网络视频录像机

用户手册

SRN-472S

CE

SAMSUNG

网络视频录像机
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 是 “admin”，密码应在首次登录时设置。**
如果要将产品与无线路由器配合使用、请设置无线网络的密码。
不使用密码保护或使用默认无线路由器密码可能会使视频数据受到潜在威胁。
请每隔三个月更改密码以保护个人信息并避免因信息失窃造成损失。
请注意，用户应负责安全以及密码管理不善导致的其他问题。

概述

重要安全说明

使用装置前请仔细阅读这些操作说明。
请按照下面列出的安全说明操作。
请将这些操作说明放在方便处、以供将来参考。

1) 请阅读这些说明。
2) 请妥善保管这些说明。
3) 注意所有警告。
4) 请遵循所有说明。
5) 切勿在近水处使用本设备。
6) 清洁时只使用干布。
7) 请勿堵塞任何通风口。根据厂商的说明进行安装。
8) 不要将本设备安装在任何靠近热源例如电暖炉、暖气片、或其他(包括扩音器)会产生热气的设备。
9) 请勿忽略极化或接地型插头的安全保护用途。极化型插头具有两边、有一边较另一边宽。
接地型插头具有两 边和第三端接地插脚。该宽边或第三端插脚是为您的安全而提供的。
如果所提供的插头不适用于您的插座、请联系电工更换旧插座。
10) 保护电线以防践踏或被挤压、特别是插头处、便利插座处以及设备接出处的电线。
11) 只使用厂商指定的附加装置/附件。
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) 所有维修均应由合格的维修人员执行。设备在具有任何方式的损坏时需要维修服务、如电源线或插头损坏、设备内溅入液体或落入杂物、设备曾淋雨或浸水无法正常操作、或是跌落。

概述

使用前须知

本手册提供使用产品所需的操作信息、并且包含关于每个零部件及其功能和菜单或网络设置的说明。
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- 对于由于使用非标准产品或不按照本手册中的说明使用产品而造成的任何损失、我们概不负责。
- 如果您要打开系统的机箱检查是否存在问题、请咨询购买产品所在商店的专家。
- 在添加硬盘或外部存储器（USB 内存、USB 硬盘等等）之前、请检查它与本产品是否兼容。 有关兼容性列表、请与零售商联系。

警告

电池

在产品中换用不正确的电池可能会导致爆炸。因此、您必须使用与产品中正在使用的电池同类的电池。
以下是您现在正在使用的电池的规格。

- 标准电压：3V
- 标准容量：170mAh
- 连续标准负载：0.2mA
- 操作温度：-20°C ~ +85°C (-4°F ~ +185°F)

注意

- 将电源线连接到接地的插座。
- 将试电插头用作断开连接设备、它应该随时都可操作。
- 不应该将电池放在强热中、例如阳光下、火上或类似的物体中。
- 如果换用类型不正确的电池、那么会有发生爆炸的风险。 请按照说明处置用过的电池。

系统关闭

如如果在产品操作时关闭电源或用不允许的操作关闭电源、都可能会导致硬盘和产品损坏。
若要安全关闭电源，请选中系统终止弹出窗口中的 <**确定**>，然后拔掉电源线。
您可能需要安装 UPS 系统来保证安全操作、以预防电源意外中断所导致的损坏。(有关 UPS 的任何问题、请向您的 UPS 零售商咨询。)

- 如果异常关闭电源、则重新启动可能需要较长时间、以便从硬盘恢复数据以正常操作。

操作温度

本产品的允许操作温度范围是 0° C ~ 40° C (32° F ~ 104° F)。
若在低于允许温度下长时间存储、本产品将无法立即正确操作。
当要使用在低温下长时间存储后的设备时、请将产品放置在室温中一段时间、然后再运行。
必须特别注意产品中的内置 HDD、其允许温度范围是 5° C ~ 55° C (41° F ~ 131° F)。
同样、如果在低于允许温度的温度下使用、硬盘可能无法正常工作。

以太网端口

本设备供在室内使用、所有通信接线都限制为在楼宇内进行。

安全注意事项

初始管理员 ID 是“admin”，密码应在首次登录时设置。
如果要将产品与无线路由器配合使用、请设置无线网络的密码。
不使用密码保护或使用默认无线路由器密码可能会使视频数据受到潜在威胁。
请每隔三个月更改密码以保护个人信息并避免因信息失窃造成损失。
请注意，用户应负责安全以及密码管理不善导致的其他问题。

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概述

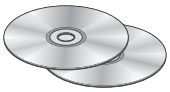
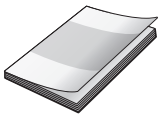
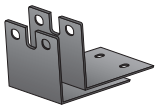
特性

本产品会将来自网络摄像机的视频和音频录制到硬盘、并允许从硬盘进行播放。
它还提供远程监视环境、可使用远程计算机通过网络远程监视视频和音频。

- 用户友好界面
- 支持 VGA、4CIF、最高以 2592X1944(5M 像素)录制
- 录制和播放视频
- 录制和播放音频
- 支持 ONVIF Pofile S 标准和 RTP / RTSP 协议
- 使用 HDMI 电缆播放高清晰度视频
- 通过 HDD SMART 显示硬盘操作状态
- 启用硬盘覆盖
- 使用 USB 2.0 协议和外接硬盘备份
- 同时播放 4 个频道
- 多种搜索模式(按时间、事件)
- 多种录制模式(正常、事件、计划录制)
- 警报输入/输出
- 通过 Windows 网络查看器进行的远程监视功能
- 网络摄像机的现场监视
- 安装向导功能（简易设置、快速设置）

包装内容

请拆开产品的包装、将产品放在平坦的位置或待安装位置。
请检查除了主装置之外、是否包括下列内容。

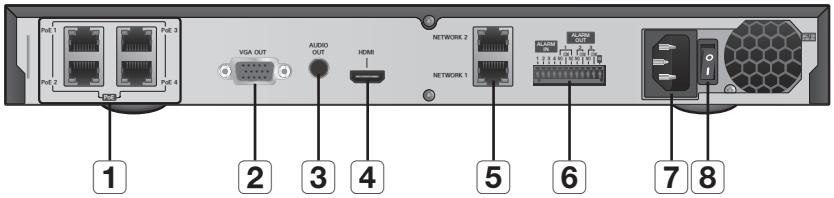
NVR	遥控器 / 遥控器电池 (AAA)	鼠标
		
电源线	Network Viewer 软件/ 用户手册 CD	用户手册或简介遥
		
支架架	支架螺钉	接线端子

概述

部件名称与功能(前面)

部件名称		功能
1	LED 指示灯	REC : 当正在进行录制时亮起。
		HDD : 显示正常访问硬盘。 正在访问硬盘时、LED 会亮起。
		ALARM :发生事件时亮起。
		NETWORK : 显示网络连接和数据传输状态。
		BACKUP : 当正在进行备份时显示。
		POWER : 显示电源打开/关闭状态。
2	USB	连接 USB 设备。
3	远程接收系统	接收来自遥控器的信号。

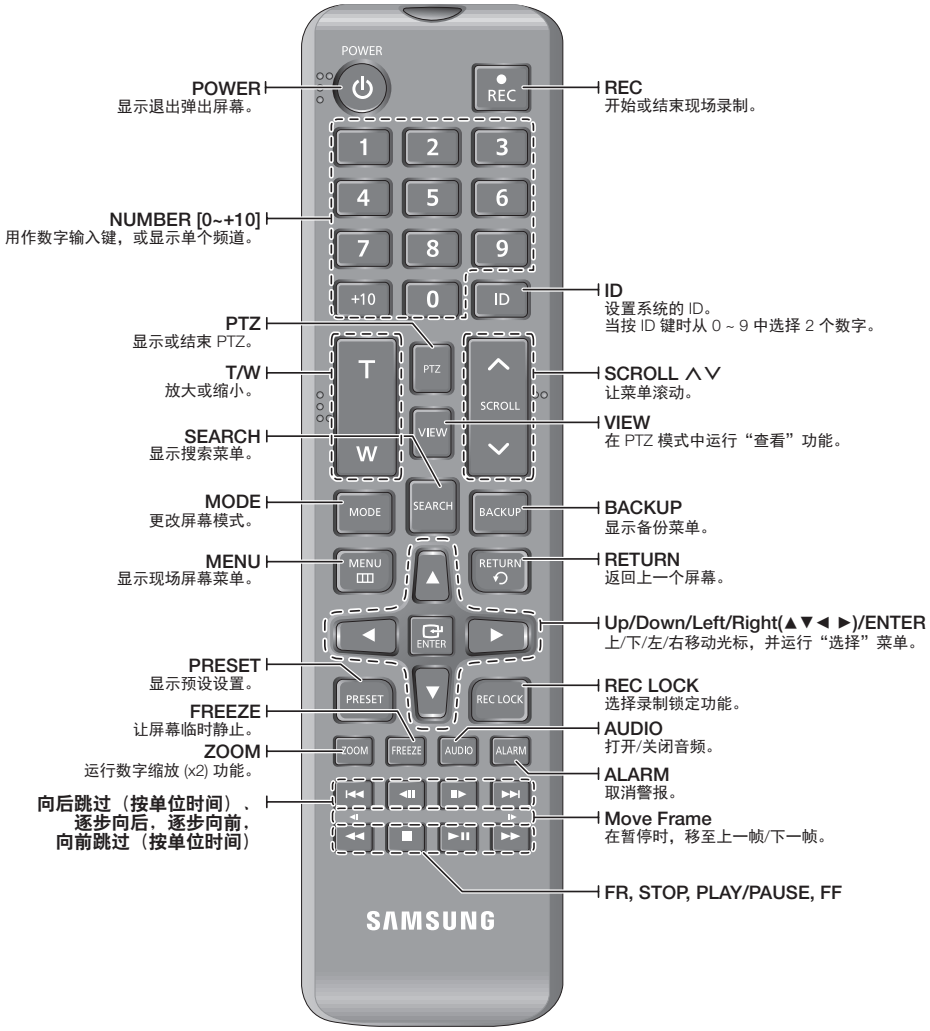
部件名称与功能(背面)



部件名称		功能
1	PoE 1/2/3/4	连接摄像机的电源端口。
2	VGA OUT	VGA 视频信号输出端口。
3	AUDIO OUT	音频信号输出端口(RCA 插孔)。
4	HDMI	HDMI 连接器端口。
5	NETWORK 2	摄像机连接端口；从摄像机接收视频。
	NETWORK 1	连接摄像机的端口，您可以访问摄像机的 Web 查看器，以设置详细的摄像机设置。
6	ALARM	- ALARM IN : 警报输入端口。 - ALARM OUT : 警报输出端口。
7	电源	电源线连接到的端子。
8	电源开关	电源开关。

概述

遥控器



使用数字按钮

1. 选择一个介于 1 和 4 之间的数字。
2. 移到所选的频道号。

更改遥控器 ID

遥控器的 ID 和 NVR 的 ID 应匹配适当的操作。

1. 按遥控器上的 [**ID**] 按钮并检查在 NVR 屏幕上显示的 ID。
   遥控器上的 ID 出厂默认值为 00。
2. 按住遥控器上的 [**ID**] 按钮，同时依次输入您选择的两个数字。
3. 完成 ID 输入后，再次按遥控器上的 [**ID**] 按钮检查设置。

- 如果要将遥控器 ID 更改为 08：按住遥控器上的 [**ID**] 按钮，同时依次按 0 和 8。
  有关如何更改遥控器 ID，请参阅“**远程设备**”。（第 67 页）

安装

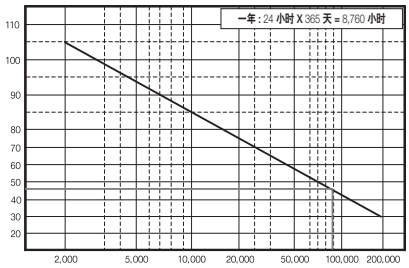
在使用产品之前、请了解下列事项。

- 切勿在室外使用本产品。
- 切勿使水或液体溅湿产品的连接部件。
- 切勿使系统处于震动或摇晃激烈的环境。
- 切勿强行拔出电源线。
- 切勿自行拆解本产品。
- 切勿超出额定的输入/输出范围。
- 仅使用通过认证的电源线。
- 对于输入接地的产品、使用接地的电源插头。

检查安装环境

本产品是顶尖的安防设备、配有高容量硬盘和其他重要的电路板。

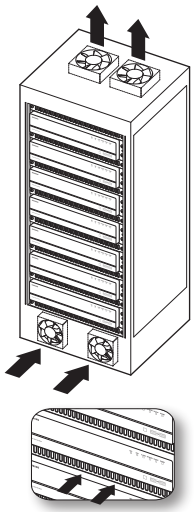
请注意、产品内部温度过高可能会导致系统故障或产品寿命缩短(请参见右图)。 在安装产品之前、须牢记下列说明。



[图 1]

当将本产品安装在支架上时、请按照下面的说明操作。

1. 请确保机架内部不是密封的。
2. 请确保空气可以通过进风口和出风口循环。
3. 如果象图 2 所示那样层叠安装产品或其他支架安装式设备、请确保留出通风的空间或安装通风口。
4. 为了形成空气自然对流、请将进风口放到机架的底部、将出风口放在顶部。
5. 强烈建议在进风口和出风口处安装风扇马达、加强空气循环。 (请在进风口处安装滤网、过滤出灰尘或异物。)
6. 请让机架内部和周围区域的温度保持在 0°C 到 40° C (32° F 到 104° F) 之间、如图 1 所示。



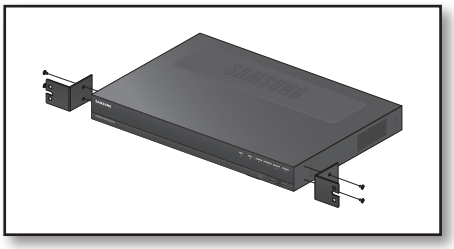
[图 2]

安装

机架安装

如图所示安装支机架、然后拧紧两侧的螺钉(每侧2个螺钉)。

- 紧固螺钉、这样即使摇晃也不会松动。



添加硬盘

确保从墙上插座上拔下电源线插头、以防止遭受电击、伤害或产品损坏。
请咨询您的提供商以获得关于硬盘安装的更多信息、因为不正确的安装或设置可能会损坏产品。

- 支持的硬盘数 : 可以添加一个基本值 EA + 一个最大值。
- 在进行安装之前、确保从墙上插座上拔下电源线插头。

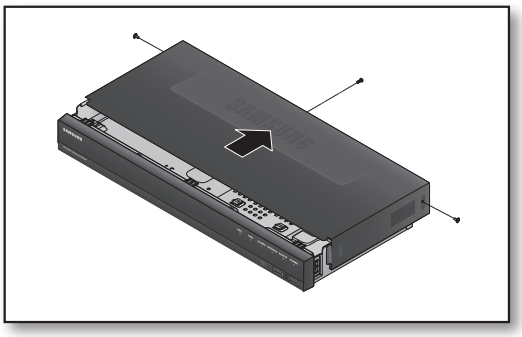
- **数据丢失注意事项(硬盘保管)**
  请千万注意、避免硬盘中的数据被损坏。
  在添加硬盘之前、请检查与本产品的兼容性。
  硬盘会因为其敏感的性质而容易发生功能异常、如果在操作时受到震动则情况尤甚。
  请确保硬盘不受震动等影响。
  对于用户粗心大意或滥用引起的硬盘损坏、我们概不负责。
- **可能会导致硬盘或记录的数据损坏的情况**
  为了降低因硬盘损坏而遗失数据的风险、请尽量频繁备份数据。
  如果在拆解或安装时受到电击、存储在硬盘中的数据可能会损坏。
  正在执行硬盘操作时电源突然中断或关闭产品可能会损坏硬盘。
  如果在硬盘操作期间移动主体或受到冲击、可能会损坏硬盘或存储在其中的文件。

