080
  (如果将 HTTP 端口设置为 80，则不需要指定端口号)
- 建议使用RTSP和HTTPS，以便防止图像信息被还原。

6. 完成后，请单击 [**应用 (** 应用 **)**]。

事件设置

您可以轻松设置事件探测项，并移到具体设置。

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



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

设置屏幕

视频与音频设置

视频设

1. 从设置菜单，选择 <Video & Audio ( )> 选项卡。
2. 单击 <**视频设置**>。
3. 选择 <**视频源**> 模式。
   - 翻转模式：使摄像机捕捉的图像上下翻转。
   - 镜像模式：使摄像机捕捉的图像水平翻转。
4. 选择“启用”或“禁用”模拟视频输出。
5. 选择视频类型。
6. 指定隐私区域。
7. 完成后，请单击 [**应用 (** 应用 **)**]。



设置加密区域

可以指定为了您的隐私将保护摄像机视频的某些区域。

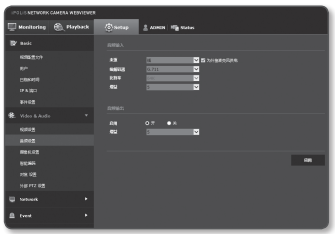
1. 将其设置为 <**开**>。
2. 完成后，请单击 [**应用 (** 应用 **)**]。
3. 使用鼠标在屏幕上选择 4 个顶点以指定区域。
4. 输入名称，选择颜色，然后单击 [**确认**]。
5. 如果想删除列表中的某个名称，请将其选中并单击 [**删除 (** 删除 **)**]。



音频设置

可以配置摄像机的音频源的 I/O 设置。

1. 从设置菜单，选择 <**Video & Audio** ( )> 选项卡。
2. 单击 <**音频设置**>。
3. 设置音频输入值。
   - 来源：设置音频输入。
     - 线：将电缆连接到音频设备。
     - 内置麦克风：摄像机中内置的麦克风。
     - 外部麦克风：3.5 pi(¢) 插孔类型外部麦克风。



   - 为外部麦克风供电：如果连接的外部麦克风没有独立的电源，请选中此选项以将摄像机设置为向连接的外部麦克风供电。如果选择了 <**外部麦克风**>，则此选项可用。
   - 编解码器：指定音频编解码器。
     - G.711：一种音频编解码器标准，它使用 64 Kbps PCM（脉冲编码调制）编码。ITU 标准音频编解码器，对于在 PSTN 网络或通过 PBX 进行的数字语音传输而言已经足够。
     - G.726：ITU 标准音频编解码器，将可变比特率 40/32/24/16 Kbps 的 ADPCM（自适应差分脉冲编码调制）应用于 64 Kbps PCM 编码。
   - 比特率：如果使用 G.726 编解码器，则设置比特率以区分压缩比。
   - 增益：指定音频输入放大倍数。



■ 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 (** 应用 **)**]。

设置屏幕

摄像机 设置

可以根据摄像机所在的环境更改摄像机设置。

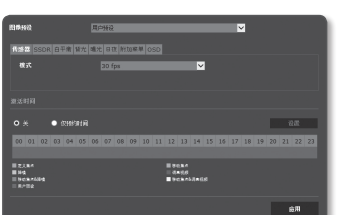
1. 从设置菜单，选择 <Video & Audio ( )> 选项卡。
2. 单击 <**摄像机 设置**>。
3. 根据需要配置以下各项的设置：
   图像预设、传感器、SSDR、白平衡、背光、曝光、日夜、附加菜单、OSD
4. 完成后，请单击 [**应用 (** 应用 **)**]。
   - 如果在更改设置之后经过一定的时间未按 [**应用 (** 应用 **)**] 按钮（超时：240 秒），则不会应用您的更改。



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。
- 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。

  ■ 如果用户选择预设模式之外的某些内容，那么用户将无法设置快速速度、AGC、SSDR 或 SSNR3。

2. 为每个图像预设模式设置摄像机项目。
3. 设置 <**激活时间** >。
   - 关：摄像机将始终执行指定的图像预设操作。
   - 仅预约时间：摄像机将在您于每个日期设置的时间段内执行指定的图像预设操作。
4. 单击 [**设置 (** 设置 **)**] 按钮。
5. 设置 <**模式**> 和 <**时间**>。
6. 完成后，请单击 [**应用 (** 应用 **)**]。



设置屏幕

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	SSNR3
定义焦点（默认） 当更改配置文件时	默认 (1/5)	1/12000	默认 (高)	默认 (12)	默认 (12)
移动焦点	1/30	1/12000	默认 (高)	默认 (12)	4
降噪	1/15	1/12000	中	默认 (12)	默认 (12)
调亮视频	默认 (1/5)	1/12000	默认	18	默认 (12)
移动焦点&降噪	1/30	1/12000	中	默认 (12)	4
移动焦点&调亮视频	1/30	1/12000	默认	18	4
用户预设	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。
- 如果更改图像预设，将只为每种模式初始化快门/自动增益/SSDR/SSNR3。
- 在预设之间 **“摄像机设置”** 值不会改变。

设置传感器

指定摄像机 CMOS 传感器每秒钟将捕捉多少帧。

1. 选择 <**传感器**>。
2. 选择 <**模式**>。



- 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 57 页)
- 如果传感器模式设置为 50 fps 或 60 fps。不能将 <**背光**> 模式设置为 <**宽动态**>。

设置 SSDR（Samsung 超级动态范围）

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。



设置屏幕

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。
- 手动：可以手动调整摄像机视频的红色和蓝色增益。
- 自动白平衡：根据当前照明条件和屏幕模式进行优化，校正摄像机视频的颜色。要获得当前照明的最佳条件，请将摄像机的焦点对准白纸，然后按 [**设置**] 按钮。
- 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。

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

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

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

设置背光补偿

可以手动在视频上指定想要的区域和设置要更清晰显示的区域。

1. 选择 <**背光**>。
2. 将 <**模式**> 设置为 <**背光补偿**>。
3. 设置 <**背光补偿级别**>。
   可以更改等级以调整监视区域的亮度。
4. 设置 <**顶部，底部，左边，右边**> 等级以指定目标区域。



- 设置背光补偿时，绿框在屏幕上显示 15 秒。
- 为了避免在背光补偿设置时出现故障，背光补偿区域的纵向空间应大于 40 且低于 60，而横向空间应大于 30 且低于 60。

设置宽动态

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 <**宽动态**>。
3. 指定 <**宽动态级别**>。



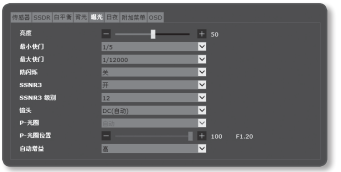
- 建议在室内环境中使用宽动态。
- 在宽动态模式下，黑暗区域和明亮区域之间可能存在噪音。
- 如果 <**背光**> 模式设置为 <**宽动态**>，传感器模式不能设置为 50 fps 或 60 fps。
- 无论何时打开或关闭宽动态模式，均会初始化最大和最小快门值。
- 如果使用手动或 P 光圈镜头（手动），有些宽动态功能可能会受到限制。

设置屏幕

设置曝光

可以调整摄像机的曝光级别。

1. 选择 <**曝光**>。
2. 选择各项并进行正确设置。
   - 亮度：调整屏幕亮度。
   - 最小快门：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。
   - SSNR3：选择“启用”或“禁用”视频噪音消除功能。
   - SSNR3 级别：调整降噪级别。
   - 镜头：选择此项以将摄像机的镜头模式设置为手动或自动。
     - DC(自动)：如果您使用 DC 镜头，请选择此项。仅自动调整光圈，但焦点无法自动控制。
     - 手动：如果您使用手动调整光圈和焦点的镜头，请选择此项。
     - P-光圈：选中此项，可使用光圈控制配有步进电机的镜头。目前，只支持 3 种类型的 P 光圈镜头。(SLA-M3180PN/M13VP288IR/SLA-M2890PN)
   - P-光圈：设置 P 光圈。
     - 自动：自动设置光圈自适应环境照明。
     - 手动：手动将光圈设置到所需位置。
   - P-光圈位置：设置 P 光圈位置。
   - 自动增益：选择自动增益控制模式。
     调整视频的增益值（即，具体地说，在低对比度场景中录制且亮度级别低于正常）以控制视频亮度。

- 如果在镜头组装或拆卸期间没有重置 <**镜头**> 模式，镜头可能会出现故障。
- 根据快门设置范围，图像曝光可能饱和。

设置日夜

1. 选择 <**日夜**>。
2. 选择各项并进行正确设置。
   - 模式：“模式”用于将颜色调整为彩色或黑白。
     - 彩色：始终以彩色输出视频。
     - 黑白：始终以黑白输出视频。
     - 自动：通常设置为彩色，但在夜晚亮度较低时使用黑白。
       - 如果 <**曝光**> 菜单中的 AGC 设置为 <**关**>，无法将日夜模式设置为 <**自动**>。



     - 外部：控制当警报输入端子与外部设备同步时的视频颜色。
     - 计划：设置摄像机以彩色模式工作的时间段。
   - 等待时间：必须保持所选亮度条件，以便在日夜之间切换光照模式的时间段。
   - 转换条件：指定光照模式转换的时间间隔。
   - 警报输入：当警报传感器打开或关闭时，视频设置为彩色或黑白。
     - 如果“日/夜”模式设置为“外部输入”，将禁用“事件警报输入”页面的警报输入功能。
   - D/N 后简单对焦：当光照模式在日夜之间切换后，视频会自动对焦。
   - 激活时间（彩色）：指定彩色模式工作的时间计划。
     - 如果设置此项，从开始时间 00 秒 到结束时间 59 秒 会保持彩色模式。

- 设置 <**D/N 后简单对焦**> 后，在某些条件下对焦功能可能无法正常工作。
  如需更多信息，请参阅 “**焦点设置**”。（第 81 页）

- 如果摄像机中安装的镜头和 <**曝光**> 菜单的 <**镜头**> 中设置的镜头不一致，日夜模式可能无法正常工作。
- 如果您切换日/夜模式，则无法探测 MD/VA 事件。

设置屏幕

设置附加菜单

1. 选择 <**附加菜单**>。
2. 选择各项并进行正确设置。
   - 数字稳定：当稳定图像输入看起来存在晃动时自动补偿图像。
   - 锐利度模式：调整图像的总清晰度。
     如果选择了 <**开**>，您可以调整图像的清晰度。



   - 锐利度级别：级别越高，图像轮廓变得越清晰和越清楚。
   - 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**>。

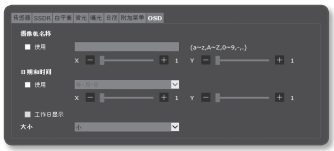
     ▪ 如果在薄雾中手动去雾级别较高，图像可能变得过于黑暗。

   - 透雾级别：控制去雾级别。

     ▪ 降低当摄像机由于外部因素（如风）晃动时导致的图像抖动程度。

设置 OSD

1. 选择 <**OSD**>。
2. 选择各项并进行正确设置。
   - 摄像机名称：指定要显示在屏幕上的摄像机名称。
   - 摄像机名称 X、Y：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：指定在屏幕上显示时间的位置。
   - 工作日显示：指定在屏幕上显示使用日期。
   - 大小：指定显示在屏幕上的文本的大小。

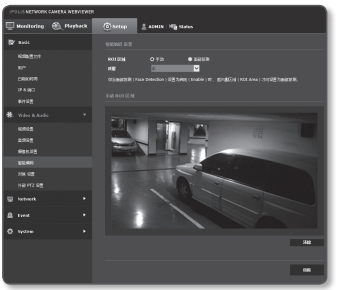


- 如果可调整位置的项目被另一个固定的 OSD 项目覆盖，那么通常情况下可能无法显示可调整位置的项目（摄像机标题、日期和时间）。

设置屏幕

智能编码

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



1. 从设置菜单，选择 <**Video & Audio** ( )> 选项卡。
2. 单击 <**智能编码**>。
3. 选择ROI区域。
   - 面部探测：当监视屏幕上识别出面部时激活该功能。

   - 最多可以同时在屏幕上检测 35 个面部。
   - 对于给定的最大分辨率，可检测面部的最小尺寸为 45x45（水平 x 垂直）像素。但可能会发生一些错误，具体情况取决于面部特征或照明。

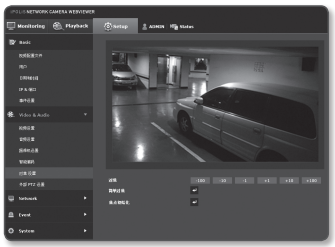
   - 手动：指定手动监控的ROI区域。
4. 设置图像质量。
   ROI区域将以指定的质量显示。
5. 如果手动指定ROI区域，请使用鼠标指针选择所需区域，然后将它拖动到所需大小。
   - 最多可以指定 5 个独立的区域。
6. 要取消区域的所有设置，请单击 [**清除(** 清除 **)**] 按钮。
7. 完成后，请单击 [**应用 (** 应用 **)**]。

   - 如果在 <**视频配置文件**> 中将智能编解码器设置为 <**关**>，则它不活动。（第 57 页）
   - 转到 <**Event** > → <**面部探测**>，将其更改为 <**启用**> 来设置所需的面部探测区域。

对焦 设置

您可以调节视频图像的焦点。

1. 从设置菜单，选择 <Video & Audio ( )> 选项卡。
2. 单击 <**对焦 设置**>。
3. 按照以下顺序设置焦点。
   1) 焦点初始化：按 [↵] 按钮以移动到默认法兰焦距位置。
   2) 对焦（调节镜头）：手动调节镜头的焦点（远 ↔ 近）并确保图像清晰。
   3) 简单对焦：将鼠标拖放到视频上可设置自动对焦的位置。单击 [↵] 按钮以自动适合焦点。



- 在下列情况下，简单对焦模式可能无法正确调适：
  - 在 简单对焦模式下突然切换至物体（突然移动、出现或消失）
  - 在 简单对焦模式下亮度彻底改变
  - 图像对比度低
  - 摄像机前面或周围有强光源时
- 如果焦点不适当的离开上面提到的位置，请使用 [-100 , -10 , -1 , +1 , +10 , +100] 按钮来手动调节焦点。
- 在难以应用简单对焦的情况下，请尝试使用手动对焦模式。

设置屏幕

外部 PTZ 设置

配置与外部平移/倾斜接收器的连接设置，以便可以通过连接至摄像机 RS-485 端口的接收器控制 PTZ 操作。



1. 从设置菜单，选择 <**Video & Audio** ( )> 选项卡。
2. 单击 <**外部 PTZ 设置**>。
3. 单击 <**▼ 显示**>。
4. 指定串行端口。
   您可以设置连接至网络摄像机、与平移/倾斜兼容的接收器的 RS-485 通信模式。
   - 协议：从 SAMSUNG-T / SAMSUNG-E / PELCO-D / PELCO-P / SUNGJIN / PANASONIC / HONEYWELL / AD / VICON / GE / BOSCH 中，选择接收器所用的相同协议。
   - 摄像机ID：显示固定摄像机 ID。
   - 波特率：RS-485 通信的传输速率。
   - 数据位：指定数据位。
   - 奇偶校验：指定奇偶校验位。
   - 停止位：指定停止位。
   - ONVIF 焦点移动：设置外部摄像机的 ONVIF 控制的焦点。
5. 完成后，请单击 [**应用 (** 应用 **)**]。

■ 仅当正确地将网络摄像机连接至与平移/倾斜兼容的接收器时，上述所有操作才可用。
并且应该正确指定平移/倾斜操作的串行端口。

■ 选中接收器在连接后支持的功能。
根据接收器或协议规格，有些功能可能会被禁用。
请参阅下表中的详细信息。

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	
SUNGJIN	O	X	O	X	X	X	X	X	O	PT 方向（上、下、左、底部）
PANASONIC	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	O (1~4)	O	
HONEYWELL	O	O (1~6)	O	O (1~6)	O	X	O	X	O	
AD	O	O (1~6)	O	O (1~6)	O	x	O	X	O	
VICON	O	O (1~6)	O	O (1~6)	O	x	O	X	O	
GE	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	X	O	
BOSCH	O	O (1~6)	O	O (1~6)	O	O (1~4)	O	X	X	

设置屏幕

6. 调整方向。
   - [**将方向更改为** ( )/( )/( )/( )/( )/( )/( )/( )]：调整摄像机方向。
   - [**移动速度控制** ( )]：数字越大，移动速度越快。

7. 设置焦点和缩放。
   - [**放大** ( )]：放大屏幕。
   - [**缩小** ( )]：缩小屏幕。
   - [**调焦** (/)]：调整屏幕中的焦点。
   - [**变焦速度控制** ( )]：数字越大，变焦速度越快。