安装硬盘时的注意事项

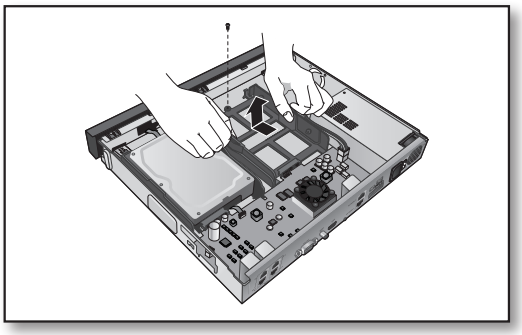
1. 切勿对硬盘过度用力。
2. 注意不要遗失拆卸螺钉或附件。
   - 如果没有正确地将螺钉或附件连接在一起、产品将会报废或无法正常操作。
3. 在添加硬盘之前、请检查硬盘兼容性。
   - 请与离您最近的经销商联系、以获得兼容设备列表。

在安装硬盘时

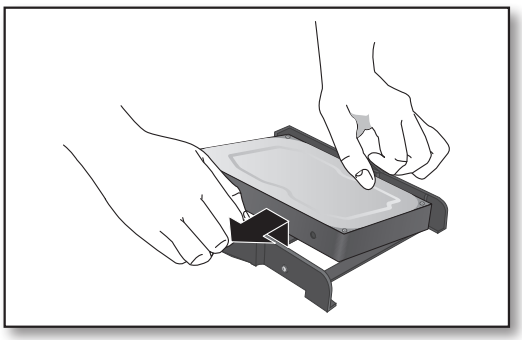
1. 松开一端以及后面的螺钉，取下盖子。



2. 松开硬盘支架上的螺钉，取下支架。
   - 按住支架两端的手柄，将其向前拉，这样便可以将主体和支架分离。

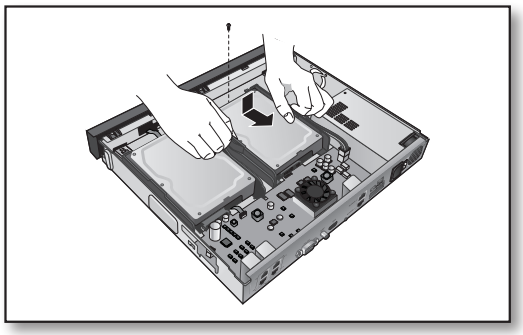


3. 首先将硬盘支架和硬盘的一端组合在一起，然后在另一端打开支架以安装硬盘。
   - 将硬盘支架中的螺钉插入到硬盘螺钉孔中。

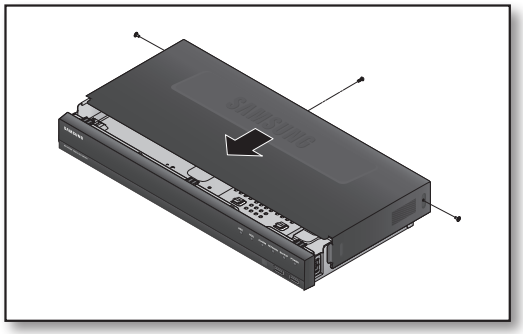


安装

4. 按住安装硬盘的支架并用螺钉将其固定。

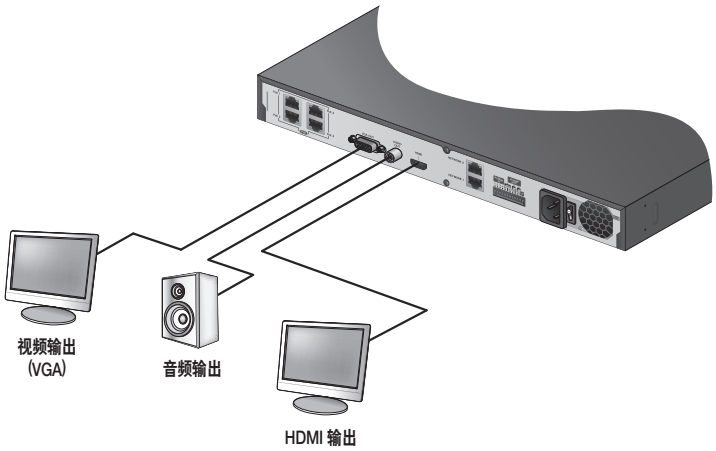


5. 关上盖子并用螺钉将其固定。



连接其他设备

连接至外部设备



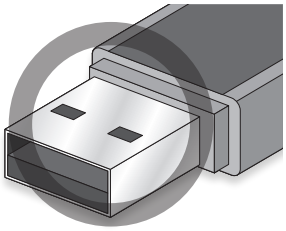
- 非额定或不正确的电源可能会导致损坏系统。 在按“电源”按钮之前、请确定您仅使用额定电源。

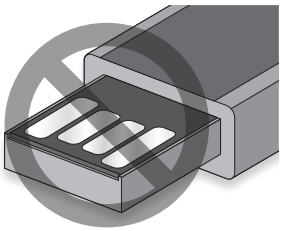
连接其他设备

连接 USB

1. 在本产品前面有一个 USB 端口。
2. 您可以将 USB 硬盘、USB CD/DVD 播放器、USB 存储器或鼠标连接到 USB 端口上。
3. 如果将 USB 硬盘连接至系统、则识别和设置可在“**菜单设置** > **设备** > **存储设备**”中进行。(第 65 页)
4. 本产品支持热拔插功能、此功能允许当正在使用系统时连接/断开 USB 设备。

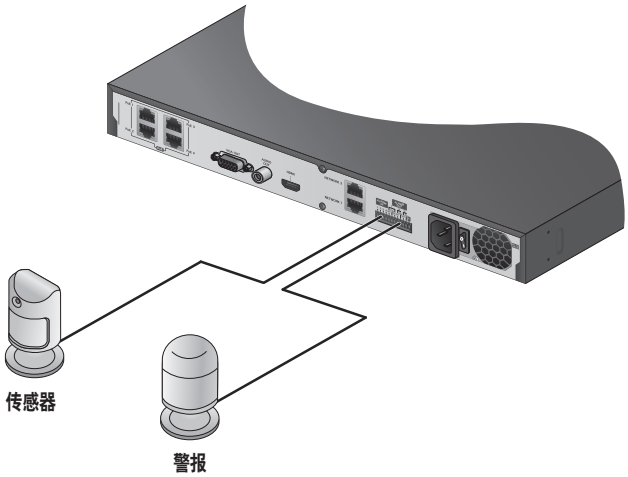
- 如果将 USB 设备用于备份、并且尚未在 NVR 上将其格式化、请在计算机上用 FAT32 将其格式化。
- 因为部分USB装置存在兼容性问题，使用时可能会出现异常、请您事前确认后再使用。
- 我们只能保证使用标准USB存储装置（表面金属类型）可以正常使用,但如果USB接口出现磨损。
- 也可能会导致USB信号传输异常,导致使用中出现异常。

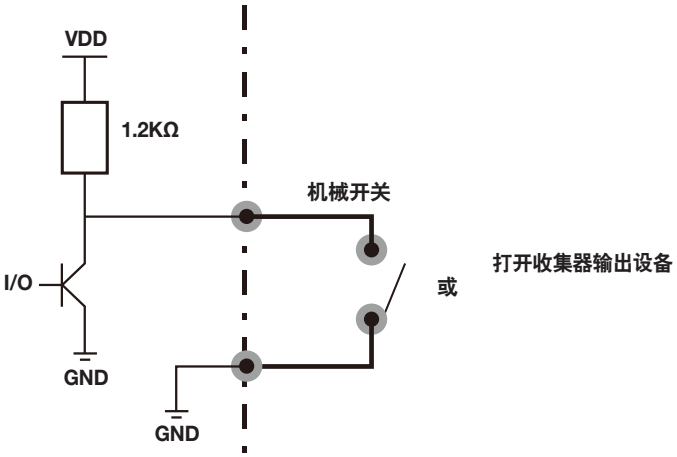




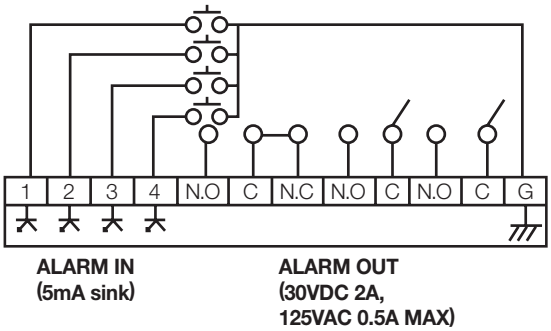
连接警报输入/输出

背面的警报输入/输出端口由下列各项组成。





- ALARM IN 1 ~ 4 : 警报输入端口
- ALARM OUT 1 ~ 3 : 警报输出端口

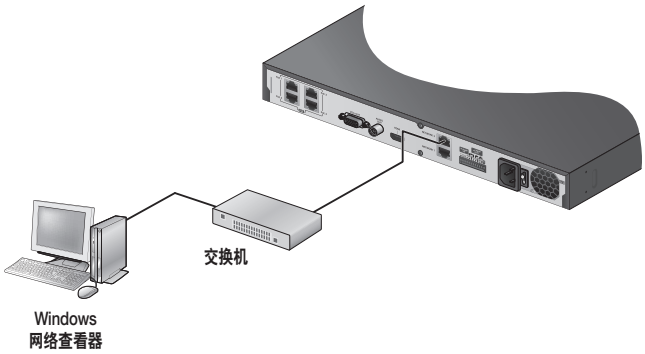


连接其他设备

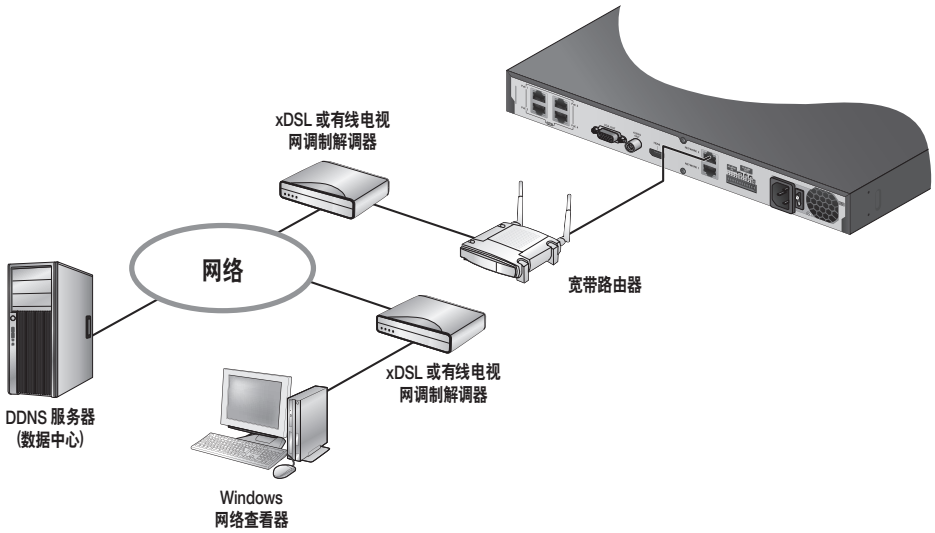
连接网络

- 有关网络连接的更多信息、请参阅“**网络配置**”。(第 76 页)

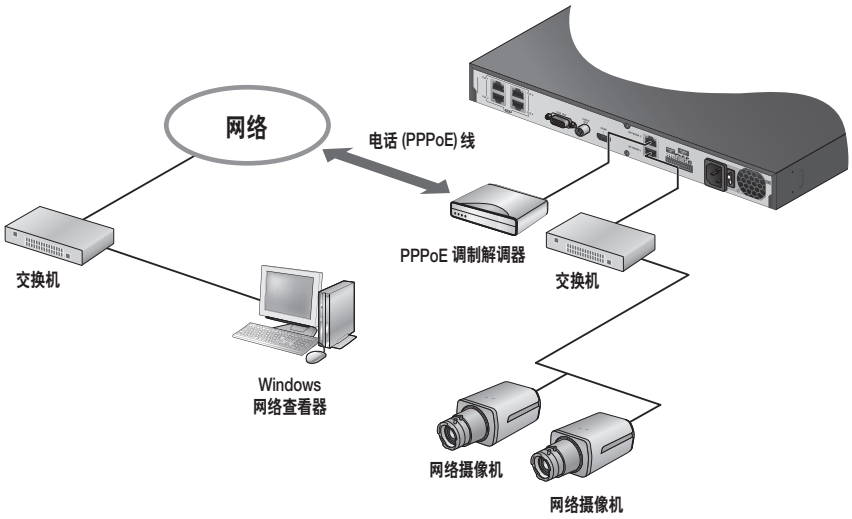
通过以太网进行的网络连接 (10/100BaseT)



通过路由器进行的网络连接

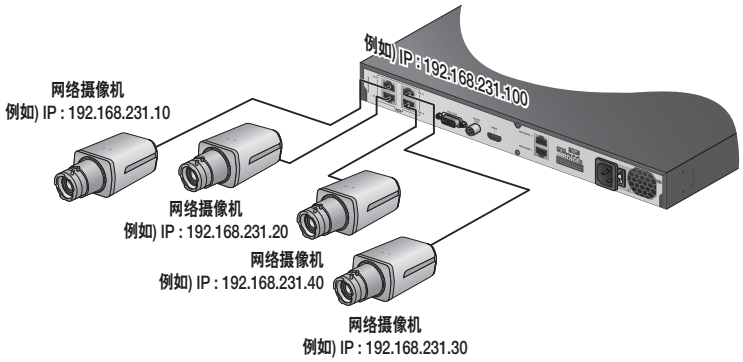


通过 PPPoE 连接至网络



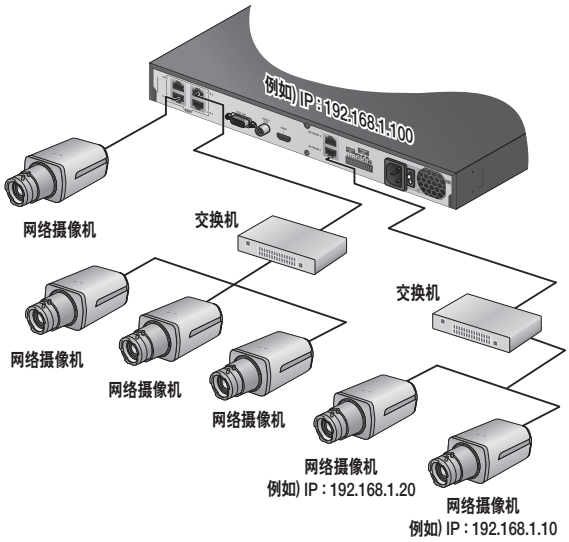
连接网络摄像机

PnP 模式



连接其他设备

手动模式


例如) IP : 192.168.1.100
网络摄像机
交换机
交换机
网络摄像机
网络摄像机
网络摄像机
网络摄像机
例如) IP : 192.168.1.20
网络摄像机
例如) IP : 192.168.1.10

现场

开始使用

启动系统

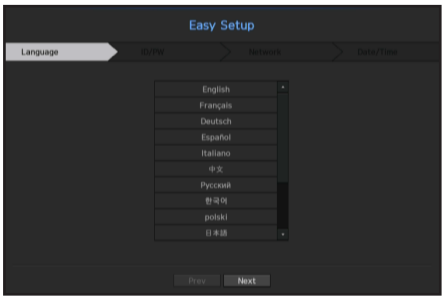
1. 将 NVR 的电源线连接至墙上插座。

2. 将会看到初始化屏幕。
   初始化过程将持续约 2 分钟。
   如果安装了新硬盘、初始化过程时间可能会更长。

简易设置

利用该设置，您可以轻松设置语言、ID/密码、网络和日期/时间。

1. 在启动本产品时将出现初始化屏幕。 然后将出现 <**Easy Setup**> 屏幕。
   设置要使用的语言，然后单击 <**Next**> 按钮进入下一步。
2. 输入并确认 <**Password**> 后，按 <**Next**> 按钮进入下一步。
3. 设置网络访问环境后，按 <**Next**> 按钮进入下一步。
4. 设置日期/时间后，按 <**Next**> 按钮来弹出摄像机注册窗口。
   按 <**OK**> 按钮进入摄像机注册屏幕，按 <**Cancel**> 按钮进入现场屏幕。
   - 有关如何注册摄像机的更多信息，请参阅“**注册摄像机**”。（第 52 页）