8. 设置预设。

■ 仅当摄像机连接至具有适当 <**串口设置**> 的平移/倾斜接收器时，才能控制平移/倾斜/缩放操作。

添加预设

1. 选择要添加的预设编号。
2. 设置预设的名称。
3. 按下 [添加] 按钮。

删除预设

1. 选择要删除的预设编号。
2. 按下 [删除] 按钮。

移动预置

1. 选择想要移动的预置编号。
2. 按下 [前往] 按钮。

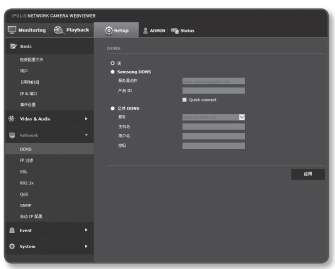
网络设置

DDNS

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

■ 您只有在接通互联网时才能使用DDNS服务。

1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**DDNS**>。
3. 选择 <**DDNS**> 连接类型。
4. 根据所选类型键入 DDNS 项目。
   - Samsung DDNS：如果使用 Samsung 提供的 DDNS 服务器，请选择此项。
     - 产品 ID：输入向 Samsung 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。



■ 如果想使用 DDNS 服务而不使用支持 UPnP 功能的集线器，则需要转到集线器菜单并激活集线器的端口转发。
有关如何设置集线器端口转发的详细信息，请参阅 **“路由器端口设置”**。（第 38 页）

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

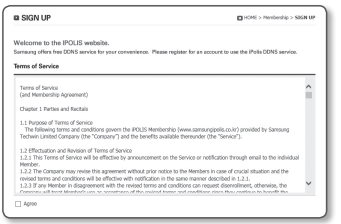
■ 如果选择了 <**Quick connect**>，请确保选择 Samsung DDNS 服务。

设置屏幕

注册 DDNS

向 Samsung DDNS 注册您的产品

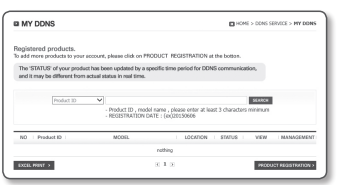
1. 访问 iPOLiS 网站 (www.samsungipolis.com) 并用已注册的帐户登录。



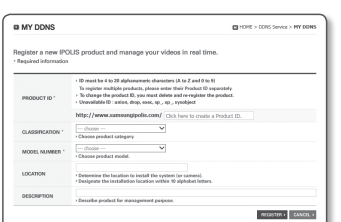
2. 从顶部的菜单栏，选择 <**DDNS SERVICE**> - <**MY DDNS**>。



3. 单击 [**PRODUCT REGISTRATION**]。
4. 输入产品 ID。
   - 必须重复检查您输入的 ID。

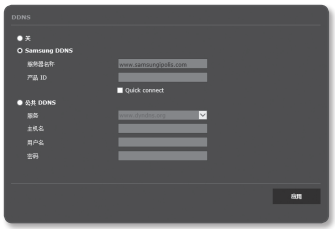


5. 选择 <**CLASSIFICATION**> 并指定 <**MODEL NUMBER**>。
6. 指定产品位置及说明（如有必要）。
7. 单击 [**REGISTRATION**]。
   产品将添加至产品列表，您可以对其进行检查。



在摄像机设置中连接至 Samsung DDNS

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



在摄像机设置中配置公共 DDNS

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



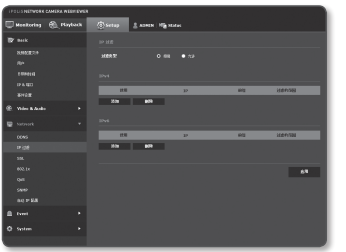
- 要正确使用 DDNS 服务，需要 DDNS 设置和路由器的端口转发设置。
  对于端口转发设置，请参阅 “**路由器端口设置**”。(第 38 页)

设置屏幕

IP 过滤

可以创建想要授予或拒绝访问权限的 IP 列表。

1. 从设置菜单，选择 <**Network (** **)**> 选项卡。
2. 单击 <**IP 过滤**>。
3. 选择 <**过滤类型**>。
   - 拒绝：如果选择此项，将限制过滤列表的那些 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 (** 添加 **)**] 按钮。
   将会创建 IP 列表。



5. 提供想要授予或拒绝访问权限的 IP。
   输入 IP 地址和前缀时，可用的 IP 地址列表将出现在右侧过滤范围列中。

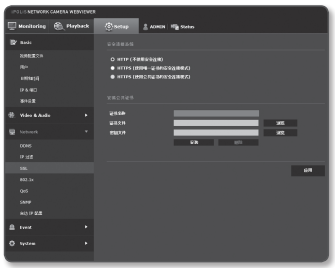
- 如果为 IP 过滤 选择了 <**允许**> 并且 <**IP & 端口**> 的 <**IPv6 设置**> 设为 <**使用**>，则应该分配当前计算机配置的 IPv4 和 IPv6 地址。
- 不能将用于当前设置的计算机的 IP 地址添加至 <**拒绝**>，应该将它添加至 <**允许**>。
- 只有设置为 <**使用**> 的 IP 地址才会显示在过滤器列中。

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

SSL

可以选择安全连接系统或安装公共证书用于此目的。

1. 从设置菜单，选择 <**Network (** **)**> 选项卡。
2. 单击 <**SSL**>。
3. 选择安全连接系统。
   - 若要使用 HTTPS 模式访问摄像机，您必须以 https://<Camera_IP> 形式键入摄像机的 IP 地址。
     如果未在 Internet Explorer 中以 HTTPS 模式配置 Web Viewer 设置，请按如下所示编辑 Internet 选项：<菜单 → 工具 → Internet 选项 → 高级 → 安全 → 取消选择 TLS 1.0 并选择 TLS 1.1、TLS 1.2>



4. 搜索要安装在摄像机上的公共证书。
   要将证书安装在摄像机上，需要提供证书名称（可由用户随意分配）、认证机构颁发的证书文件以及密钥文件。
   - 仅当安装了公共证书，<**HTTPS (使用公共证书的安全连接模式)**> 项目才会活动。
5. 完成后，请单击 [**应用 (** **应用** **)**]。

安装证书

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

删除证书

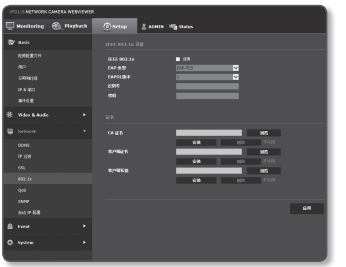
1. 单击 [**删除 (** **删除** **)**] 按钮。
2. 要删除公共证书，应该在 <**HTTP（不使用安全连接**）> 或 <**HTTPS（使用唯一证书的安全连接模式**）> 模式下访问网络视频解码器。

设置屏幕

802.1x

连接网络时，您可以选择是否使用 802.1x 协议，然后安装证书。

1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**802.1x**>。
3. 设置 <**IEEE 802.1x 设置**>。
   - 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。
   - 识别号：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。

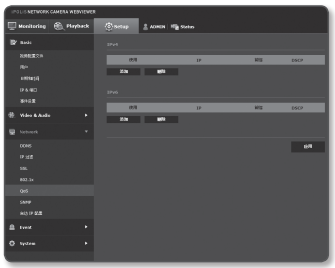
4. 安装/移除证书。
   只有 EAP-TLS 需要证书。
   - CA 证书：选择包含公共密钥的公共证书。
   - 客户端证书：选择包含客户端证书密钥的公共证书。
   - 客户端私钥：选择包含客户端私钥的公共证书。
5. 完成后，请单击 [**应用 (** 应用)]。

安装/删除与 802.1x 相关的证书

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

QoS

您可以指定优先级以确保特定 IP 的传输率稳定。



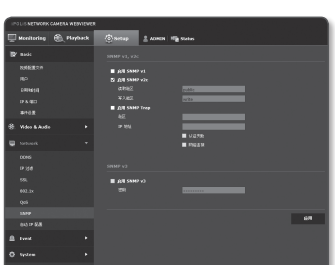
1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**QoS**>。
3. 单击 [**添加 (** 添加 **)**] 按钮。
   将会创建 IP 列表。
4. 输入将应用 QoS 的 IP 地址。

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

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

SNMP

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



1. 从设置菜单，选择 <**Network (**)> 选项卡。
2. 单击 <**SNMP**>。
3. 指定 <**SNMP**>。
   - 启用 SNMP v1：SNMP V1 将处于活动状态。
   - 启用 SNMP v2c：SNMP V2c 将处于活动状态。
     - 读取社区：提供读取社区的名称，可在其中访问 SNMP 信息。默认名称为 <**public**>。
     - 写入社区：提供写入社区的名称，可在其中访问 SNMP 信息。默认名称为 <**write**>。

- 启用 SNMP Trap：SNMP Trap用于将重要事件和情况发送到管理员系统。
  - 社区：输入用于接收消息的Trap社区名称。
  - IP 地址：输入消息将发送到的 IP 地址。
  - 认证失败：指定当社区信息无效时是否生成事件。
  - 网络连接：指定当网络断开后恢复连接时是否生成事件。
- 启用 SNMP v3：SNMP V3 将处于活动状态。
  - 密码：指定 SNMP V3 的默认密码。默认密码是 <**admin4321**>。
    - 默认密码可能会向黑客线程公开，因此建议您在安装产品之后更改该密码。请注意，未更改密码导致的安全和其他相关问题，用户自己承担责任。
    - 密码长度应该为 8 – 16 个字符。

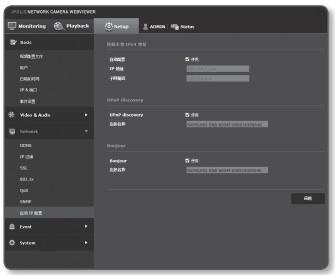
4. 完成后，请单击 [**应用 (** 应用 **)**]。

- 仅当安全连接模式是 HTTPS 时，才能设置 SNMP v3。请参阅 “**SSL**”。（第 89 页）
- 如果您不使用SNMP v3，则可能出现安全问题。

自动 IP 配置

您可以自动设置可用于访问和摄像机搜索的IP。

1. 从设置菜单，选择 <**Network (** **)**> 选项卡。
2. 单击 <**自动 IP 配置**>。
3. 设置 <**链路本地 IPv4 地址**>。
   可以分配一个额外的 IP 地址以从链路本地网络访问摄像机。
   - 自动配置：指定“启用”或“禁用”链路本地 IPv4 地址。
   - IP 地址：显示所分配的 IP 地址。
   - 子网掩码：显示所分配 IP 的子网掩码。



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



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

6. 完成后，请单击 [**应用 (** 应用 **)**]。

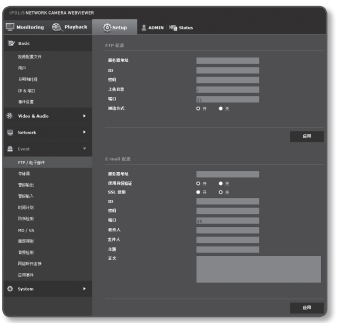
设置屏幕

事件设置

FTP / 电子邮件

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

1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**FTP / 电子邮件**>。
3. 选择 <**FTP 配置**> 或 <**E-mail 配置**> 并输入/选择所需的值。
   - FTP 配置
     - 服务器地址：输入您将警报或事件图像传输到的 FTP 服务器的 IP 地址。
     - ID：输入用于登录 FTP 服务器的用户 ID。
     - 密码：输入用于登录 FTP 服务器的用户帐户密码。
     - 上传目录：指定警报或事件图像将传输到的 FTP 路径。
     - 端口：FTP 服务器的默认端口为 21；但是，可以根据 FTP 服务器设置使用不同的端口号。
     - 被动方式：如果由于防火墙或 FTP 服务器设置需要以被动模式连接，请选择 <**开**>。



- E-mail 配置
  - 服务器地址：输入您将警报或事件图像传输到的电子邮件服务器的 SMTP 地址。
  - 使用身份验证：选择是否使用身份验证。
  - SSL 使用：指定使用 SSL。
  - ID：输入用于登录电子邮件服务器的用户 ID。
  - 密码：输入用于登录电子邮件服务器的用户帐户密码。
  - 端口：电子邮件服务器的默认端口为 25；但是，可以根据电子邮件服务器设置使用不同的端口号。
  - 收件人：输入电子邮件收件人的地址。
  - 发件人：输入电子邮件发件人的地址。如果发件人地址不正确，来自发件人的电子邮件可能会被电子邮件服务器分类为垃圾邮件，这样可能不发送。
  - 主题：输入电子邮件的主题。
  - 正文：为邮件提供文本。将警报或事件图像附加至准备的电子邮件。

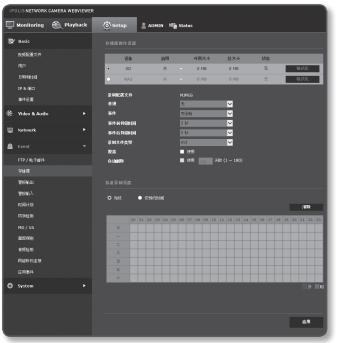
4. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

存储器

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

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



- 如果设备正在正确录制数据，将显示“**录制**”。
- 如果显示“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。
- 如果按照下列指示操作之后“错误”消息未消失，请格式化 Micro SD 卡。
  格式化之后，如果错误消息仍然存在，请更换 Micro SD 卡。
- 如果您不在设置中将按钮移到“关”位置就移除 Micro SD 卡或者如果您将摄像机连接到不稳定的电源，那么 Micro SD 卡可能会受损。

在 Micro SD 存储卡上进行录制

1. 将 SD 卡录制设置为 <**开**>。
2. 单击 [**应用 (** 应用 **)**] 按钮。
3. 检查存储卡的 <**可用大小**> 和 <**总大小**>。
   您可以通过单击 <**格式化**> 按钮来格式化 Micro SD 卡。
   - 如果 Micro 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 Micro SD/SDHC/SDXC 存储卡规格**"。(第 11 页)
   - 对于大容量的 Micro 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：显示录制配置文件的编解码器类型。
   - 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：指定警报发出之后的时间点；将传输图像到指定的时间点为止。最多可以指定警报发出之后 120 秒。
   - 录制文件类型：指定所录制图像的文件格式。
     - STW：Samsung 的独特文件格式。
     - 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：如果 Micro SD 存储卡已满，这将删除旧数据并存储新数据代替。
   - 自动删除：删除指定时间段的数据，不删除其他数据。
     可以设置的范围是 1 到 180 天。

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

设置屏幕

5. 指定 <**标准录制设置**>。
   - 始终：始终将录制的视频保存在 Micro SD 存储卡中。
     - 如果设置为始终，则激活时间无法更改。
   - 仅预约时间：仅在指定星期几的指定时间录制。
   - [清除(清除)]：清除选择选定的时间。
6. 完成后，请单击 [**应用 (** 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 分配的具有唯一性的 IP 地址。
   - ID：这是 NAS 中注册的一个 ID。
   - 密码：NAS 中注册的密码。
   - 默认文件夹：指定用来保存数据的 NAS 用户文件夹。
3. 单击 [**测试**] 按钮来查看是否可以成功连接到 NAS。



   - 如果显示成功消息，则意味着您可以成功地将数据保存到 NAS 中。
   - 如果显示失败消息，请检查以下方面。
     - 确认 NAS 的 IP 地址有效。
     - 确认 NAS 的 ID/密码有效。
     - 确认您可以访问使用 NAS 的 ID 指定为基本文件夹的文件夹。
     - 确认 NAS 的 SMB/CIFS 项已被取消选中。

- 确认 NAS IP 地址和摄像机 IP 地址的格式正确。
  Ex) NAS 和摄像机子网掩码的初始值是 255.255.255.0。
  如果 IP 地址是 192.168.20.32，NAS IP 地址的范围应该是 192.168.20.1~192.168.20.255。
- 检查是否作为其他用户尝试访问，而没有对所保存和使用的基本文件夹进行格式化。
- 确认使用了建议的 NAS 设备。

4. 设置结束后，将 NAS 装置设置为 <**开**>。
5. 单击 [**应用 (** 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。
   - 由于使用 NAS 时临时网络中断之后可能没有保存数据，因此我们建议您同时使用 SD 防止录制的图像丢失。
   - 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。