- 频道中没有注册任何摄像机时，才会显示摄像机注册窗口。
- 如果注册一个或多个频道，将弹出录制设置屏幕。
- 使用第 4 步中所设置网络的 IPv4 信息完成所有步骤后，DHCP 服务器将自动重新开始运行。
  可以在 DHCP 服务器启动后一分钟内搜索摄像机。

现场

关闭系统

1. 按遥控器上的 [POWER] 按钮或在现场屏幕菜单中选择 <**关闭**>。
2. 此时将弹出“**关闭**”确认窗口。
3. 使用遥控器上的方向按钮，选择 <**确定**> 并按 [ENTER] 按钮或单击 <**确定**>。
   系统将会关闭。

- 只有具有“**关闭**”许可权的用户才能关闭系统。
- 有关许可权管理的信息、请参阅“**用户** > **设置许可权**”。(第 45 页)

登录

如果您想使用 NVR 菜单，则需要以具有其访问权限的用户身份登录。

1. 在现场模式屏幕中，右键单击鼠标按钮或按遥控器上的 [MENU] 按钮。
   将会在屏幕上看到上下文菜单、如图中所示。

2. 选择 <**登录**>。
   登录对话框将会出现。

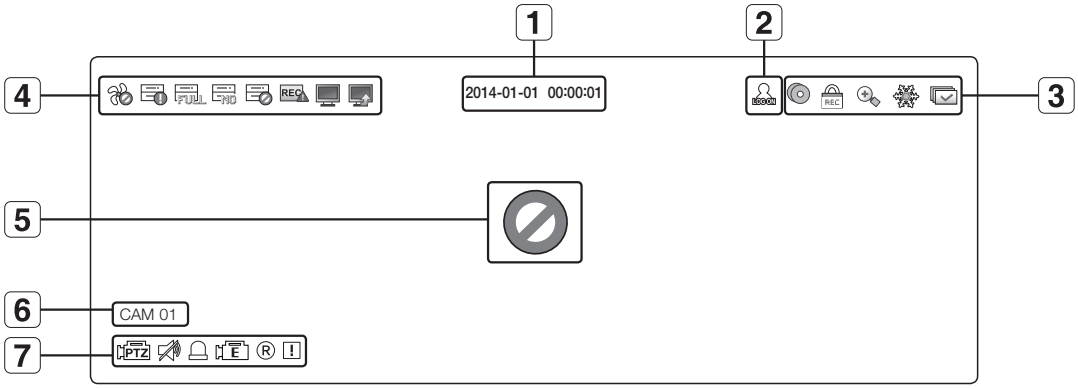
- 即使您按需要用遥控器登录的菜单按钮，也会显示登录屏幕。
- 初次管理员 ID 为“admin”，并且必须在安装向导中设置密码。
- 如果要将产品与无线路由器配合使用、请设置无线网络的密码。不使用密码保护或使用默认无线路由器密码可能会使视频数据受到潜在威胁。
- 请每隔三个月更改密码以保护个人信息并避免因信息失窃造成损失。
  请注意，用户应负责安全以及密码管理不善导致的其他问题。

- 若要更改访问权限，请参阅“**用户** > **设置许可权**”。(第 45 页)

现场屏幕配置

现场屏幕上的图标

您可以使用现场屏幕上的图标检查 NVR 的状态或操作。



名称			描述
1	当前日期、时间		显示当前时间和日期。
2	登录信息		在登录时、将会显示“LOG ON”图标。
3	屏幕模式		在现场状态下执行备份时显示。
			如果录制取消菜单的访问受到限制，只有在执行手动录制时才会显示此项。 ■ 只有有权取消录制的用户才能取消录制。
			运行放大功能时显示。
			按静止按钮时显示。
			以设定时间间隔切换所有频道时显示。
4	系统操作		风扇存在问题时显示。
			由于设备问题而无法接收录制日期时显示。
			硬盘空间已满和 NVR 录制空间不足时显示。
			未安装硬盘或现有的硬盘需要更换时显示。
			硬盘需要技术检测时显示。

现场

名称			描述
4	系统操作	REC	超出每个频道最大允许数据量时显示。
			网络过载时显示。 ■ 超出最大接收容限并导致 CPU 过载时显示。 如果您修改摄像机设置或者删除摄像机来减轻性能负担，此项会显示。
			存在服务器固件更新时显示。
5	视频输入状态		摄像机设置为 <**打开**> 状态无任何输入时显示。
		SAMSUNG	没有授予对现场视图的许可权时显示。
			如果摄像机处于 <**关闭**> 状态，或者没有注册任何摄像机，或者摄像机处于 <**隐蔽 2**> 模式，屏幕上不会显示任何内容。 如果将摄像机设置为 <**隐蔽1**>、则会显示视频、但是不会显示 OSD 菜单。
6	摄像机标题/频道		显示摄像机标题和频道编号。
7	摄像机操作	PTZ	会针对具备 PTZ 功能的摄像机连接至的频道显示此图标。
			显示“音频打开/静音”。如果取消激活、不会在视频模式中显示。
			如果传感器设置为 <**打开**>、则在已连频道的屏幕上会显示输入信号。
		E	将移动探测设置为 <**打开**>之后，发生网络摄像机的运动、摄像机事件时，显示在频道上。
		Ⓡ/Ⓔ/Ⓢ	此项显示常规/事件/计划录制的状态。
		!	由于解码性能有限而未能对所有帧解码（这种情况下只解码 I 帧）时显示。

错误信息

- 如果没有连接内置硬盘，在左上角将显示“**无硬盘**”（ ）图标。在此情况下、应与服务中心联系获取帮助、因为该情况可能会导致无法录制、播放或备份。
- 如果冷却风扇不能正常运转或出现故障、则会出现 <**风扇信息**> 窗口、且会在左上角显示风扇错误图标 ( )。在此情况下、请检查内部风扇是否正常工作。
  由于风扇出错可能会缩短产品使用寿命、因此一定要联系服务中心获取帮助。

■ 如果您在屏幕上看到风扇出错图标或无硬盘、硬盘故障图标、请联系服务中心获取更多详情。

现场屏幕菜单

除了遥控器的功能按钮之外，在现场屏幕模式下，还可以用鼠标按钮右键单击或按遥控器上的 [MENU] 按钮来启动现场屏幕菜单，从这里您可以访问其中的每个菜单。

上下文菜单会因登录/注销的状态、分屏模式和 NVR 操作状态而异。

■ 根据用户权限设置，可以限制使用现场查看、备份、录制、停止录制、搜索、PTZ、远程警报输出以及终止菜单。

< 单画面模式菜单 >

< 分屏模式菜单 >

现场

单画面模式菜单

单画面模式菜单仅在单画面模式中可用。
如果该菜单在单屏中显示为 <**场景模式**>，那么在分屏中，当在该菜单中只选择一个通道时，该菜单会显示为 <**全屏幕**>。

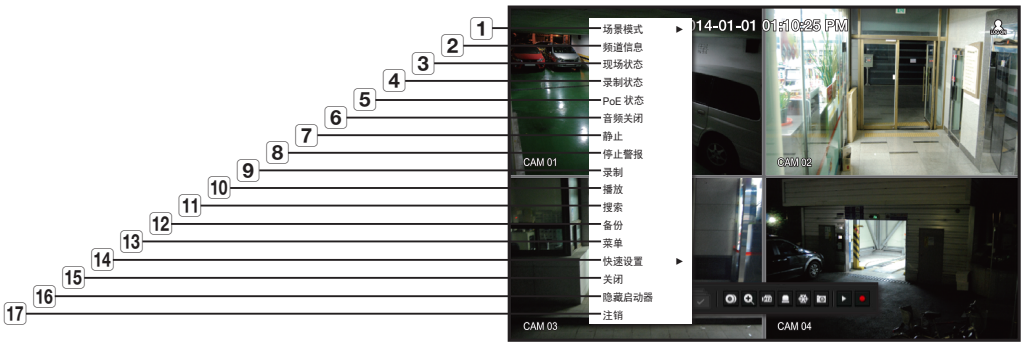
< 单画面模式菜单 >

<分屏中的一个通道选择菜单 >

菜单		描述
1	**全屏幕**	在分屏模式中选择并单击所需的频道、以切换为所选频道的全屏幕。
2	**PTZ 控制**	访问“PTZ 控制”菜单。 在选择单个频道之后、PTZ 菜单在现场屏幕上处于活动状态。 (第 38 页)
3	**放大**	可以放大选择的屏幕。 (第 35 页)
4	**捕捉**	捕捉所选频道的屏幕。

分屏模式菜单

在现场分屏模式中、右键单击以显示此上下文菜单、如图中所示。
分屏模式中的上下文相关菜单会有不同、取决于登录/注销状态。



菜单		描述
1	**屏幕模式**	选择现场屏幕的屏幕模式。 请参阅“**现场屏幕模式**”。(第 32 页)
2	**频道信息**	屏幕上显示每个频道的摄像机连接信息。 请参阅“**频道信息**”。（第 33 页）
3	**现场状态**	显示连接至每个频道的摄像机的现场状态。 请参阅“**现场状态**”。(第 34 页)
4	**录制状态**	显示每个频道的录制状态。 请参阅“**录制状态**”。(第 34 页)
5	**PoE 状态**	在每个通道中设置 PoE 状态。 请参阅“**PoE 状态**”。(第 36 页)
6	**音频打开/关闭**	打开/关闭所选频道的声音。 请参阅“**音频打开/关闭**”。(第 36页)
7	**静止**	临时停止播放视频。 请参阅“**静止**”。(第 37 页)
8	**停止警报**	停止警报输出、取消激活事件图标并退出自动切换。 请参阅“**事件监视**”。(第 37 页)
9	**录制/停止**	开始/停止标准录制。

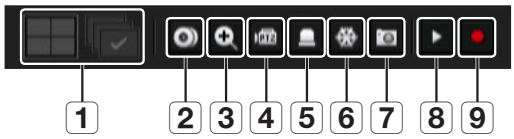
现场

菜单		描述
10	**播放**	请参阅“**搜索和播放** > **播放**”。(第 91 页)
11	**搜索**	请参阅“**搜索和播放** > **搜索**”。(第 88 页)
12	**备份**	搜索备份设备并为每个频道运行备份，或者在随后更合适的时间运行计划备份。
13	**菜单**	进入主菜单。请参阅菜单设置。（第 41 页）
14	**快速设置**	“**摄像机注册**”和“**录制设置**”屏幕将立即出现。
15	**关闭**	系统关闭对话框将会出现。
16	**显示/隐藏启动器**	显示或隐藏启动器。请参阅“**查看启动器菜单**”。(第 31 页)
17	**登录/注销**	您可以登录或注销。

查看启动器菜单

启动器菜单将出现在实时屏幕底部。

1. 在现场屏幕的上下文菜单中选择 <**显示启动器**>。
2. 将光标移到底部、然后在启动器菜单中单击所需的项目。



菜单		描述
1	**屏幕模式**	显示在栏类型中可用的分屏模式列表。 当前屏幕模式将显示为灰色。
2	**备份**	搜索备份设备并为每个频道运行备份，或者在随后更合适的时间运行计划备份。
3	**放大**	放大所选的区域。 此功能仅在单画面现场模式中可用。
4	PTZ	如果连接至选定频道的网络摄像机支持 PTZ 操作、这将会运行 PTZ 控制启动器。 此项仅在现场单画面模式中才会处于活动状态。
5	**警报**	如果它已激活则会停止警报。
6	**静止**	临时静止现场屏幕。
7	**捕捉**	捕捉所选频道的屏幕。
8	**播放**	如果存在要播放的文件、则进入播放模式、否则进入搜索模式。
9	**录制**	开始/结束现场屏幕录制。

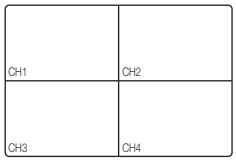
现场

现场屏幕模式

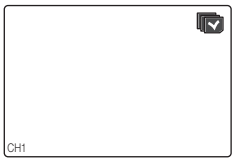
在三个分屏中显示四个现场视频。

显示屏幕模式的方法。

如果您想更改分屏模式，请在启动菜单中选择推荐的屏幕模式，或者用鼠标按钮右键单击，然后在屏幕模式菜单中选择一个分屏模式。
按遥控器上的 [MODE] 按钮以按照启动菜单中推荐的顺序进行更改。



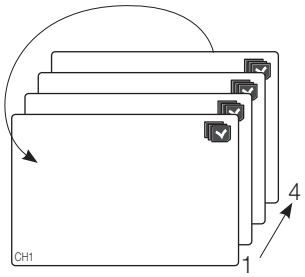
4 分屏模式



自动顺序

自动屏幕切换

您可以在单屏中查看四个连续的现场视频。

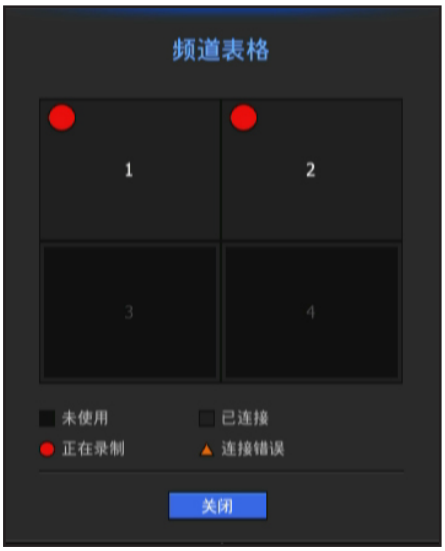


单画面模式

- 在分屏模式中、如果您在“**设备** > **监视器**”中设置了 <**顺序切换时间**>、将以设置的时间间隔执行自动顺序。(第 67 页)

频道信息

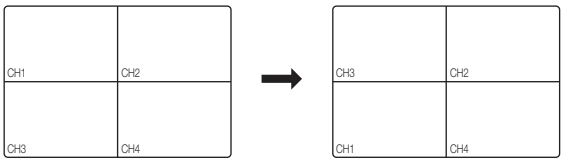
在现场屏幕菜单中选择 <**频道信息**> 来检查摄像机与每个频道的连接状态。



频道设置

可以在分屏的所需区域显示频道。

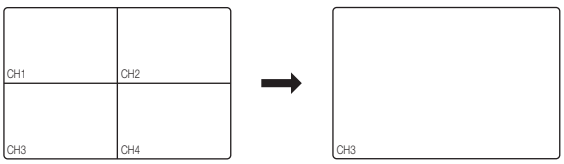
1. 将光标放在每个频道的摄像机名称上面、以在屏幕右侧显示 <▼> 键。
2. 单击摄像机名称以显示频道列表、可在其中选择不同频道。
3. 选择所需的频道、然后单击。
   所选择的通道会显示在屏幕中。
   如果您想更改通道位置，则可以将您的鼠标光标放在所需的位置上。
   - 例如 : 如果您想将通道 1 区更改为通道 3 区。



切换至单画面模式

用鼠标按钮在分屏中双击所需的通道，可将该屏幕切换到单屏。
按遥控器上的通道编号按钮，可切换到单屏。
请参阅“**遥控器** > **使用数字按钮**”。 (第 12 页)

- 例如 : 用您的鼠标双击通道 3 或按遥控器上的数字 3。



现场

现场状态

频道	型号	状态	IP 地址	编解码器	分辨率	帧速率	质量
1	SNB-6004	已连接	192.168.0.7	H.264	1280X1024	30Fps	20(Worst)
2	SNB-6004	已连接	192.168.0.7	H.264	1280X1024	30Fps	1
3	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–

从现场屏幕菜单中选择 <**现场状态**> 以显示连接至每个频道的摄像机的状态和传输信息。

- 型号 : 显示连接到每个频道的摄像机的型号名称。
- 状态 : 显示设置到每个频道的摄像机的连接状态。
- IP 地址 : 显示设置到每个频道的摄像机的 IP 地址。
- 编解码器 : 显示设置到每个频道的摄像机的现场配置文件编解码器信息。
- 分辨率 : 显示设置到每个频道的摄像机的现场配置文件分辨率。
- 帧速率 : 显示设置到每个频道的摄像机的现场配置文件传输速率。
- 质量 : 显示设置到每个频道的摄像机的现场配置文件传输质量。