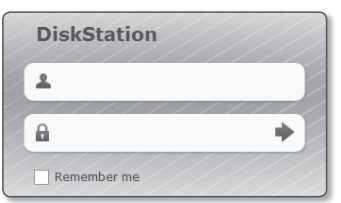
设置屏幕

NAS(网络连接存储器)指南

- 由于使用 NAS 时临时网络中断之后可能没有保存数据，因此我们建议您同时使用 SD 防止录制的图像丢失。
- 如果设置允许同时连接和使用 Micro SD 存储卡和 NAS，NAS 享有较高录制优先级。
- 如果通过将覆盖设置为 <**关**> 激活覆盖并且可用容量低于 10%，则将其保存在 Micro SD 卡中。
- 如果正将数据保存到 NAS，在插入其他摄像机使用的 Micro SD 存储卡时，可能无法保存数据。
- NAS 建议规格：请参阅 **"NAS 建议规格"**。(第 11 页)
- 如果在数据保存到 NAS 期间更改 NAS 保存设置，该更改将不会立即在系统中反映出来。
- 如果在数据保存期间移除 NAS 设备，或者网络断开，NAS 保存操作将异常终止。
- 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。

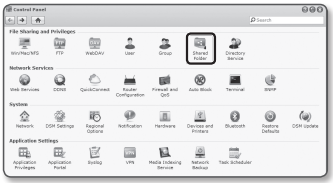
1. 作为管理员访问 Synology NAS。在本例中，NAS IP 地址设置为 [**192.168.20.253**]。



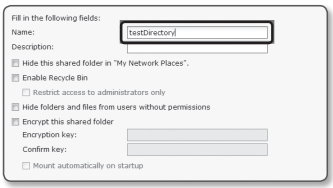
2. 如果作为管理员访问，将显示以下屏幕。单击 [**Control Panel**]。



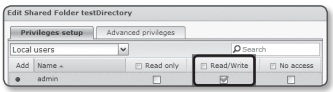
3. 在文件共享和权限菜单中单击 <**Shared Folder**>。



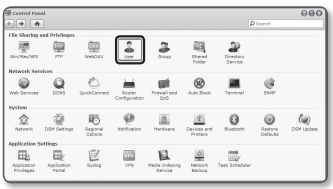
4. 单击 [**Create**] 按钮。
5. 在输入共享文件夹名称 (ID) 后，单击 [**OK**] 按钮来创建共享文件夹。
在本例中，共享文件夹名称是 [**testDirectory**]。



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。

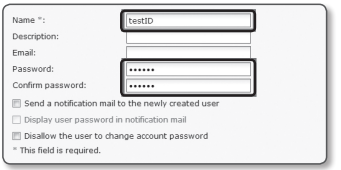


7. 在文件共享和权限菜单中单击 <**User**>。



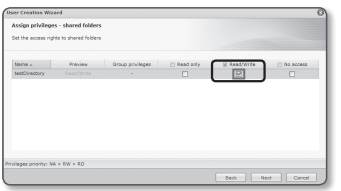
设置屏幕

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



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

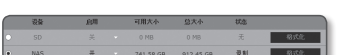
9. 在 Windows 中，设置 NAS 访问的权限。
   为第 4 步中创建的名称为“testDirectory”的共享文件夹，选中 [**Read/Write**] 权限。



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

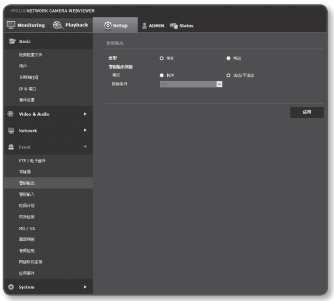


11. 在输入项目 10 后，选中 <**开**>。
12. 单击 [**应用 (** 应用 **)**] 按钮。
    通过使用 NAS 来完成保存。



警报输出

1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**警报输出**>。
3. 设置摄像机的警报输出类型。
   - 如果您更改警报输出类型，监视页面上的警报输出按钮和事件设置页面上显示的警报输出类型会相应地更改。



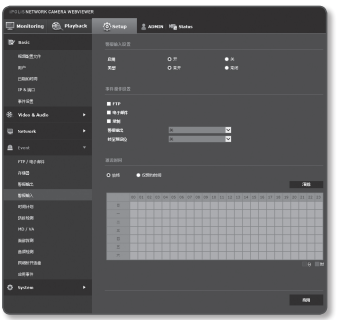
   - 类型
     - 常开：如果将警报输出设备“开路”状态视为正常，当触发警报事件时，则变成“闭路”状态。
     - 常闭：如果将警报输出设备“闭路”状态视为正常，当触发警报事件时，则变成“开路”状态。
4. 设置警报输出按钮。
   - 模式：设置警报输出方式。
     - 以下是在禁用时单击警报输出按钮时操作之间的差异。
     - 脉冲：在持续时间（切换间隔）指定的时间段内激活，然后自动变成不活动。
     - 活动/不活动： 它保持为已激活，直到用户再次单击按钮以使它不活动为止。
   - 转换条件：如果模式设置为脉冲，则设置保持激活的警报持续时间：1 到 15 秒。
5.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

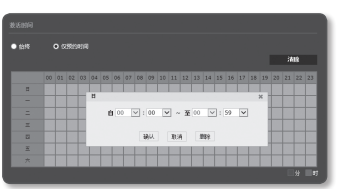
设置屏幕

警报输入

可以设置警报输入类型、激活时间和工作模式。

1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**警报输入**>。
3. 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(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。



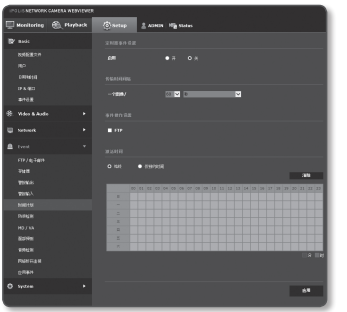


6. 指定警报发出时将执行的操作。
   - FTP：在警报输入设置中指定使用 FTP 传输。
     - 有关详细信息，请参阅 “**FTP / 电子邮件**”。（第 94 页）
   - 电子邮件：在警报输入设置中指定电子邮件传输的使用。
     - 有关详细信息，请参阅 “**FTP / 电子邮件**”。（第 94 页）
   - 录制：在警报输入设置中指定录制的使用。
     - 在 <**存储器**> 中将 <**录制**> 设置为 <**开**>。（第 96 页）
   - 警报输出：选择如果警报进入是否设置警报输出，并指定警报输出时间。
   - 转至预设位：在设置警报输入时，移动至指定的预设位置。
     - 仅当已安装摄像机平移/倾斜接收器时，转至预设位才可用。
7. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

时间计划

可以设置为根据计划以特定间隔保存视频数据，而不考虑事件的实际出现情况。



1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**时间计划**>。
3. 设置是否 <**启用**>。
4. 指定 <**传输时间间隔**>。
5. 指定 <**激活时间**>。
   - 始终：始终在设置的时间间隔内以运行的模式激活。
   - 仅预约时间：在指定的时间和日期定期以运行的模式激活。

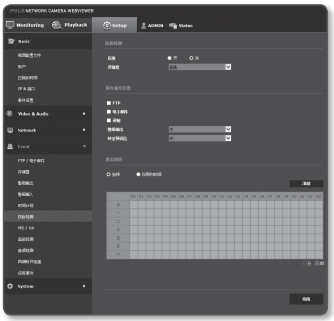
> ■ 传输间隔设置值必须小于预设激活间隔才能成功进行图像传输。

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 94 页）
7. 完成后，请单击 [**应用 (** 应用 **)**]。

防拆检测

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

1. 从设置菜单，选择 <**Event (** **)**> 选项卡。
2. 单击 <**防拆检测**>。
3. 设置是否 <**启用**>。
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 104 页)
6. 完成后，请单击 [**应用 (** **应用** **)**]。



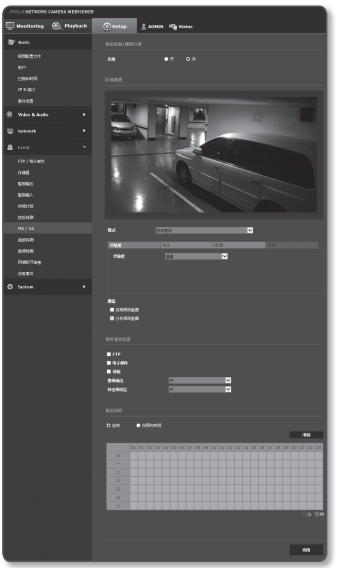
- 在下列情况下，默认防拆检测功能可能无法正常工作：
  - 在简单背景或低照度以及夜晚情况下，可能会降低检测灵敏度。
  - 摄像机摇晃严重或照明激烈变化会导致错误地视为拆离。
  - 防拆检测可能会在拆离发生之后的一定时间（最多 5 秒）进行。
  - 一旦检测到拆离，摄像机将继续在特定稳定性时间（大约 5 秒）之后继续标准操作，在此稳定性期间不会执行任何检测。