录制状态

频道	配置文件	录制类型		帧 (fps)		比特率 (bps)			
				输入	录制	限制	输入	录制	输入/限制
1	H.264	正常	全	30.0	30.0	8.0M	0.3M	0.3M	3.8%
2	H.264	正常	全	30.0	30.0	8.0M	0.3M	0.3M	3.8%
3	–	–	–	–	–	–	–	–	0.0%
4	–	–	–	–	–	–	–	–	0.0%

从现场屏幕菜单中选择 <**录制状态**> 以显示每个频道的摄像机配置文件、输入/录制帧速率、输入/限制/录制 bps。

- 比特率总计(录制/最大值) : 录制比特率显示实际数据录制量、而总比特率显示 NVR 允许的最大数据传输。
- 配置文件 : 显示针对每个频道配置的视频配置文件。
- 帧 (fps) : 显示每个频道每秒输入/录制帧数。
- 比特率 (bps)
  - 限制/输入/录制 : 显示每个频道的限制/输入/录制数据量。
  - 输入/限制 : 显示从摄像机传输的实际数据的数据比率、以及用户定义的允许最大值。
- 当前 : 显示当前传输数据的录制状态信息。
- 最大 : 显示在配置的标准和事件录制中录制数据最大的录制信息。
- : 重新装载录制信息。
- 录制设置 : 菜单屏幕将切换到录制设置屏幕。

- 在 NVR 用另一个可用的配置文件替换所选配置文件的情况下、列表底部可能会出现警告消息。 如果所选配置文件无法产生视频数据、就会出现这种情况。
- 如果关键帧录制超出通过限制比特率指定的允许数据量、则弹出警报和图标将会出现面屏幕上。
  除非更改摄像机或录制设置、否则受限录制警报弹出窗口在显示一次之后不会重复；如果更改设置以通知这种状态、它可能会再次出现。
  如果要将警报弹出窗口设置为不出现、请将 <**设置警告**> 的设置更改为不显示消息弹出窗口。
  有关录制数据的比特率限制的详细信息、请参阅“**录制设置**”。（第 70 页）

放大

此项只能在现场单画面模式中激活。
在选择单画面屏幕后，如果使用放大功能，所选区域将放大 2 倍。

1. 在现场屏幕菜单中，选择 <**放大**>。
   按遥控器上的 [ZOOM] 按钮或单击启动菜单上的 < ⊕ >。
   在屏幕中央将显示放大图标。
2. 可以使用遥控器的方向键 (▲▼◄►) 或用鼠标拖动来设置放大区域。
3. 按 [ENTER] 按钮或用鼠标双击将所选区域放大两倍。
   - 在放大的屏幕中，您可以用鼠标拖动或使用遥控器的导航键 (▲▼◄►) 来移动放大的区域。
4. 在现场屏幕菜单中，选择 <**缩小**>。
   按遥控器上的 [ZOOM] 按钮或单击启动菜单上的 < ⊖ > 来取消放大功能。

<正常>

<已放大两倍>

现场

POE 状态

在现场屏幕中，您可以看到每个端口的 PoE 状态。

1. 选择 <**PoE 状态**>。
   将显示 PoE 状态视图窗口。

- 功耗 (W)：显示 PoE 中的功率消耗。
  - 0 : 没有设备连接到端口或者设备正在使用自己的电源。
  - **–** : 端口发生故障（可以在附加信息中显示更加详细的故障信息。）

- 每个端口的最大功率为 15.4W。
- 如果每个端口超过 15.4W，则会自动切换电源。

- PoE : 打开/关闭摄像机的电源。
  如果选中，则表示电源处于打开状态。如果未选中，则表示电源处于关闭状态。
- 更多信息：如果电源存在问题，会在此处进行说明。
  电源问题包括超过功率（1 到 4 级）和电压错误。
- PoE 总功耗：显示所有端口的功耗总和。

2. 按 <**返回**> 移动到上一个屏幕。

音频打开/关闭

您可以根据现场模式中的频道打开/关闭声音。

在单画面幕模式中打开/关闭音频

在该屏幕中，单击音频图标 (🔊) 或在遥控器中按 [AUDIO] 按钮可将音频打开/关闭。

- 如果即使激活了输出也没有音频输出，则检查所连接的网络摄像机是否支持音频和音频设置。
  如果声音信号无法从噪声中输出、可能会显示声音图标。
- 仅当在“**设置设备** > **摄像机**”中将 <**音频**> 设置为 <**打开**> 的频道才会在现场模式中显示音频图标 (🔊)、可以使用该图标来打开/关闭声音。

静止

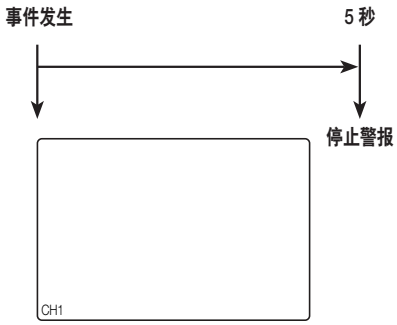
此项仅在现场模式中可用、它可以临时停止播放现场图像。

1. 按遥控器上的 [FREEZE] 按钮或在启动模式下单击 < ❄ >。
   系统暂停视频播放。
2. 按遥控器上的 [FREEZE] 按钮或在启动模式下单击 < ❄ >。
   系统取消暂停。 恢复播放。

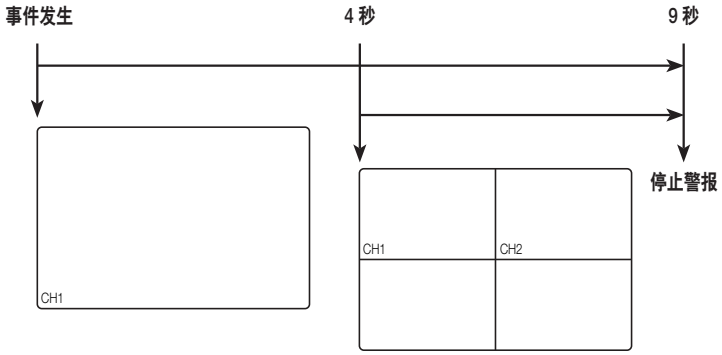
事件监视

发生事件时、此项将显示特定的事件(传感器/移动/视频丢失)同步的频道。
在“**监视器** > **事件显示**”中、将事件监视设置为“打开/关闭”并指定事件显示时间。 (第 67 页)

- 如果同时发生多个事件、屏幕会切换为分屏模式。
  - 2~4 事件 : 4 分屏模式
- 如果在 <**事件显示**> 的设置时间内发生第二个事件、则第一个事件将持续到第二个事件终止。
  - 例如 : 如果您将 <**事件显示**> 设置为 5 秒、并且在频道 1 只发生了一个事件。



  - 例如 : 如果您将 <**事件显示**> 设置为 5 秒、并且在频道 1 发生第一个事件后的设置时间内在频道 2 内发生了第二个事件。



现场

- 按 [ALARM] 按钮或选择 <**停止警报**> 来初始化警报输出状态并且取消事件功能。
- 如果输出警报及与事件录制设置一起指定的事件前时间和事件后时间、将会根据指定的录制类型(事件前或事件后)执行事件录制。

- 对于连续的事件、例如移动探测、切换到另一种分屏模式显示时、如果连续事件随后发生、则可能不会立即进行、即使您已停止事件警报也是如此。
- 视频可能会延迟、具体视网络状况而定。
- 事件输出可能会延迟、因为从网络摄像机传输警报事件需要时间。

PTZ 控制

使用本 NVR、您可以根据喜好配置 PTZ 摄像机和商业摄像机的设置。

PTZ 设备

仅当选择了将 PTZ 摄像机连接至的频道时、此项才会处于活动状态。

开始使用 PTZ 操作

仅当选择 PTZ 摄像机的频道时、才能激活 PTZ 摄像机、其按以下方式操作 :

- 使用遥控器：按遥控器上的 [**PTZ**] 按钮。
- 使用启动器菜单 : 单击现场屏幕的启动器菜单上的 < PTZ >。
- 使用现场屏幕菜单 : 在现场屏幕的上下文菜单中选择 <**PTZ 控制**>。
- 使用现场屏幕上的图标 : 只需单击现场屏幕上的 <PTZ> 图标。

- 仅当连接了 PTZ 摄像机并且 <PTZ> 图标显示在屏幕上时、此项才可用。
- 即使连接的网络摄像机不支持 PTZ 操作 您也可以通过安装 PTZ 驱动器(物理设备)来配置 PTZ 控制设置(如果可能)。
- 它只支持具有 Samsung PTZ 功能的网络摄像机以及在 ONVIF 中注册的摄像机。

使用 PTZ 摄像机

可以使用单个 PTZ 摄像机来执行平移、倾斜和缩放操作以监视多个位置、并且可以配置所需模式下预设的自定义设置。

1. 打开 <**PTZ 控制**> 菜单。
   屏幕左下角中的 <PTZ> 图标将变成黄色、指出系统访问“**PTZ 控制**”模式。 将会看到“**PTZ 控制**”启动器菜单。

- 在正常模式下、即使无法进行 PTZ 操作、PTZ 正在工作(活动)标记也可能会处于活动状态。 因此、请先确定您已完成 PTZ 设置、然后再继续。

2. 通过使用启动菜单中的 PTZ 球或按遥控器上的左/右 (▲▼◄►) 按钮来移动摄像机录制位置。

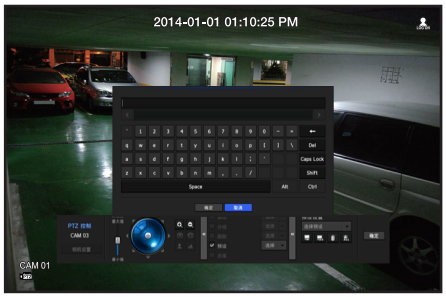
- 灵敏度 : 调整平移和倾斜控制的灵敏度。
- PTZ 滚轮 : 单击中心附近的区域可以缓慢移动摄像机镜头；单击较远的区域将快速移动。
  - 按住鼠标左键将逆时针旋转摄像机镜头；按住鼠标右键将顺时针旋转摄像机镜头。
- 缩放 : 激活 PTZ 摄像机的缩放操作。
- 光圈 : 调整进入摄像机的光线量。
- 对焦 : 可手动调节对焦设置。
- 摆动 : 摆动是在两个预置点之间移动并让您可以跟踪移动的监控功能。
- 分组 : 组功能可让您将各种预设分组、然后可以按顺序调用它们。
- 跟踪 : 跟踪会记住您指示移动的痕迹并重现它供参考。
- 巡视 : 依次监控用户创建的所有组。
  - 对于摆动、分组、巡视和跟踪功能而言，某些摄像机的菜单标题和操作方式可能存在差异。

- 即使网络摄像机默认支持 PTZ 操作、PTZ 控制也只能在启动器菜单中适用的菜单处于活动状态时可用。

现场

预设

预设是 PTZ 摄像机记住的特定位置。 可以使用“预设”功能、来为单个 PTZ 摄像机最多定义 255 个预设。



添加预设

1. 选中预设复选框。
2. 选择 < >。
   虚拟键盘将出现在屏幕上。 使用它来提供预设名称。
   - 请参阅“**使用虚拟键盘**”。(第 43 页)

- : 您可以根据喜好更改预设设置。
- : 删除选择的预设。
- : 删除所有现有的预设设置。

- 最多可以添加 255 个预设、这是 NVR 支持的最大数目。
- 如果您将保存预设设置的摄像机更换为另一个摄像机、则必须再次配置预设设置。

3. 选择 <**确定**>。
   将以提供的名称保存预设设置。

如果您想更改或删除预设名称。

1. 选中预设复选框并选择要更改或删除的预设。
2. 如果您选择 < >，则输入所需名称并按“确定”。
   如果选择 < >，则按“确定”可将其删除。

- : 删除所有现有的预设设置。

- 如果您删除全部预设、可能会相应地删除在网络摄像机中指定的默认预设。

菜单设置

您可以设置系统、设备、录制选项、事件和网络。

系统设置

您可以设置日期/时间/语言、用户、系统属性和日志。

日期/时间/语言

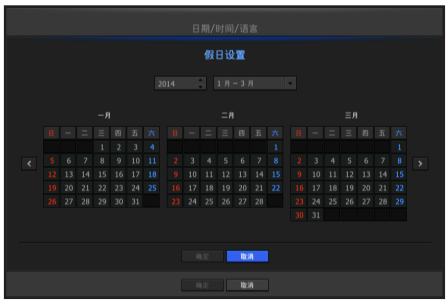
设置日期/时间/语言

您可以检查和设置当前日期/时间和与时间相关属性，以及屏幕界面所用的语言。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ► ⇨ <**日期/时间/语言**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 日期：设置将出现在屏幕上的日期及其格式。
- 时间：设置将出现在屏幕上的时间及其格式。
- 时区：根据格林威治标准时间 (GMT) 设置所在地区的时区。
  - GMT（林威治标准时间）是标准的世界时间和世界时区的基础。
- 时间同步：指定使用与时间服务器的同步。
  单击 <**设置**> 按钮以显示时间同步设置屏幕。
  如果您选择使用 <**时间服务器**>，将依据定义为 <**时间服务器**> 的服务器定期同步当前时间。
  如果是这种情况，您不能手动更改时间设置。
  - 同步：指定使用与时间服务器的同步。
  - 时间服务器：输入时间服务器的 IP 地址或 URL。
  - 上次同步时间：显示最近与选定的时间服务器同步的时间。
  - 作为服务器激活：设置为 <**使用**> 以让 NVR 充当其他 NVR 的时间服务器。
- DST：设置夏令时及其时间段，在设置的时间段内，使时间比时区内的 GMT 快 1 小时。
- 语言：选择您的语言。设置界面语言。
  支持英语、法语、德语、西班牙语、意大利语、中文、俄语、韩国语、波兰语、日语、荷兰语、葡萄牙语、土耳其语、捷克语、丹麦语、瑞典语、泰国语、罗马尼亚语、塞尔维亚语、克罗地亚语、匈牙利语、希腊语、芬兰语和挪威语。

- 假日：用户可以根据自己的偏好选择某些日期为假日。
  假日还应用于 <**录制计划**> 或 <**警报计划**> 设置。



  - 例如，如果您选择 1 月 1 日并选中 <**1/1**>，各年份的第一天即设置为假日；如果您选中 <**1/1**> 和 <**一月 第1 三**>，各年份的第一天和 1 月的第一个星期三即设置为假日。

使用日历

使用鼠标可更加轻松地选择项目。

1. 选择年份和月份。
   在滚轮的左侧/右侧的屏幕中选择 < ❮ ❯ > 键之后，按 [ENTER] 按钮可向后/向前移动三个月。
2. 使用方向按钮并按 [ENTER] 按钮来选择日期。
   - 如果某日期存在满足系统日志、事件日志、时间搜索和事件搜索条件的数据，该日期标注为灰色。

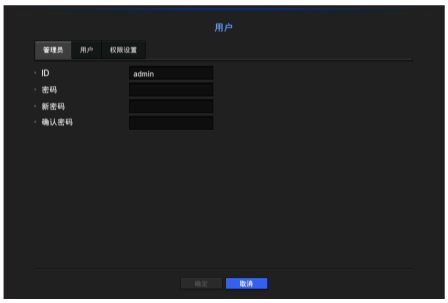
用户

您可以设置每个用户对 NVR 的特定功能和设置的许可权。

设置管理员

您可以设置或更改管理员的 ID 和密码。
管理员可以使用和设置所有菜单项和功能。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**用户**> ⇨ [ENTER] ⇨ ▼ ⇨ <**管理员**> ⇨ ▲▼◄► ⇨ [ENTER]



- ID：更改管理员 ID。
- 新密码：输入新密码。

- 初次管理员 ID 为“admin”，并且必须在安装向导中设置密码。
- 请每隔三个月更改密码来保护个人信息，并预防信息失窃造成的损失。
  请注意，安全性以及密码管理不善导致的任何问题须由客户负责。

使用虚拟键盘

1. 进行字母数字输入时，屏幕上会出现虚拟键盘窗口。
2. 使用方向键 (▲▼◄►)，移动到所需的文本选项卡并按 [ENTER] 按钮。
3. 在虚拟键盘上方的文本输入框中会显示包含所选字符的候选单词列表。
4. 可从列表中选择单词，或者使用键盘输入整个单词。
   - 如果有许多候选单词，可使用 < ❮ ❯ > 按钮来前后移动。

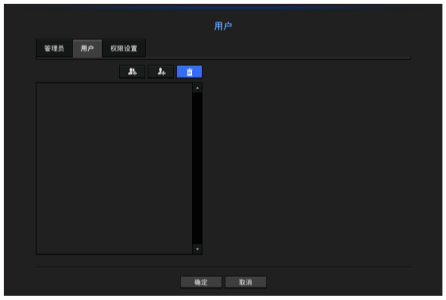
5. 选择 <**确定**>。
   系统应用所输入的单词。
   - 输入大写字母时，使用 <Caps Lock> 按钮。
   - 输入特殊字符时，使用 <Shift> 按钮。
   - 使用虚拟键盘与使用您所在区域的常规键盘相同。
   - ID 只允许使用字母数字字符。
   - 密码应为数字和字母的组合，而且长度应为八个或更多字符。
     密码中不能包含特殊字符，例如：&；#；<；>；{；}；'；~。

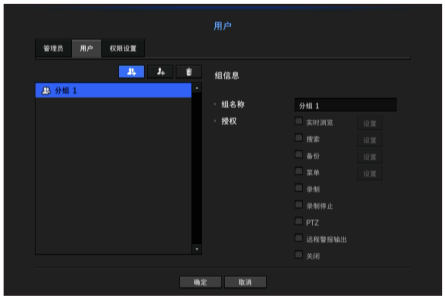
菜单设置

用户设置

您可以创建组或设置每个组的许可权。
您可以添加用户和编辑注册用户信息。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ►▼ ⇨ <**系统**> ⇨ <**用户**> ⇨ [ENTER] ⇨ ▼► ⇨ <**用户**> ⇨ ▲▼◄► ⇨ [ENTER]





如果您想添加组

1. 单击 [ ] 按钮来弹出“添加组”窗口。
   如果您希望添加组，请单击 <**确定**>。
2. 单击组名称项来启动用于输入组名称的虚拟键盘。
   输入要注册的组名称。
   - 您最多可以添加 10 个组。

如果您想设置组许可权

设置访问每个组的许可权。
每个组的用户只能访问带有复选标记的项目。

1. 选择该菜单来设置组许可权。
   该组中的用户登录时将出现具有访问许可权的菜单。
   - 实时浏览：您可以设置访问每个频道现场屏幕的许可权。
   - 搜索：您可以设置访问每个频道现场屏幕的许可权。
   - 备份：您可以设置访问每个频道备份菜单的许可权。
   - 菜单：您可以选择和设置可访问的设置菜单。组用户只能访问所选的菜单。如果您选择该菜单，将出现组许可权设置屏幕。
   - 录制、录制停止、PTZ、远程警报输出、关闭：您可以选择这些功能来添加到组的许可权。
2. 单击 <**确定**>。
   选中所需组用户来为其分配访问所选项目的许可权。

如果您想注册用户

1. 单击 [ ] 按钮来弹出“添加用户”窗口。
   要添加用户，请单击 <**确定**>。
2. 选择所需组。
   注册用户时，将自动注册所选组。
   - 在输入所有必填信息后可以更改组。
3. 输入名称、ID、密码并选择是否使用查看器。
   如果选择启用 <**Viewer**>，您将有权使用 Web 浏览器和网络浏览器。
4. 单击 <**确定**>。
   系统将保存注册用户信息。

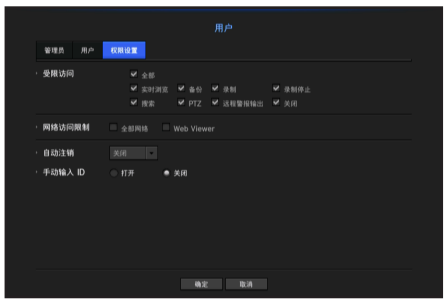
如果您想删除组和用户信息

1. 要删除，请单击 [ ] 按钮。
2. 删除确认窗口随即出现，您可以选择要删除的项目并单击 <**删除**>。

设置许可权

您可以对所有常规用户设置受限访问。
设有限制的项目将需要登录后使用。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**用户**> ⇨ [ENTER] ⇨ ►▼ ⇨ <**权限设置**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

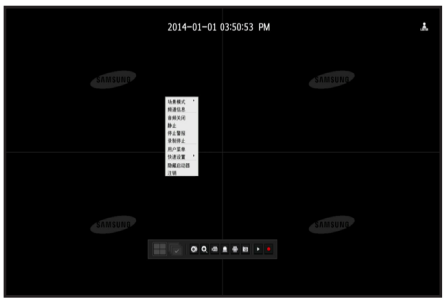


- 受限访问：许用户使用的所有菜单项可以设置受限访问。
  - 已选中 ( )：受限
  - 未选中 ( )：可访问
  - 如果在 <**受限访问**> 未将其选中 ( )，任何用户均可访问该项目，而无论 <**组权限**> 设置如何。
  - 如果在 <**受限访问**> 中将其选中 ( )，只有在 <**组权限**> 设置中拥有许可权的用户才能访问该项目。

- 网络访问限制：限制来自 <**受限访问**> 网络的远程访问。
  - 全部网络：限制通过网络查看器和 Web Viewer 的所有访问。
  - Web Viewer：限制通过 Web Viewer 访问。
- 自动注销：如果某用户在所设置期间内没有在 NVR 上执行任何操作，系统会自动将其注销。
- 手动输入 ID：在登录窗口中，选择是否输入 ID。

如果用户具有受限的访问权

如果新组限制为访问整个菜单，则属于该组的用户只能访问基本菜单，并且只能更改他们各自的密码。
如果所有许可权均受到限制，您将只能看到一些可以在现场屏幕菜单中访问的菜单项。



更改用户密码

如果您以具有受限访问权的组的用户帐户登录，则您只能更改您自己的密码。

1. 提供登录信息。
2. 选择 <**用户菜单**>。
   “许可权管理”屏幕随即出现。
3. 选择 <**用户**>。
   “密码”对话框随机出现。
4. 提供新密码。
5. 选择 <**确定**>。
   旧密码将更改为新密码。

系统管理

您可以查看系统版本、更新到新版本以及执行数据备份和初始化。

检查系统信息

在升级之前，您可以检查当前软件版本和 MAC 地址。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**系统管理**> ⇨ [ENTER] ⇨ ▼ ⇨ <**系统信息**> ⇨ ▲▼◄► ⇨ [ENTER]

- 系统信息：显示当前系统的信息。
  用户不能更改这些值。
  - Micom 版本：这是 micom 版本。
- 软件升级：将 NVR 的软件更新到最新版本。
- 设备名称：当网络查看器连接至 NVR 时显示。

菜单设置

升级当前软件版本

1. 连接存储了要更新软件的设备。
   - 系统可能需要约 10 秒钟时间来识别该设备。
   - 可升级设备包括 USB 存储器和网络设备。
   - 要更新网络，必须将当前 NVR 连接到网络。
     由于受限访问，可能无法启用通过代理服务器进行升级。
2. 从 <**系统**> 窗口中选择 <**系统管理**>。
3. 选择 <**系统信息**>。
4. 系统识别并显示出所连接的设备后，选择 <**升级**>。
   - 如果您在升级菜单窗口中连接该设备，可以单击 < ■ > 按钮来搜索可用软件。
   - 如果网络上存在升级镜像，将出现弹出窗口。
   - 仅当 <**系统信息**> 中的当前 <**软件版本**> 不高于 <**软件升级**> 的情况下，才会激活 <**升级**> 按钮。
5. 在“**软件升级**”窗口中单击 <**确定**>。
   - 在升级时屏幕上会显示进度。
6. 完成升级后将自动重新启动。
   切勿在完成重新启动之前关闭电源。

- 如果出现“**升级失败**”消息，请从第 4 步重试。
  如果仍然失败，请咨询服务中心以获得帮助。

设置

您可以通过使用存储媒体复制和导入 NVR 设置。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**系统管理**> ⇨ [ENTER] ⇨ ▼► ⇨ <**设置**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 存储设备：显示所连接的存储设备。
- 导出：将 NVR 设置导出到所连接的存储设备。
- 导入：从存储设备导入 NVR 设置，然后应用于 NVR。
  - 取消选中您所希望导入项目的复选框
    只有所选项目之外的其他项目才会应用到 NVR。
  - 不能检索另一个模式中的配置文件。换句话说，在 PnP 模式下，不能检索手动设置信息。在手动设置模式下，不能检索 PnP 设置信息。
- 载入出厂默认值：恢复 NVR 的出厂默认设置。
  取消选中您所希望重设项目的复选框。然后只有所选项目之外的其他项目才会恢复工厂默认值。
  如果选择 <**初始化**>，将出现“**载入出厂默认值**”的确认对话框。单击 <**确定**> 将系统初始化为出厂默认值。
  - 更改模式之后，重新启动以便初始化/（PnP 模式 < -> 手动设置模式）

- 如果您想初始化 <**权限设置**>，则需要重置密码。
  如果重新启动，则重置密码会启动“安装向导”，如果未启动该向导，则使用指南屏幕来重置密码。

菜单设置

日志信息

您可以浏览关于系统和事件的日志。

检查系统日志

系统日志显示在系统每次启动、关闭和更改系统设置时的日志和时间标记。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**日志信息**> ⇨ [ENTER] ⇨ ▼ ⇨ <**系统日志**> ⇨ ▲▼◄► ⇨ [ENTER]

- 搜索日期：单击日历图标来显示日历窗口，或者使用方向按钮指定系统日志的搜索期间。
  - 有关使用日历的信息，请参阅“**使用日历**”。（第 42 页）
- 搜索：指定日期，然后单击该按钮显示日志列表中的搜索结果。
- 类型：如果日志太多，可以通过选择类型来显示所需格式的日志。
- 导出：将 NVR 中记录的所有日志信息保存到存储介质。

检查事件日志

您可以搜索已录制的事件，其中包括警报、摄像机事件和视频丢失。
还显示日志及其时间标记。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**日志信息**> ⇨ [ENTER] ⇨ ▼► ⇨ <**事件日志**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 搜索日期：单击日历图标来显示日历窗口，或者使用方向按钮指定系统日志的搜索期间。
  - 有关使用日历的信息，请参阅“**使用日历**”。（第 42 页）
- 搜索：指定日期，然后单击该按钮显示日志列表中的搜索结果。
- 类型：如果日志太多，可以通过选择类型来显示所需格式的日志。
- 导出：将 NVR 中记录的所有日志信息保存到存储介质。

检查备份日志

您可以查看备份人以及详细信息（备份时间、频道、使用的设备、文件格式等）。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ <**系统**> ⇨ ►▼ ⇨ <**日志信息**> ⇨ [ENTER] ⇨ ▼► ⇨ <**备份日志**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 搜索日期：单击日历图标来显示日历窗口，或者使用方向按钮指定系统日志的搜索期间。
  - 有关使用日历的信息，请参阅“**使用日历**”。（第 42 页）
- 搜索：指定日期，然后单击该按钮显示日志列表中的搜索结果。

菜单设置

设置设备

您可以设置摄像机、存储设备和监视器。

摄像机

注册摄像机

您可以注册每个频道的网络摄像机并在摄像机之间建立连接。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ► ⇨ <**摄像机**> ⇨ [ENTER] ⇨ ▼ ⇨ <**摄像机注册**> ⇨ ▲▼◄► ⇨ [ENTER]

- 预览：将频道视频作为当前图像来查看。
- 协议：显示已注册网络摄像机的协议信息。
- 型号：显示摄像机型号名称。
- IP 地址：显示网络摄像机的 IP 地址。
- 连接：显示连接状态。
- 数据率：显示频道接收的数据总量。
- 性能：显示接收特定数量的数据而需要的性能占用比。
  - 使用 RTSP、ONVIF 协议注册的摄像机可以占用两倍于现有数据量的容量。

- 如果 NVR 已被初始化，则无法将其连接到摄像机。请首先配置网络设置，然后再添加摄像机。有关网络设置的更多信息，请参阅“**网络配置**”。（第 76 页）

如果想在 PnP 模式下注册摄像机

- 当在 PnP 模式下连接摄像机时，应提前设置初始 ID、密码和 DHCP 模式。
- 应使用 Samsung 协议注册 Samsung 摄像机，使用 Onvif 协议注册其他摄像机。
- 在 PnP 模式下，您不能连接在 PoE 端口或摄像机设置端口中运行 DHCP 服务器的设备。（例如：集线器）

自动搜索和注册网络摄像机

1. 在 <**摄像机 注册**> 字段中，单击 <**自动**> 按钮。
2. 搜索已连接的网络摄像机。
   - 已注册的摄像机将在列表中标记为蓝色。
   - 如果重新搜索或摄像机IP因为DHCP服务器无法分配IP 而一直维持相同IP时(例-192.168.1.100), 单击 < > 按钮检查是否已分配IP。如果仍然相同，则可以选择分配 IP 地址直接进行分配。
3. 单击列表上方的标题部分即可重新排列搜索列表。
   - 通过 ONVIF 搜索到的摄像机不提供预览。

4. 选中您希望连接到的网络摄像机旁的复选框。
   - 您可以选中列表中的所有网络摄像机并一次性分配 <**ID**> 和 <**密码**>。
   - 单击列表上方的标题部分即可重新排列搜索列表。

- 使用管理员之外的用户账户注册摄像机可能会限制摄像机功能。
- 在摄像机 Web 查看器中更改摄像机 ID/密码时，如果摄像机已在 NVR 中注册，那么您还必须更改在 NVR 中注册的摄像机 ID/密码信息。

5. 单击 <**ID/密码**> 按钮来输入所选网络摄像机的 <**ID**> 和 <**密码**>。
6. 单击 <**连接测试**> 按钮来连接到摄像机。
7. 单击 <**注册**> 来注册所选的摄像机。

手动搜索和注册网络摄像机

1. 在 <**注册**> 菜单中，单击 <**手动**> 按钮。
2. 手动搜索窗口将会出现。
3. 选择频道以及用于连接到摄像机的协议。
   输入项目可能会因选择的协议而异。

- SAMSUNG：符合 Samsung 采用的内部网络协议。
- ONVIF：表示摄像机支持 ONVIF 协议。当连接在列表中找不到其名称的摄像机时，请选择 <**ONVIF**>。
- RTSP：符合 RFC 2326，其为实时流的其中一种“实时流协议 (RTSP)”。

4. 如果选择 <**Samsung**> 协议，请根据需要选择选项。

- 型号：选择摄像机型号。
  - Samsung 网络摄像机/编码器：表示摄像机/编码器支持 Samsung 的 SVNP 协议。连接未出现在摄像机列表中的摄像机时，请选择 Samsung 网络摄像机/编码器。
    - 但是，如果摄像机未出现在列表中，则必须选择摄像机的正确型号名称。一些过时的摄像机型号可能不受支持。
    - 以下型号不再受支持。如果您使用 ONVIF 注册它们，某些摄像机功能可能会受到限制或者导致错误。
      建议您注册 Samsung 协议。
      - SNB-2000, SNB-3000, SNC-B2315, SNC-B2331, SNC-B2335, SNC-B5368, SNC-B5395, SNC-B5399, SNC-570, SNC-1300, SND-460V, SND-560, SND-3080, SND-3080C, SND-3080CF, SND-3080F, SND-3081, SNP-3301, SNP-3301H, SNP-3350, SNP-3370, SNP-3370TH, SNP-3750, SNV-3080, SNP-3430
- 地址类型：选择摄像机的地址类型。
  - 地址类型可能会因所连接的产品型号而异。
  - 静态 (IPv4)/静态 (IPv6)：用于手动提供摄像机的 IP 地址。
  - iPOLiS DDNS：仅当已向 iPOLiS DDNS (www.samsungipolis.com) 服务器注册摄像机时，此项才可用。提供 DDNS ID 的已注册域。
    - 例如）http://www.samsungipolis.com/snb5000；提供“snb5000”作为 iPOLiS DDNS
  - URL：用于 URL 地址输入。

- 请参阅所连接摄像机的用户手册，并检查摄像机支持的 DDNS 规范。

- IP 地址：提供摄像机的 IP 地址。
- 设备端口：提供摄像机的设备端口。
- HTTP 端口：提供摄像机的 HTTP 端口。
- ID：提供要注册的摄像机的 ID。
- 密码：输入要注册的摄像机的密码。