设置屏幕

MD / VA

可将动作探测和视频分析的事件设置为触发事件信号输出。

1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**MD / VA**>。
3. 设置是否 <**启用**>。
4. 根据您的用途，从移动探测和智能视频分析中选择。
5. 设置 <**灵敏度**>、<**大小**> 和 <**地区**>。选择 智能视频分析时，还需要设置 <**分析**>。
6. 选择使用 <**覆盖**>。
   - 探测规则重叠：在视频上表示探测结果。
   - 分析规则重叠：在视频上显示分析规则。
7. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 104 页)
8. 完成后，请单击 [**应用 (** 应用 **)**]。



- 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。

设置屏幕

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 <**地区**> 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. 要删除区域，请右键单击屏幕以打开弹出窗口上下文菜单，然后选择删除和 [**确认**] 按钮。
6. 完成后，请单击 [**应用 (** 应用 **)**]。



设置屏幕

使用智能视频分析

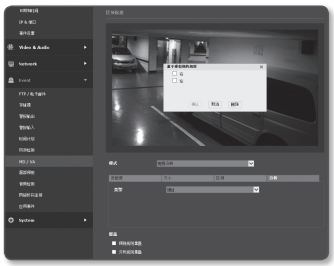
它会检测满足灵敏度、大小和区域以及事件条件规则指定的所有条件的事件。

1. 选择视频分析模式。
2. 设置 <**灵敏度**>、<**大小**> 和 <**地区**>。
   有关设置的详细信息，请参阅 **“使用移动探测”**。（第 110~111 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 113~114 页）
6. 完成后，请单击 [**应用 (** 应用 **)**]。



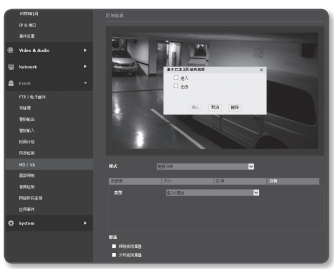
设置视频分析规则

▪ 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

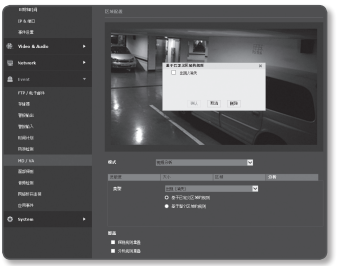


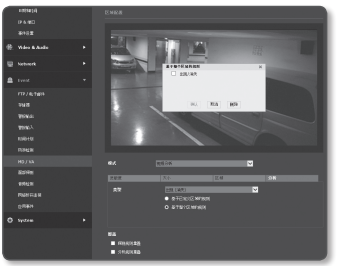
1. 将类型设置为 <**进入/退出**>。
2. 在屏幕上，单击四个顶点以定义检测区域，一个弹出窗口将会出现。
3. 选择所需规则：
   - 进入：检测中心点从区域外部进入已定义区域的移动物体的移动。
   - 出去：检测中心点从已定义区域内部移动到外部的移动物体的移动。
4. 单击 [**确认**]。
5. 要除去已定义的规则，请右键单击区域的显示的虚内部线以打开弹出上下文菜单，然后选择 [**删除**] 按钮。

设置屏幕

▪ 出现(消失)

1. 将分析类型设置为 <**出现 (消失)**>。
2. 选择所需事件规则：
   - 基于已定义区域的规则：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。
     从弹出菜单中选择 <**出现/消失**>。
   - 基于整个区域的规则：它会检测出现在整个屏幕中并保留一定时间的出现物体的事件，以及相反情况下存在于屏幕中的物体消失。
     右键单击屏幕以打开弹出上下文菜单，然后选择 <**出现/消失**>。
3. 单击 [**确认**]。
4. 要除去已定义的规则，请右键单击区域的显示的虚内部线或屏幕以打开弹出上下文菜单，然后选择 [**删除**] 按钮。

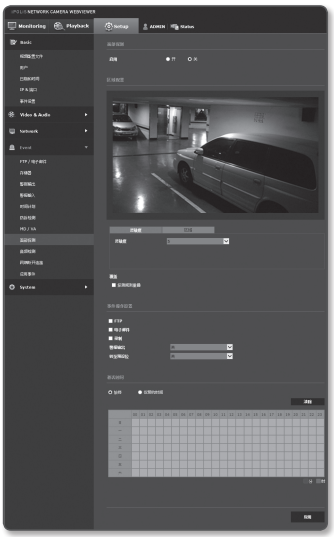




面部探测

可以设置为探测已识别的面部并相应地触发事件。

1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**面部探测**>。
3. 设置是否 <**启用**>。
4. 选择 <**灵敏度**> 选项卡以设置灵敏度级别。
   - 当灵敏度提高时，面部探测变得更靠近并且细腻。
5. 选择 <**地区**> 选项卡，使用鼠标在图像上选择 4 个顶点以指定探测区域。



- 最多可以同时在屏幕上检测 35 个面部。
- 对于给定的最大分辨率，可检测面部的最小尺寸为 45x45（水平 x 垂直）像素。但可能会发生一些错误，具体情况取决于面部特征或照明。

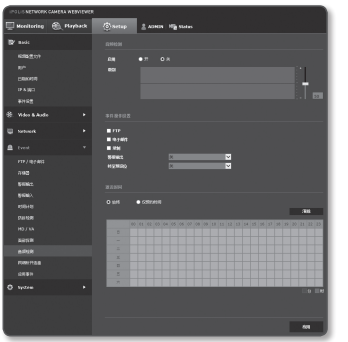
6. 如需删除指定区域，请按鼠标右键，然后在弹出窗口中单击 [**确认**]。
7. 设置是否使用 <**探测规则重叠**>。
   探测到面部时，会在屏幕上以矩形标记其位置和大小。
8. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**> 的详细信息，请参阅 “**警报输入**”。（第 104 页）
9. 完成后，请单击 [**应用 (** 应用 **)**]。

设置屏幕

音频检测

可以设置为探测超过指定音量的声音并相应地触发事件。

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



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

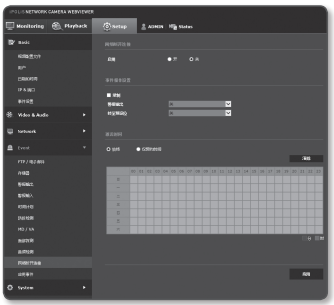
5. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 104 页)
6. 完成后，请单击 [**应用 (** 应用 **)**]。

- 选择 <Video & Audio> - <**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。

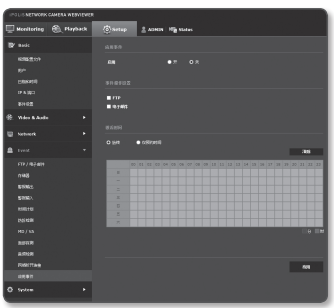
1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**网络断开连接**>。
3. 设置是否 <**启用**>。
4. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 104 页)
5. 完成后，请单击 [**应用 (** 应用 **)**]。



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。

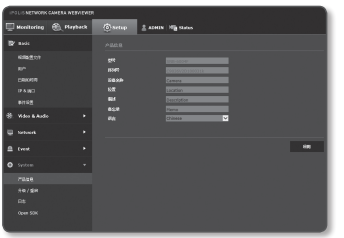
1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**应用事件**>。
3. 设置是否 <**启用**>。
4. 指定激活时间和激活条件。
   - 有关 <**激活时间**> 和 <**动作**>的详细信息，请参阅 “**警报输入**”。(第 104 页)
5. 完成后，请单击 [**应用 (** 应用 **)**]。



设置屏幕

系统设置

产品信息



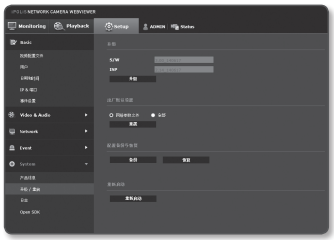
1. 从设置菜单，选择 <Event ( )> 选项卡。
2. 单击 <**产品信息**>。
3. 检查摄像机信息，或根据网络环境提供详细信息。
   - 型号：产品的型号名称。
   - 序列号：产品序列号。
   - 设备名称：提供将在现场屏幕上显示的设备名称。
   - 位置：指定安装摄像机的位置。
   - 描述：提供有关摄像机位置的详细信息。
   - 备忘录：提供有关摄像机的说明以便更好理解。
   - 语言：选择 Web 查看器 OSD 的首选语言。