5. 选择 <**ONVIF**> 或 <**RTSP**> 作为协议并为出现的每个字段输入值。

- ONVIF Address/RTSP URL：输入支持 ONVIF 或 RTSP 的摄像机的 RTSP 访问地址。
  有关 RTSP 地址的更多信息，请参阅每部适用网络摄像机的手册。
- ID：输入用于通过 ONVIF/RTSP 协议进行访问的 ID。
- 密码：输入用于通过 ONVIF/RTSP 协议进行访问的密码。
- 模式：选择在 RTSP 连接模式下网络摄像机支持的模式。
  - TCP：与网络摄像机进行的连接类型将切换为“基于 TCP 的 RTP”。
  - UDP：与网络摄像机进行的连接类型将切换为“基于 UDP 的 RTP”。
  - HTTP：与网络摄像机进行的连接类型将切换为“基于 TCP (HTTP) 的 RTP”。
  - HTTPS：与网络摄像机进行的连接类型将切换为“基于 TCP (HTTPS) 的 RTP”。

菜单设置

如果要检查摄像机注册的错误详细信息

如果您无法注册摄像机，将会显示失败的原因。

- **由于未知错误导致连接失败**。：如果由于未知连接状态导致无法注册摄像机，则此消息将会出现。
- **由于摄像机账户锁定，访问失败**。：如果登录摄像机账户时输入错误 ID/密码 5 次，即显示该消息。
  请在 30 秒后尝试重新登录。如果仍然出现该消息，您可能需要查看是否有人尝试从外部访问您的摄像机。
- **已成功连接**。：如果摄像机已成功连接，则此消息将会出现。
- **型号信息不正确**。**请提供正确的型号信息**。：如果提供用于注册摄像机的型号信息不正确，则此消息将会出现。
- **身份验证失败**：如果提供用于注册摄像机的 ID 或密码不正确，则此消息将会出现。
- **连接失败（并发用户太多）**。：如果并发用户数超过上限，则此消息将会出现。
- **由于 HTTP 端口信息不正确，连接失败**。：如果摄像机的 HTTP 端口号无效，则此消息将会出现。
- **连接失败**。**未知连接状态**。：如果由于未知错误导致无法连接摄像机，则此消息将会出现。
- **用户型号修改**：当注册新的摄像机时，如果用户将型号设置为 <**Samsung 网络摄像机/编码器**>，系统将根据设备的默认值命名摄像机。如果自动注册失败，则用户可以更改要注册的摄像机的型号名称。

编辑摄像机配置文件

第一次添加摄像机时，会临时依次将它添加为 H.264、MPEG4 和 MJPEG 默认配置文件。
要更改配置文件，请参阅“**设置摄像机录制配置文件**”（第 71 页）或“**现场设置**”（第 63 页）。

- 对于 NVR，如果您为现场、录制和网络配置文件设置 3 个不同的配置文件，则一个摄像机将相应地产生具有不同流格式的视频流。请特别注意，现场配置文件可能会因所用屏幕分割模式而异。
- 对于摄像机，如果仅提供一个配置文件，则会如配置文件指定那样固定产生的帧速率；如果提供多个配置文件，则不能保证所产生的视频流帧速率。例如，如果提供 2 个 30 fps 的配置文件，则摄像机可能会以 20fps 传输流。

ONVIF 设置

在添加摄像机屏幕的底部，单击 <**ONVIF 设置**> 按钮来设置采用 ONVIF 协议的摄像机的更多设置。

- 要更改该信息，必须使用相应用户账户（用于摄像机注册的摄像机账户）来阅读用户信息，并且使用管理员权限建立连接。

配置文件

- 频道：显示采用 ONVIF 设置的已注册摄像机列表。
- 添加配置文件：您可以添加摄像机配置文件。
  添加配置文件后，单击 <**确定**> 按钮将其添加到列表。
- 删除：选择要删除的配置文件后，单击 <**删除**> 按钮来删除所选配置文件。
- 配置文件信息：您可以设置所选配置文件的详细信息。

在完成设置每个项目后，单击 <**确定**> 按钮来保存更改。

用户

- 添加用户：您可以添加摄像机用户。
  添加用户后，单击 <**确定**> 按钮将其添加到列表。
- 删除：选择要删除的用户后，单击 <**删除**> 按钮来删除所选用户。
- 用户信息：您可以设置所选用户的详细信息。

网络

您可以设置网络的详细信息。

- IP 类型：选择 IPv4 或 IPv6 IP 类型。
- DHCP：选择是否使用 DHCP。
- DNS/NTP 服务器：仅当 DHCP 设置处于 <**打开**> 状态时才会激活 DHCP 复选框。
  - 如果选中 DHCP，可以手动输入 IP 地址。

继电器

您可以设置继电器的详细信息。

- 数字输出：您可以选择数字输出频道。
- 中继模式：选择双稳态或单稳态模式。
- 中继备用：选择打开或关闭继电器备用模式。
- 等待时间：选择继电器操作等待时间。

事件

您可以设置事件的详细信息。

- 可用事件（来自摄像机）：显示摄像机使用 ONVIF 协议支持的所有事件的列表。
- NVR 支持的事件：您可以将摄像机支持的事件列表映射到 NVR 可以探测的事件。没有默认值。只显示摄像机发送的值。

摄像机设置

可以更改每个频道的已注册网络摄像机的视频设置。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ► ⇨ <**摄像机**> ⇨ [ENTER] ⇨ ▼► ⇨ <**相机设置**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 添加：您可以添加摄像机配置文件。单击“添加”按钮来启动添加窗口。
  输入信息，然后单击 <**确定**> 按钮将其添加到列表。
- 删除：您可以从列表中删除所选的配置文件。
- 选择摄像机：选择摄像机频道以更改视频传输设置。
- 配置文件：显示已连接摄像机的视频配置文件。
- 编解码器：显示所选配置文件的编解码器信息。
- 分辨率：您可以更改所选配置文件的分辨率。
- 帧速率：您可以更改所选配置文件的波特率。
- 质量：您可以更改所选配置文件的视频质量。
- 比特率控制：您可以更改所选配置文件的视频传输位速率。

菜单设置

- 如果您更改每个型号的特定配置文件的配置，波特率的有效范围可能会相应更改。
  例如）如果您将第一个配置文件的波特率设置为 30fps，第二个配置文件的发送速率将更改为 15fps。
- 可以在网络摄像机的设置菜单中配置除“编解码器”、“分辨率”、“传输速率”和“传输质量”之外的菜单项。
- 如果您更改当前配置文件设置，则在录制或现场屏幕上可能会中断播放一定的时间。
- 在“摄像机设置”页面上进行的更改会立即应用，而通过摄像机网页进行的更改可能需要长达 3 分钟。

设置

在摄像机设置屏幕底部，按 <**设置**> 按钮来设置摄像机，同时观看所选摄像机的现场视频。

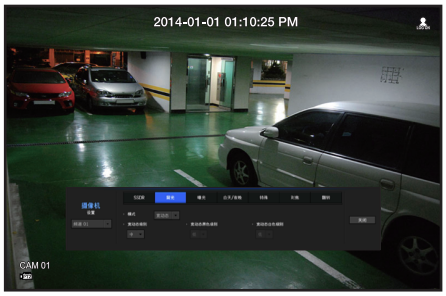
- SUNAPI（Samsung 统一网络 API）：支持 Samsung 提供的通信协议的摄像机。
  1. 支持 SUNAPI 的摄像机
  2. 使用管理权限连接的摄像机。
  3. 连接到 Samsung 协议的摄像机。
  在上述情况下，您可以使用该功能。
- 有关摄像机设置的更多信息，请参阅摄像机用户手册。
  设置和操作规格会因不同的摄像机而存在差异。

SSDR

如果黑暗和明亮区域之间存在显著差异，可增大黑暗区域的亮度来保持整个区域的亮度。
可以设置模式、级别和 D 范围。

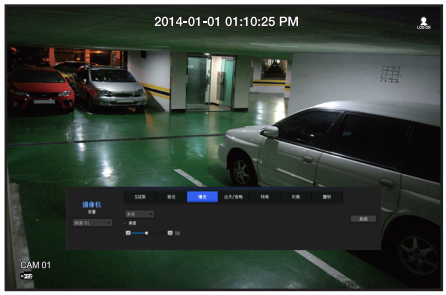
背光

您可以同时查看明亮和黑暗区域。
可以设置模式、宽动态级别和宽动态级别黑色/白色级别。



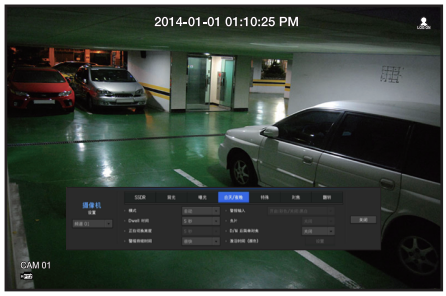
曝光

您可以调整摄像机的曝光。
可以设置亮度控制、快门、SSNR、“设置”、快门/镜头和增益。



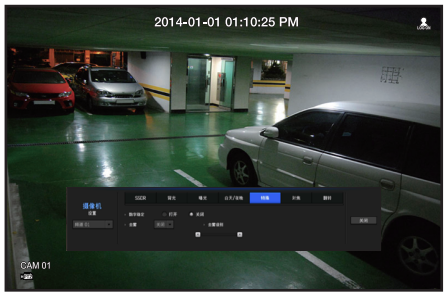
白天/夜晚

您可以更改模式来调整颜色和对比度。
可以设置模式、切换时间、亮度范围、警报时间、警报输入/输出、负片、白天/夜晚切换和简单焦点以及激活时间。



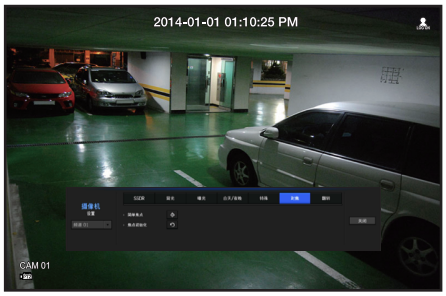
特殊

可以设置 DIS（晃动补偿）和去雾级别。



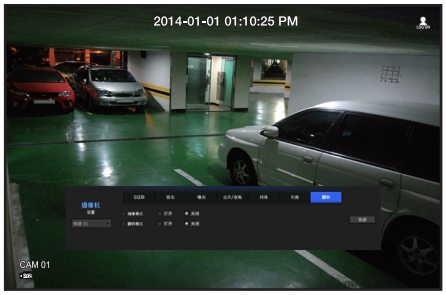
对焦

您可以调节摄像机视频的焦点。
可以设置简单焦点和焦点初始化设置的项目。



翻转

可以设置镜像模式（水平翻转）和翻转模式（垂直翻转）。



在完成摄像机设置后，单击 <**关闭**> 按钮来回到上一屏幕。

现场设置

您可以更改网络摄像机的当前传输设置。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ► ⇨ <**像机**> ⇨ [ENTER] ⇨ ▼► ⇨ <**现场设置**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 实时替换：您可以选择实时配置文件设置模式。
  如果您选择 <**手动**>，会启用配置文件设置项目，您可以手动更改设置。
  - 自动：如果要进行实时监视，必须自动选择大致等于每个频道的输出分辨率的配置文件。
    例如，摄像机配置文件：支持三个配置文件（1280x720、800x600 和 640x480）。
    如果输出屏幕的分辨率为 1920x1080：
    当单个频道的频道分辨率为 1920x1080 时，会自动选择 1280x720。
    当 16 分屏频道的频道分辨率为 480x270 时，会自动选择 640x480。
  - 手动：使用用户从已注册的摄像机配置文件中选择的配置文件执行实时监视。
  - 录制：使用为录制设置的配置文件执行实时监视。
- 配置文件：您可以选择所连接的摄像机设置的视频配置文件。
- 编解码器：显示所选择的录制配置文件的编解码器。
- 分辨率：显示所选择的配置文件的分辨率。
- 帧速率：显示所选择的配置文件的帧速率。
- 质量：显示所选择的配置文件的传输视频质量。

菜单设置

频道设置

可以配置每个频道的视频设置。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ► ⇨ <**摄像机**> ⇨ [ENTER] ⇨ ▼► ⇨ <**频道设置**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 应用于频道：如果选择 <**应用于频道**>，将出现“**应用于频道**”确认窗口。
  在选择设置将应用于的频道后，单击 <**确定**> 将其应用于所选频道。
- 视频
  - <**打开/关闭**>：您可以打开/关闭所选频道的摄像机。
  - <**隐蔽1**>：显示除所选频道的视频之外的信息。
    为保护隐私，在继续录制时不显示该视频。
  - <**隐蔽2**>：在继续录制时，仅显示空白屏幕。

■ 如果频道设置为 <**隐蔽1**> 或 <**隐蔽2**> 模式，将听不到频道的声音。
但是，如果频道的“音频”设置处于 <**打开**> 状态，即使在现场模式下听不到声音，系统仍会录制频道的声音。

- 音频
  - 如果设置为 <**打开**>，您可以在现场屏幕上打开/关闭频道的音频。
  - 如果设置为 <**关闭**>，现场屏幕上的频道音频会关闭，也不会录制。
- 摄像机名称：提供摄像机名称。
  - ■ 最多可以输入 15 个字符，包括空格。

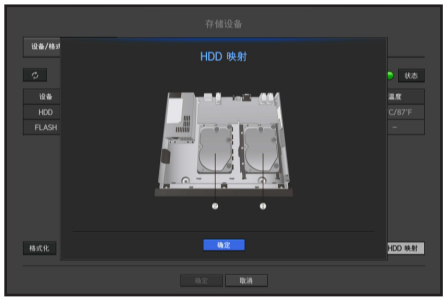
存储设备

您可以检查有关存储设备的信息。

设备/格式

您可以检查存储设备及其容量、使用情况以及状态。
可用设备包括硬盘和 USB 设备（存储器、硬盘）。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ►▼ ⇨ <**存储设备**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备/格式**> ⇨ ▲▼◄► ⇨ [ENTER]



- 存储状态：显示存储设备的工作状态。
  - 红色：表示存在视频丢失的情况。
  - 绿色：表示没有视频录制丢失的正常情况。
  - 状态
    - 完全 BPS：显示当前录制速率。
    - 当前丢失率：显示当前录制丢失率。
    - 最大丢失量：显示截至目前的最大丢失量。
- 编号：您可以检查内置硬盘的指定编号。
  - 如果您希望找到硬盘编号所在的位置，请参阅 <**HDD 映射**>。
- 容量：显示存储设备已用容量和全部容量。
- 使用情况：指定存储设备的用途。
- 状态：显示存储设备的当前工作状态。
  有关硬盘检查或更换警报的信息，请参阅“**HDD 警报设置**”（第 66 页）
  - 正常：在正常操作期间显示。
  - 检查：运行但存在部分问题。
    如果使用 RAID 阵列，会在状态显示为“降级”或“重构”时显示该警报。
  - 更换：当您不能再使用硬盘时显示。
- 温度：您可以检查安装在 NVR 中的硬盘的温度。

菜单设置

- 格式化：选择设备，在出现格式确认窗口后单击格式。
  单击 <**确定**> 对所选存储设备进行格式化。

- 格式化将删除已保存的所有录制数据。请注意！
- 在执行格式化期间不能录制视频。
- 切勿拆下正在格式化的设备。

- HDD 映射：您可以根据为内部安装的硬盘分配的编号来检查其位置。
  - 请在维修或安装附加硬盘时参考该位置。

HDD 警报设置

可以设置检查警报输出终端、更换警报输出终端以及警报时间，看是否存在硬盘缺陷。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ►▼ ⇨ <**存储设备**> ⇨ [ENTER] ⇨ ▼► ⇨ <**HDD 警报**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

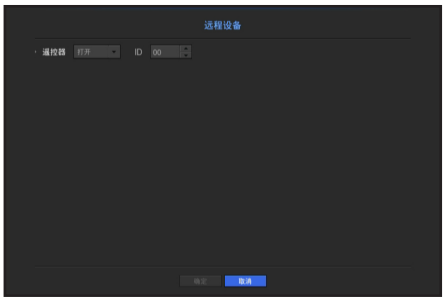
- 警报
  - 选择 <1>、<2>、<3> 警报信号将通过警报输出端口输出。
  - 如果选择 <**蜂鸣声**>，将发出蜂鸣声。
  - 如果选择 <**全部**>，将通过背面端口输出蜂鸣声和警报信号。
- 检查警报输出端口：如果硬盘产生检查警报，则警报信号将输出到指定的警报输出端口。
- 替换警报输出端口：如果硬盘产生更换警报，则警报信号将输出到指定的警报输出端口。
- 警报持续时间：设置警报信号和蜂鸣声的警报持续时间。

- <**检查**> 状态表示硬盘正在操作，但它发生问题，需要进行技术检查。
  ( ) 会出现在现场屏幕上。
- <**更换**> 状态表示硬盘有缺陷，需要立即更换。
  ( ) 会出现在现场屏幕上。

远程设备

可以调整将用来与 NVR 连接的遥控器的 ID。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ►▼ ⇨ <**远程设备**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]



- 遥控器：选择是否使用遥控器。
- ID：选择已链接到摄像机的 ID 号码。
  如果遥控器 ID 不匹配，那么它将无法正常工作。

■ 若要更改遥控器 ID，请参阅“**更改遥控器 ID**”。(第 12 页)

监视器

您可以设置监视器上显示的信息以及输出系统。

监视器设置

您可以配置监视器输出相关的设置，包括所显示信息、停延时间和输出系统。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**设备**> ⇨ ►▼ ⇨ <**监视器**> ⇨ ▲▼◄► ⇨ [ENTER]

- 事件显示：设置发生事件时监视器上的事件频道显示的停延时间。
  如果将其设置为 <**连续**>，那么它将继续显示，直到按 [ALARM] 按钮取消它为止。
- 显示：只在监视器屏幕上显示选中的项目。
- 顺序切换时间：设置现场模式差分屏幕的自动切换时间。

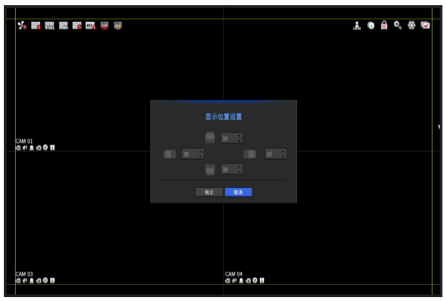
菜单设置

- 视频输出：从 <HDMI> 和 <VGA> 中选择视频输出类型。
  如果您选择的 <HDMI> 或 <VGA> 与监视器设置不一致，可能无法输出视频。
  如果按遥控器上的 [STOP (■)] ➞ [ZOOM] ➞ [STOP (■)] ➞ [ZOOM] ➞ [MENU] 按钮，则会显示基本分辨率弹出窗口。可以在该窗口中调整所需的分辨率。
  - 如果监视器不支持更改后的分辨率，可能无法正常显示视频。在这种情况下，屏幕会在一段时间后恢复为默认设置。然后您可以更改为其他分辨率。

- 考虑网络环境造成的视频延迟，指定事件显示时间和停延时间。

调整显示位置

根据实际条件，某些监视器可能无法显示关于 NVR 的信息（摄像机名称、图标、时间信息等）此时可以更改数据显示位置。



1. 在监视器设置菜单中选择 <**显示位置设置**>。
2. 使用遥控器上的方向键或数字按钮，可以调整屏幕。
3. 单击 <**确定**>。

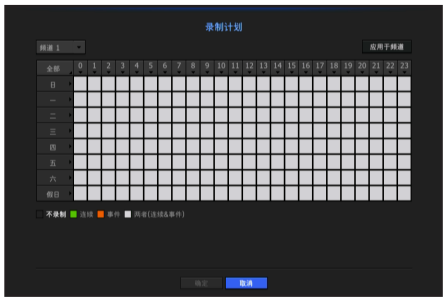
设置录制

您可以设置计划的录制、事件录制和与录制相关的其他设置。

录制计划

预定日期和时间以便在指定的时间计划录制。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**录制**> ⇨ ► ⇨ <**录制计划**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]



- 全部：将使用相同的录制计划保留全部时间范围（星期一到星期日（包括假日） AM 0~ PM 23）。
- 应用于频道：如果选择 <**应用于频道**>，将出现“**应用于频道**”确认窗口。
  在选择设置将应用于的频道后，单击 <**确定**> 将其应用于所选频道。

通过颜色进行录制设置

颜色	功能	描述
无颜色	不录制	无计划/事件录制
绿色	连续	仅适于计划录制
橙色	事件	仅适于事件录制
白色	两者(连续&事件)	适于计划/事件录制

每次单击所选单元格均会按以下顺序循环：<**不录制**>-<**连续**>-<**事件**>-<**两者(连续&事件)**>。

菜单设置

录制设置

您可以按频道和按标准/事件的录制类型设置分辨率、IPS 和录制质量。
您可以检查每个频道的完全帧和关键帧录制的帧速率和数据传输量。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**录制**> ⇨ ►▼ ⇨ <**录制设置**> ⇨ [ENTER] ⇨ ▼ ⇨ <NVR> ⇨ ▲▼◄► ⇨ [ENTER]

- 应用于频道：如果选择 <**应用于频道**>，将出现“**应用于频道**”确认窗口。
  在选择设置将应用于的频道后，单击 <**确定**> 将其应用于所选频道。
- 标准，事件：配置标准录制和事件录制。
  - 全：录制摄像机提供的所有帧。
  - 密钥：仅录制摄像机提供的关键帧。
    实际录制速度可能会因摄像机设置而异。一般而言，录制速率是每秒 1 到 2 帧。
  - 关闭：不进行录制。
- 帧
  - 全：显示所有场景录制的数据量。
  - 密钥：显示主要场景录制的数据量。
- 限制：为每个频道设置允许输入的数据量。
- 事件：您可以设置当发生事件时将在哪个点开始或停止录制。
  - 前置：发生事件时，无论时间如何设置都将开始录制。
    如果将其设置为五秒，将在发生事件前五秒钟开始录制。
  - 后置：发生事件时，将在所设置时间之后继续录制。
    如果将其设置为五秒，将在事件结束后继续录制五秒钟。
- 音频：指定是否录制从摄像机接收的声音。

- 如果频道的数据传输超出定义的允许限制，它可能会影响其他频道，并且可能会强制切换至 <**密钥**> 录制，即使将频道配置为 <**全**> 录制模式也是如此。对于关键帧录制频道，在现场屏幕顶部将出现受限录制的图标。
- 显示为黄色的频道表示当没有收到摄像机的录制数据时, 为了临时录制将摄像机替换为配置文件进行录制。
  请检查频道信息，查看列出为黄色的频道应用的配置文件。
  显示为橙色的频道表示在摄像机次输入数据量超过了次允许的数据量。这时无法接收所有的帧, 只能录制关键帧(每秒1张或2张)。只要将次允许的数据量设置为大于次输入的数据量就可以了。
  请参阅有关“**录制状态**”的说明。（第 34 页）

设置摄像机录制配置文件

可以将视频配置文件设置为当摄像机连接到每个通道时进行录制。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**录制**> ⇨ ►▼ ⇨ <**录制设置**> ⇨ [ENTER] ⇨ ▼► ⇨ <**摄像机**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 只能针对摄像机支持的配置文件来配置设置。
- 如果用于录制和网络的配置文件不相同，则摄像机的视频来源可能会与在摄像机中指定的帧速率不相同。

- 配置文件：选择已连接摄像机的录制配置文件。
- 编解码器：显示所选录制配置文件的编解码器信息。
- 分辨率：显示所选录制配置文件的分辨率。
- 帧速率：显示所选录制配置文件的波特率。
- 质量：显示所选录制配置文件的视频质量。

菜单设置

录制选项

您可以设置当硬盘已满时是停止录制还是开始覆盖。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**录制**> ⇨ ►▼ ⇨ <**录制选项**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 无空间模式：选择硬盘重复录制类型。
  - 覆盖：如果硬盘已满，此选项将覆盖现有数据并保持录制。
  - 停止：如果硬盘已满，此选项将自动停止录制。
- 无空间报警：如果您针对无空间模式选择 <**停止**>，则此按钮将处于活动状态。指定当硬盘录制结束时使用蜂鸣音。
  如果选中此项，当硬盘已满和录制停止时将发出蜂鸣音。
- 自动删除：如果选择此选项，时间段列表框将会处于活动状态。指定删除时间段以删除旧于指定日期的所有数据。但是，可以搜索从当前时间到选定日期的数据。

- 如果您在完成设置后单击 <**确定**>，将会自动删除旧于指定时间段的现有数据。因此，必要时，建议备份先前的数据以供日后使用。

设置事件

进行传感器检测、摄像机事件或视频损失检测时，您可以为录制进行此设置。

传感器检测

您可以设置传感器的操作条件和连接的摄像机，以及警报输出及其持续时间。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**事件**> ⇨ ► ⇨ <**传感器检测**> ⇨ [ENTER] ⇨ ▼ ⇨ <NVR> ⇨ ▲▼◄► ⇨ [ENTER]

- 应用到其它感应器：如果选择 <**应用到其它感应器**>，将出现“**应用到其它感应器**”确认窗口。在选择设置将应用于的频道后，单击 <**确定**> 将其应用于所选频道。
- 传感器操作：设置传感器的操作模式。
  - 在 <**摄像机**> 选项卡中，您可以设置是否使用传感器。
  - <常开（N.O）>：传感器处于打开状态。如果传感器被关闭，会发出警报。
  - <常闭（N.C）>：传感器处于关闭状态。如果传感器被打开，会发出警报。

- 摄像机：选择要连接到传感器的频道。
  如果选择了摄像机，会出现“**摄像机预设设置**”窗口。
  选择一个频道并设置预设。
  - 在 PTZ 模式下可进行预设设置。
- 警报输出：设置警报输出方式。
  - 有关警报输出的详细信息，请参阅“**HDD 警报** > **警报**”。（第 66 页）
- 警报持续时间：设置警报信号和警报声音的持续时间。

- 如果选择 <**摄像机**> 选项卡，您可以配置连接到每个频道的网络摄像机的传感器操作设置。
- 如果连接的网络摄像机（已配置警报输入/输出设置）触发警报，则 NVR 将执行警报输出。

菜单设置

摄像机事件

可以指定从摄像机发送的事件（移动探测、视频分析事件、音频事件）的操作、警报显示方法以及警报时间。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**事件**> ⇨ ►▼ ⇨ <**摄像机事件** > ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 应用于频道：如果选择 <**应用于频道**>，将出现“**应用于频道**”确认窗口。
  在选择设置将应用于的频道后，单击 <**确定**> 将其应用于所选频道。
- 摄像机事件：选择是否使用摄像机事件。
- 运动检测：选择是否使用来自摄像机的运动检测。
- 摄像机：选择事件检测频道。
- 如果您选择了摄像机项目，将出现“**摄像机预设**”屏幕。选择要连接的频道并设置预设。
  - 您可以在 PZT 模式中设置预设。
- 警报：选择警报输出方式。
  - 有关详细信息，请参阅“**HDD 警报** > **警报**”。（第 66 页）
- 警报持续时间：设置警报的持续时间。
- 摄像机移动探测：您可以为所连接的网络摄像机设置详细的运动检测设置。

- 模式：设置移动探测模式。
- 地区：单击 <**设置**>，出现详细设置菜单后，设置移动探测区域。
- 灵敏度：设置运动检测的灵敏度。（非常低/低/中/高/非常高）。
- 大小：单击 <**设置**>。出现详细设置菜单后，设置要检测对象的最大/最小大小。
- 激活时间：选择运动检测的工作时间。

完成设置后，单击 <**确定**> 按钮保存设置并回到上一屏幕。

视频丢失检测

可以对摄像机进行设置，以便在断开摄像机连接或由于网络连接不稳定而导致视频丢失时，摄像机可触发警报。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**事件**> ⇨ ►▼ ⇨ <**视频丢失检测**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 应用于频道：如果选择 <**应用于频道**>，将出现“**应用于频道**”确认窗口。
  在选择设置将应用于的频道后，单击 <**确定**> 将其应用于所选频道。
- 视频丢失状态：指定使用视频丢失检测。
- 警报输出：选择警报输出方式。
  - 有关警报输出的详细信息，请参阅“**HDD 警报** > **警报**”。（第 66 页）
- 警报持续时间：指定发出哔声的警报输出持续时间。

警报输出计划

您可以设置计划警报的条件和操作时数。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**事件**> ⇨ ►▼ ⇨ <**警报输出计划**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 警报输出：设置警报输出方式。
  - 有关警报输出的详细信息，请参阅“**HDD 警报** > **警报**”。（第 66 页）
  - <**打开**>：以绿色标记，而且总是以计划的时间生成警报。
  - <**关闭**>：以黑色标记，即使发生事件时也不会产生警报。
  - <**事件同步**>：以橙色标记，仅当发生事件时产生警报。
- 应用于所有警报输出：将配置的计划应用于所有警报。

- 当警报在计划的时间内产生时，您可以通过取消计划停止警报。

菜单设置

网络配置

它从远程位置提供现场屏幕的网络监控，同时根据事件支持邮件转寄功能。您可以配置支持此类功能的网络环境。

界面

您可以设置网络连接路由和协议。

设置网络连接

设置网络的协议和环境。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ► ⇨ <**界面**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ▲▼◄► ⇨ [ENTER]

- 网络 1（摄像机）：摄像机连接端口；从摄像机接收视频。
- 网络 2（Viewer）：用于将视频发送到 Web Viewer 的端口。
- 网络 1（摄像机）/网络 2（Viewer）设置
  - IP 类型：选择网络连接类型。
  - IP 地址、子网掩码、网关、DNS
    <**静态**>：您可以手动输入 IP 地址、子网掩码、网关和 DNS。
    <**DHCP**>：将自动设置 IP 地址、子网掩码和网关的值。
    <**PPPoE**>：将自动设置 IP 地址、子网掩码和网关的值。
  - 用户 ID、密码：如果将连接模式设置为 PPPoE，您需要输入“**用户 ID**”和“**密码**”来在 PPPoE 中注册。
- 传输带宽（网络 3）：输入上传数据宽带的最大值。
  请在输入该值之前在连接模式中查看所分配的设置。
  - 如果网络 TX/RX 的总和小于 32Mbps，最大传输速率为 32Mbps。
- 默认网关：通过使用网络 1（摄像机）/网络 2（Viewer）设置基本网关。

- 如果将其选择为 <**手动**>，您可以手动输入 <**DHCP**> 和 <**PPPoE**> 的 DNS。

连接和设置网络

网络可能不同于连接方式，请在设置连接模式前检查您的网络环境。

不使用路由器时

- **静态 IP 模式**
  - 互联网连接：静态 IP、租用线路和 LAN 环境允许 NVR 和远程用户间的连接。
  - NVR 网络设置：将已连接 NVR 的 <**界面**> 菜单中的 <**网络**> 设置为 <**静态**>。
  - ■ 请咨询您的网络管理员以获取 IP、网关和子网掩码。
- **DHCP 模式**
  - 互联网连接：将 NVR 直接连接至有线电视网调制解调器、DHCP ADSL 调制解调器或 FTTH 网络。
  - NVR 网络设置：将已连接 NVR 的 <**界面**> 菜单中的 <**网络**> 设置为 <**DHCP**>。
- **PPPoE**
  - 互联网连接：PPPoE 调制解调器直接连接至 NVR，此时 PPPoE 连接需要用户 ID 和密码。
  - NVR 网络设置：将已连接 NVR 的 <**界面**> 菜单中的 <**网络**> 设置为 <**PPPoE**>。
  - ■ PPPoE 的 <**用户 ID**> 和 <**密码**\> 应与 PPPoE 用户信息相同。
    如果您不知道该 ID 和密码，请咨询您的 PPPoE 服务提供商。

菜单设置

使用路由器时

- 为避免 IP 地址与 NVR 的静态 IP 发生冲突，请检查下列各项：

• 使用静态 IP 设置 NVR

- 互联网连接：您可以将 NVR 连接至与 PPPoE/有线电视网调制解调器连接的路由器上或连接至在局域网 (LAN) 环境中的路由器上。

• 设置 NVR 网络

1. 将已连接 NVR 的 <**连接**> 菜单中的 <**连接模式**> 设置为 <**静态**>。
2. 检查设置的 IP 地址是否在宽带路由器提供的静态 IP 范围之内。
   IP 地址、网关和子网掩码：请咨询您的网络管理员。
   - 检查设置的 IP 地址是否在宽带路由器提供的静态 IP 范围之内。