■ 默认语言设置为 <**中文**>。

4. 完成后，请单击 [**应用 (** 应用 **)**]。

升级 / 重启

1. 从设置菜单，选择 <**System (** **)**> 选项卡。
2. 单击 <**升级 / 重启**>。
3. 选择所需的项目并进行适当设置。
   - 升级：执行系统升级。
   - 出厂默认设置：将系统重置为出厂默认值。
     - 网络参数之外：初始化除了网络设置和镜头设置以及 Open SDK 安装文件和内部设置之外的所有内容。
     - 全部：重置包括摄像机设置在内的所有设置。(但是，将不重置日志信息）
       - 如果重置摄像机，IP 寻址系统将默认为 DHCP。如果未找到 DHCP 服务器，将自动恢复之前的设置。
   - 配置备份与恢复：在执行恢复流程之前，备份当前的系统设置。备份或恢复之后，系统会自动重新启动。
   - 重新启动：重新启动系统。



设置屏幕

执行升级

1. 单击 [**升级**]。
2. 单击 [**浏览**] 并指定要升级的文件。
3. 单击 [**发送**]。



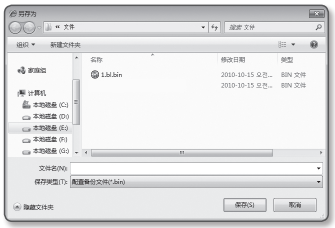
4. “**升级**”对话框出现，其底部将显示进度。
5. 完成升级之后，浏览器将会退出，并且摄像机会重新启动。



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

备份当前设置

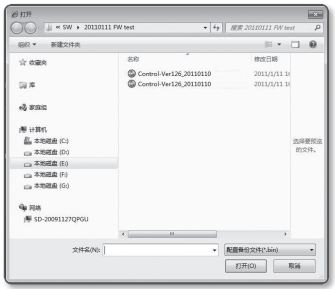
1. 单击 [**备份**]。
   另存为对话框将出现。
2. 指定备份路径及正确的文件名，然后单击 [**保存(S)**]。
   备份文件将以“**.bin**”格式保存到指定的路径。



恢复备份设置

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

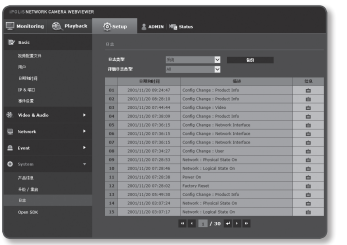
- 如果执行备份或恢复，Web 浏览器将关闭，且摄像机将重新启动。
- 如果您试图恢复其它型号上备份的配置文件，有些功能可能会失去作用，您需要手动更改设置。



设置屏幕

日志

可以检查系统日志或事件日志。

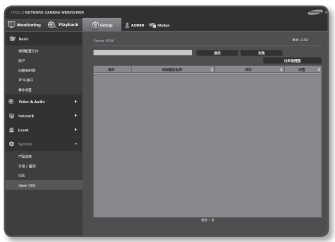


1. 从设置菜单，选择 <**System** ( )> 选项卡。
2. 单击 <**日志**>。
3. 选择日志类型。
   - 系统：您可以检查系统日志，其中记录了所有系统更改，包括时间信息。
   - 事件：可以检查事件日志，包括时间信息。
4. 从右边的日志列表，选择要搜索的项目。
   - 如果在左上角的下拉列表中选择了 <**All**>，将显示适用日志类型的所有日志。
5. 如果一页无法显示所有可用的日志，请使用底部按钮以移至前一个、下一个或最后项目。
6. 单击 <**备份**> 按钮可将当前所选模式（系统、事件）的所有日志数据保存在浏览器 download 文件夹的“摄像机在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

- 如果要查看日志的详细信息，请单击日志右列中的 [**信息** ( )]；日志信息将显示在底部窗格中。
- 每页显示 15 个日志，最新的日志显示在顶部。
- 事件/系统日志列表最多可包含 1000 个日志；之后，每当创建新日志时，将删除最旧的现有日志。

Open SDK

用户可以在摄像机上安装应用程序来执行更多功能。



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

■ 有关应用程序使用或安装的问题，请参阅 Techwin 开发人员网站。

设置屏幕

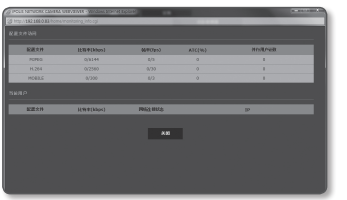
查看配置文件信息

配置文件访问

您可以检查配置文件信息。

1. 单击实时屏幕中的[**Status (**)]。
2. 将显示配置文件信息屏幕。





- 配置文件访问：显示新添加的配置文件的信息。
  - 配置文件：显示新添加的编码器的信息。
  - 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 [**Status (**)] 以刷新它。应用更改需要一些时间。

附录

规格

项目		说明
视频	成像设备	1/2.8" PS Exmor 2.38M CMOS
	总像素数	1952(水平) x 1116(垂直)
	有效像素数	1944(水平) x 1104(垂直)
	扫描系统	逐行扫描
	最低照度	彩色：0.1 Lux (F1.2, 50IRE)、0.03Lux (F1.2, 30IRE) 黑白：0.01 Lux (F1.2, 50IRE)、0.002 Lux (F1.2, 30IRE)
	S/N 比率	50dB
	视频输出	CVBS : 1.0 Vp-p / 75Ω 复合，720x480(N)，720x576(P)，供安装使用 - DIP 连接器类型
镜头	焦距(变焦比率)	-
	最大孔径比	-
	视野角度	-
	最短物距	-
	聚焦控制	简单对焦/手动 - 通过网络远程控制（手动，简单对焦，日/夜）
	镜头类型	手动/DC 自动光圈，P 光圈
	安装类型	C/CS 接口

附录

项目		说明
操作	摄像机标题	关/开（最多显示 45 个字符）
	日夜	自动 (ICR)/彩色/黑白/外部/计划
	背光补偿	关/背光补偿/WDR
	宽动态	120dB
	对比度增强	SSDR（Samsung 超级动态范围）（关/开）
	数字降噪	SSNRIII（2D+3D 噪音过滤）（关/开）
	数字图像稳定器	关/开
	透雾	自动/手动/关
	移动探测	关/开（4 边形的 4 个区域）
	隐私遮挡	关/开（4 边形的 32 个区域）
	增益控制	关/低/中/高
	白平衡	自动追踪白平衡/自动控制白平衡/手动/室内/室外
	电子快门速度	最小/最大/防闪烁（1 ~ 1/12,000秒）
	数字缩放	-
	翻转/镜像	关/开
	智能视频分析	防拆，虚拟线，进入/走出，出现/消失，音频探测，面部探测，，人脸识别（支持元数据）
	远程控制接口	RS-485 （协议：Samsung-T/E、Pelco-D/P、Sungjin、Panasonic、Honeywell、AD、Vicon、GE、BOSCH）
	警报 I/O	输入 1ea / 输出 1ea

项目		说明
操作	警报触发	移动探测，防拆，音频探测，面部探测，网络断开连接，视频分析，警报输入
	报警事件	• 通过 FTP 上传文件，电子邮件 • 通过电子邮件通知 • 网络断开连接以及发生事件时进行本地存储（SD/SDHC/SDXC）或 NAS 录制 • 外部输出
	音频输入	可选（麦克风输入/音频输入/内置麦克风） 电源电压：2.5VDC (4mA)，输入电阻：大约 2K 欧姆
	音频输出	线路输出（3.5 毫米单声道插座），最大输出级别：1 Vrms
网络	以太网 : 光纤	SFP（LC 型）
	光纤 : 以太网物理层	100 Base-FX、1000 Base-X
	光纤 : 默认速率	1000Mbps
	光纤 : 以太网标准	支持 IEEE 802.3u、IEEE 802.3z
	视频压缩格式	H.264(MPEG-4 Part 10/AVC), Motion JPEG
	分辨率	1920x1080 / 1280x1024 / 1280x960 / 1280x720 / 1024x768 / 800x600 / 800x450 / 640x480 / 640x360 / 320x240 / 320x180
	最大帧速率	H.264：所有分辨率下最大 60 fps MJPEG：1920x1080 / 1280x1024 / 1280x960 / 1280x720 / 1024x768：最大 15 fps 800x600 / 800x450 / 640x480 / 640x360 / 320x240 / 320x180：最大 30fps
	智能编解码器	手动模式（基于区域：5EA） 人脸识别模式

附录

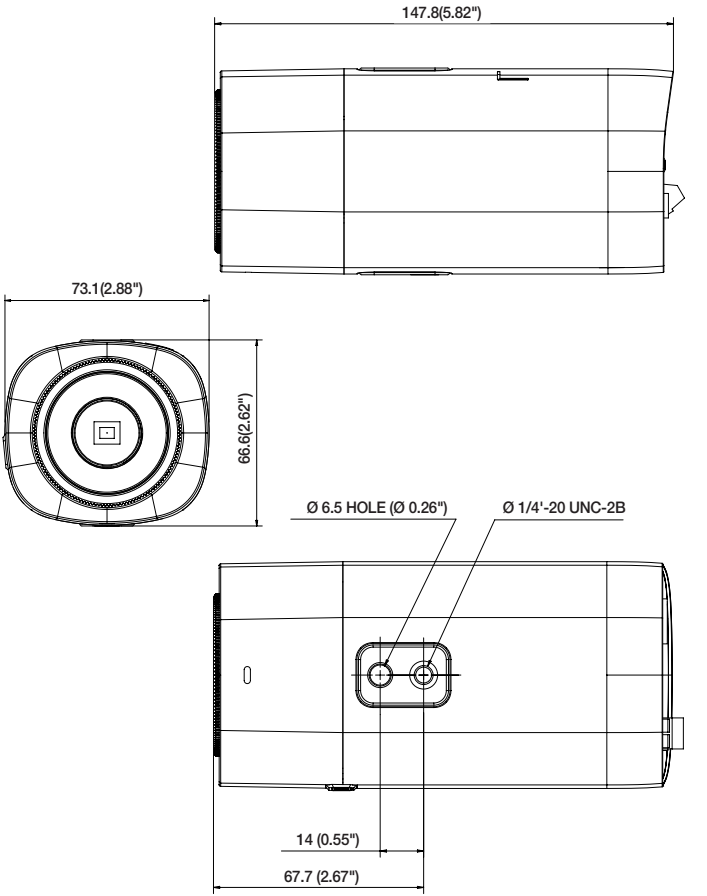
项目		说明
网络	**视频质量调整**	H.264：压缩级别、目标比特率级别控制 MJPEG：质量级别控制
	比特率控制方法	H.264：CBR 或 VBR MJPEG：VBR
	流能力	多流（最多 10 个配置文件）
	音频压缩格式	G.711 μ 法则/G.726 可选 G.726 (ADPCM) 8KHz，G.711 8KHz G.726：16Kbps，24Kbps，32Kbps，40Kbps
	音频通信	双向
	IP	IPv4, IPv6
	协议	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
	安全	HTTPS(SSL) 登录验证 分类登录验证 IP 地址过滤 用户访问日志 802.1X 身份验证方法
	流方法	单播/多播
	最大用户访问量	单播模式下 15 个用户
	存储器	micro SD/SDHC/SDXC - 可以下载录制到 SD/SDHC/SDXC 存储卡中的移动图像。 NAS（网络附加存储）

项目		说明
网络	应用程序编程接口	ONVIF Profile S SUNAPI(HTTP API) SVNP 1.2
	语言	英语、法语、德语、西班牙语、意大利语、中文、韩文、 俄语、日语、瑞典语、丹麦语、葡萄牙语、捷克语、波兰语、土耳其语、罗马尼亚语、塞尔维亚语、荷兰语、克罗地亚语、匈牙利语、希腊语、挪威、芬兰
	Web 查看器	支持的操作系统 : Windows XP / VISTA / 7 / 8 / 8.1, MAC OS X 10.7 ~ 10.10 支持的浏览器 : Microsoft Internet Explorer（版本 8~11） Mozilla Firefox（版本 9~35）, Google Chrome（版本 15~40）, Apple Safari（版本 8.0.2（Mac OS X 10.10）、7.0.6（Mac OS X 10.9）、6.0.2（仅限 Mac OS X 10.8、10.7）、5.1.7）※ 仅限 Mac OS X
	中央管理软件	SmartViewer, SSM
环境	工作温度/湿度	-10°C ~ +55°C (+14°F ~ +131°F) / 低于 90% RH
	贮藏温度/湿度	-30°C ~ +60°C (-22°F ~ +140°F) / 低于 90% RH
电气	输入电压/电流	AC24V，DC 12V
	功耗	最大 12.5W (AC 24V, 50 ~ 60Hz)，最大 10.5W (DC 12V)
机械	颜色/材料	前端（黑色），机身（象牙白）/前端（铝质），机身（塑料）
	尺寸 (宽x高x深)	宽73.1 x 高66.6 x 深147.8mm (2.88" x 2.62" x 5.82")
	重量	385g

附录

产品视图

单位 :毫米(英寸)



故障排除

故障	解决方法
无法使用网络浏览器访问摄像机。	• 检查摄像机的网络设置 是否正确。 • 检查网络缆线是否正确 连接。 • 若使用 DHCP 连接、检查摄像机是否能够 无故障地获得动态 IP 地址。 • 若摄像机与宽带路由器连接、确认是否 正确设置了端口转发。
虽然摄像机背面传输(TX)/接收(RX)光纤状态指示灯"亮起",但依然无法建立浏览器与摄像机的连接。	• 请确认光纤通信传输速率控制开关（100 Base-FX / 1000 Base-X）的规格是否匹配 SFP 模块。 • 请检查局域网线缆的连接状态。
摄像机背面传输 (TX) 灯"亮起"/接收(RX)光纤状态指示灯"熄灭"。	• 检查光缆是否为交叉连接（AB/BA）。 • 检查 4 条光缆中是否有一条或多条已经断开连接。
查看器在监视期间断开。	• 已连接的查看器在摄像机或网络配置发生更改时会断开。 • 检查所有的网络连接。 • 若摄像机通过 PPPoE 网络进行连接，查看器在网络状况不佳的情况下可能会断开。
无法使用 IE 7.0 的选项卡浏览器连接系统。	• 由于共享了 cookie 数据，所以与新窗口或选项卡连接时可能出错。不要使用新窗口或选项卡，选择“文件 → 新建会话”
IP 安装程序未检测到连接至网络的摄像机。	• 关闭 PC 上的防火墙设置、再次搜索摄像机。
图像重叠。	• 检查是否将多个摄像机应当设置的不同地址设为了同一多播地址。多个摄像机共享同一地址可能会导致图像的重叠。
无图像出现。	• 如果传输方法设置为多播，请检查摄像机所连接的 LAN 中是否有路由器支持多播。

附录

故障	解决方法
<Event> 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。
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 Micro SD 内存卡。	• 检查内存卡是否有缺陷。
插入了 Micro SD 内存卡，但摄像机操作不正常。	• 检查是否以正确的方向插入内存卡。 不能保证本摄像机装置能正常使用由其他设备格式化的内存卡 • 在 <Setup> → <Event> → <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。 • 检查是否作为其他用户尝试访问，而没有对所保存和使用的基本文件夹进行格式化。 • 确认使用了建议的 NAS 设备。

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GPL SW

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

LGPL SW

Component Name	License	URL
gLibc	LGPL 2.0	
Inetutils	LGPL 3.0	
neon-0.29.6	LGPL 2.0 (The Manual and test suite are GPL)	http://www.webdav.org/neon/

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libcap-1.2.1	BSD 2.0	http://www.kernel.org/pub/linux/libs/security/linux-privs/libcap2
lighttpd-1.4.35	BSD 2.0	http://www.opensource.org/licenses/bsd-license.html
Game-ws	BSD 2.0	
MiniUPnP Project Client	BSD 2.0	
pppd-2.4.5	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@samsung.com.

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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.

18. "Source Code User" means a person who uses the Source Code.

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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.

Article 4. License of Source Code

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

2. The Source Code shall be distributed exclusively by T-Engine Forum. Any person who obtains the Source Code under Article 4.1 above shall not make any re-Distribution of the Source Code.

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1. to copy and/or modify the Source Code provided by T-Engine Forum hereunder for its own research, development and the like.

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

1. T-Engine Forum and the copyright holder of the Source Code warrant that the Source Code does not infringe third party's copyrights. Provided, however, that T-Engine Forum and the copyright holder of the Source Code make no warranty as to the Hardware-dependent Part and/ or Compiler- dependent Part set forth in Article 6.2 in the Ported Source Code by any third party.

2. Neither T-Engine Forum nor the copyright holder of the Source Code warrants that the Source Code will fit for any particular purpose of the Source Code User.

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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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