- 如果 DHCP 服务器配置了开始地址 (192.168.0.100) 和结束地址 (192.168.0.200)，您应在配置的 DHCP 范围（192.168.0.2 ~ 192.168.0.99 和 192.168.0.201 ~ 192.168.0.254 之外）设置 IP 地址。

3. 检查网关地址和子网掩码是否与设置在宽带路由器中的相同。

• 设置宽带路由器的 DHCP IP 地址

1. 要访问宽带路由器配置，在连接到宽带路由器的本地计算机上打开 Web 浏览器，然后输入路由器地址（如：http://192.168.1.1）。
2. 在此阶段，按下例配置本地计算机的 Windows 网络：
   例如）IP：192.168.1.2
   子网掩码：255.255.255.0
   网关：192.168.1.1
   - 在连接到宽带路由器之后，会提示输入密码。虽然在用户名字段中无需输入内容，但是需在密码字段中输入“admin”，并单击 <**确定**> 以访问路由器配置。
   - 访问路由器的 DHCP 配置菜单和设置其 DHCP 服务器激活，并提供开始和结束地址。
     设置开始地址 (192.168.0.100) 和结束地址 (192.168.0.200)。

- 以上步骤可能根据厂商的路由器设备而有所不同。

端口设置

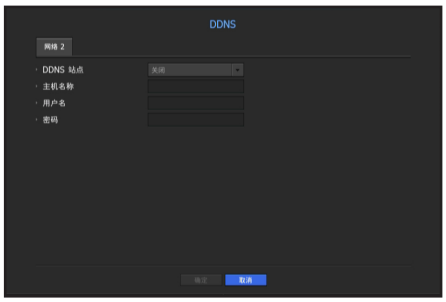
[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ► ⇨ <**界面**> ⇨ [ENTER] ⇨ ▼► ⇨ <**端口**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

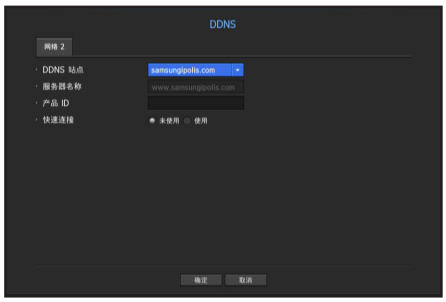
- 协议类型：在 TCP、UDP - 单播和 UDP - 多播之间选择协议类型。
- 设备端口：输入可连接的端口号。最初设置为 <**554**>。
  - TCP：与 UDP 相比，它具有更好的稳定性和较低速度，建议用于互联网环境。
- UDP 端口：最初设置为 <**8000~8159**>。按 160 的倍数增加/减少。
  - UDP：与 TCP 相比，其稳定性低且速度较快，建议用于局域网 (LAN) 环境。
- 多播 IP 地址：用户可直接输入。
- 多播 TTL：从 0 到 255 中选择。TTL 的初始值设为 <**5**>。
- Web 直播端口：输入 Web Viewer 的端口号。最初设置为 <**80**>。
- 发送 SSL：选择该选项可发送 SSL。
- 备份带宽：选择备份带宽的值。

DDNS

如果有远程用户访问网络，您可以设置是否使用 DDNS 以及是否连接该站点。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**DDNS**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络 2**> ⇨ ▲▼◄► ⇨ [ENTER]





- DDNS 站点：指定使用 DDNS 并选择要注册的站点。
- 服务器名称：提供向 DDNS 站点注册时使用的主机名。
- 产品 ID：提供向 DDNS 站点注册时使用的用户 ID。
- 密码：提供向 DDNS 站点注册时使用的密码。

- 请参阅“**使用虚拟键盘**”。（第 43 页）
- 如果选择 <**关闭**>，输入框将处于不活动状态。
- 如果选择 <**iPOLiS**>，主机名称输入框将处于不活动状态。此时用户名输入框将处于活动状态。

- Quick Connect：如果选择 <**samsungipolis.com**> 作为 <**DDNS 站点**>，将出现此项。
  要使用该功能，请在将 NVR 连接到 UPnP 路由器时将其设置为 <**使用**>，

- 如果在 Quick Connect 配置期间取消，它会自动切换为 <**未使用**> 并保存。

检查 Quick Connect 状态

Quick Connect 的进度栏及其消息会出现。

- **Quick Connect 成功**：成功连接的消息。
- **网络配置无效**：如果网络配置无效，该消息将会出现。请检查配置。
- **请启用路由器的 UPnP 功能**：如果路由器需要启用 UPnP 功能，该消息将会出现。
- **找不到路由器**：如果找不到路由器，则该消息将会出现。请检查路由器的配置。
- **请重新启动路由器**：如果应该重新启动路由器，则该消息将会出现。

DDNS 设置

DDNS 是动态域名系统的缩写。
DNS（域名系统）是一项服务，将包含用户友好字符的域名（例如：www.google.com）发送到数字的 IP 地址 (64.233.189.104)。
DDNS（动态 DNS）是一种通过 DDNS 服务器注册域名和浮动 IP 地址的服务，以便使域名不会发送至 IP 地址中，即使 IP 在动态 IP 系统进行更改的情况下也是如此。

- **在 NVR 中设置 DDNS**
  在已连接 NVR 的 <**协议**>菜单中将 <**协议类型**> 设置为以下各项：
  例如）协议类型：TCP
  端口 (TCP)：554、555、556、557、558
  DDNS 站点：iPOLiS
- **路由器的 DDNS 设置**
  选择路由器网络传输协议的相应菜单。
- **设置路由器的 UPnP**
  请参阅路由器的文档以启用路由器的 UPnP 功能。

IP 过滤

您可以准备 IP 地址列表来允许或阻止对某个 IP 地址的访问。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**IP 过滤**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 过滤类型：
  - 拒绝：如果选择拒绝，将限制对所注册 IP 地址的访问。
  - 允许：如果选择允许，则只能访问所注册的 IP 地址。
- 使用：为将使用 IP 过滤的 IP 地址选中该复选框。
- IP 地址：输入要过滤的 IP 地址。
- 过滤范围：如果输入 IP 地址或前缀，将显示阻止或允许的 IP 地址的范围。

■ 如果某摄像机的 IP 地址没有包括在“允许”列表中，或者位于“拒绝”列表中，系统将拒绝对它的访问。

菜单设置

SSL

您可以选择安全连接系统或安装公共证书。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**SSL**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 安全连接系统：您可以选择一种类型的安全连接系统。
  - HTTP（非安全连接）
  - HTTPS（使用唯一证书的安全连接）
  - HTTPS（使用公共证书的安全连接）
- 安装公共证书：您可以浏览和注册要安装的公共证书。
  如果您希望使用证书，您需要安装证书文件以及加密文件。
  - 只有存在已注册公共证书的情况下才能选择 <**HTTPS（使用公共证书的安全连接）**> 菜单。

802.1x

连接至网络时，您可以选择是否使用 802.1x 协议并安装相应的证书。

802.1x 是服务器和客户端的一种证书系统。它可以保证可靠运行，保护网络收发数据免受黑客窃用并防范病毒或信息泄漏。

通过使用该系统，您可以阻止未经认证的客户端的访问，只允许与认证用户通信，从而提高安全级别。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**802.1x**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ▲▼◄► ⇨ [ENTER]

- EAPOL 版本：选择要用作协议的 EAPOL 版本。
  - 如果设置为版本 <2>，某些交换机集线器可能不工作。选择版本 <1>。

- ID：输入 RADIUS 服务器管理员提供的 ID。
  - 如果输入的 ID 与客户端证书中的 ID 不匹配，则不能正确处理。
- 密码：输入 RADIUS 服务器管理员提供的密码。
  - 如果输入的密码与客户端证书中的私钥不匹配，则不能正确处理。
- 证书：搜索设备。单击 <**重新扫描**> 来再次搜索设备。
- CA 证书：仅当您的公共证书包含公共密钥时选择此项。
- 客户机证书：在公共证书包含客户端的身份验证密钥的情况下选择此项。
- 客户端私钥：在公共证书包含客户端私钥的情况下选择此项。

- 为了成功实施 802.1x 运行环境，管理员必须使用 RADIUS 服务器。
  此外，连接到服务器的交换机集线器必须是支持 802.1x 的设备。
- 如果 RADIUS 服务器、交换机集线器和 NVR 设备的时间设置不匹配，它们之间的通信可能失败。
- 如果为客户端私钥分配了密码，服务器管理员应确认该 ID 和密码。
  ID 和密码的长度都是最多 30 个字符。（只能使用字母、数字以及特殊字符“-”、“_”和“.”。）
  允许不输入密码来访问未使用密码保护的文件。
- NVR 采用的 802.1x 协议是 EAP-TLS。
- 您需要安装所有三个证书来使用 802.1x。

现场直播设置

可以对配置文件进行配置，以通过网络传输每个频道的现场视频。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**视频直播**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 配置文件：选择已连接摄像机的网络配置文件。
- 编解码器：显示所选网络配置文件的编解码器信息。
- 分辨率：显示所选网络配置文件的分辨率。
- 帧速率：显示所选网络配置文件的波特率。
- 质量：显示所选网络配置文件的视频质量。

- 如果用于网络和录制的配置文件不相同，则摄像机的视频来源可能会与在摄像机中指定的帧速率不相同。

菜单设置

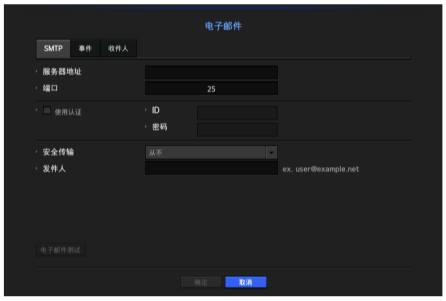
电子邮件

您可以按特定的时间间隔或在事件发生时向 NVR 的注册用户发送电子邮件。

SMTP 设置

设置 SMTP 邮件服务器。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**电子邮件**> ⇨ [ENTER] ⇨ ▼ ⇨ <**SMTP**> ⇨ ▲▼◄► ⇨ [ENTER]



- 服务器地址：输入要连接到的 SMTP 服务器地址。
- 端口：设置通讯端口。
- 使用认证：如果 SMTP 服务器使用用户身份验证，请选中此项。
  此时将激活账户输入框。
- ID：当连接至 SMTP 服务器时输入要使用验证的 ID。
- 密码：输入 SMTP 服务器用户的密码。
- 安全传输：选择 <**从不**> 或 <**TLS（如果可用）**>。
- 发件人：使用虚拟键盘输入发件人的电子邮件地址。
  - 请参阅“**使用虚拟键盘**”。（第 43 页）
- 电子邮件测试：对服务器设置进行测试。

事件设置

您可以设置将会发送至用户的事件的时间间隔和类型。

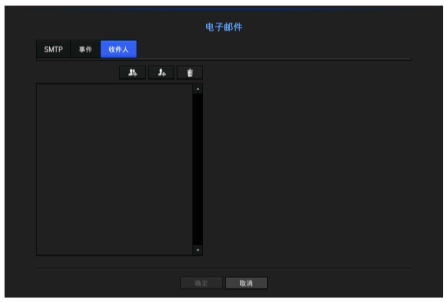
[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**电子邮件**> ⇨ [ENTER] ⇨ ▼► ⇨ <**事件**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

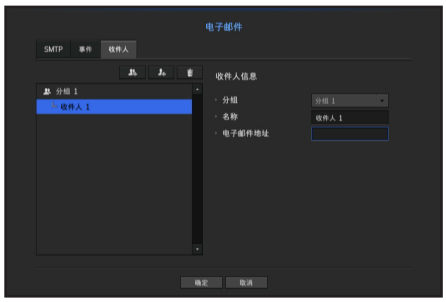
- 事件间隔：设置事件间隔。
  - 如果发生一系列事件，则会以特定的时间间隔，而不是按每个事件发送电子邮件。
- 使用事件传输：选择如果发生事件时应发送电子邮件的事件类型。
  如果发生所选事件，将向具有收件人权限的组发送电子邮件。

收件人设置

您可以创建组并向其添加用户；也可以删除用户和更改组。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**电子邮件**> ⇨ [ENTER] ⇨ ▼► ⇨ <**收件人**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]





- 单击 < > 来添加组。
  选择组名称和权限。
- 选择接收电子邮件的收件人组。
  如果添加了一个组，它将显示在组列表中。
- 单击 < > 来添加收件人。
  选择组并输入名称和电子邮件地址。
  如果创建了一个组，您可以添加收件人。
  - 有关输入收件人名称和电子邮件地址的信息，请参阅“**使用虚拟键盘**”。（第 43 页）

SNMP

使用 SNMP 协议，系统或网络管理员可以远程监控网络设备以及运行环境。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**SNMP**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

- 启用 SNMP v1：使用 SNMP 版本 1。
- 启用 SNMP v2：使用 SNMP 版本 2。
  - 读取社区：输入只读社区的名称来访问 SNMP 信息。默认设置为 <**private**>。
  - 写入社区：输入只写社区的名称来访问 SNMP 信息。默认设置为 <**public**>。
- 启用 SNMP v3：使用 SNMP 版本 3。
  - 密码：设置 SNMP 版本 3 的初始用户密码。
- 启用 SNMP 陷阱：SNMP 报文用于将重要事件和情况发送到管理员系统。
  - 陷阱管理器：输入消息将发送到的 IP 地址。

- 仅当安全连接方式设置为 HTTPS 模式时，才能设置 SNMP v3。
  详情请参阅“**SSL**”。（第 82 页）

DHCP 服务器

可以设置内部 DHCP 服务器，并且可以为网络摄像机分配 IP 地址。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**DHCP 服务器**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ▲▼◄► ⇨ [ENTER]

网络设置

• 网络 1：选择 <**设置**>，然后您便可以设置服务器所使用的 IP 范围和时间。

设置 DHCP 服务器

1. 在DHCP 服务器设置窗口上，单击 <**设置**>。
2. 在 <**状态**> 字段中选择 <**运行**>。
3. 在 <**IP 范围**> 字段中输入起始 IP 和结束 IP。
4. 填写 <**IP 租约时间**> 字段。
5. 单击 <**确定**>。
   输入的 IP 范围将被设置为网络的 DHCP 服务器地址。

检查 IP

可以通过 DHCP 服务器检查当前使用的 IP 和 Mac 及所连接的网络端口。

[MENU] ⇨ [ENTER] ⇨ ▼ ⇨ <**菜单**> ⇨ [ENTER] ⇨ ▼ ⇨ <**网络**> ⇨ ►▼ ⇨ <**DHCP 服务器**> ⇨ [ENTER] ⇨ ▼► ⇨ <**检查 IP**> ⇨ [ENTER] ⇨ ▲▼◄► ⇨ [ENTER]

• 网络：选择网络端口，以检查 IP 信息及其他信息。

搜索和播放

搜索

您可以按时间，或者按事件等搜索标准，对录制数据进行搜索。
您可以在现场模式中直接访问 <**搜索**> 菜单。

1. 在现场模式下，用鼠标按钮右键单击或按遥控器上的 [MENU] 按钮。
   现场菜单随即出现。
2. 选择 <**搜索**>。
   或者按遥控器上的 [SEARCH] 按钮
3. 此时应出现搜索菜单。
4. 可以通过自动删除功能限制搜索。
   请参阅“**设置录制** > **录制选项**”。（第 72 页）

- 重叠的数据：仅当某个时间存在重叠数据（由于更改 NVR 的时间设置）时显示此项。最晚的数据首先列出，从 <List0> 开始。
  它不出现在 <**备份搜索**> 中。
- 该搜索时间基于 NVR 指定的时间。

时间搜索

您可以搜索所需时间的录制数据。
显示的时间是应用了时区和夏令时系统(DST)的地区标准时间，因此根据在同一时间录制的数据时区和夏令时系统(DST)的应用与否会有所不同。

1. 在 <**搜索**> 菜单中选择 <**时间搜索**>。
2. 在日期选择窗口中，单击 < ⬍ > 按钮来选择搜索日期。
   - 有关使用日历的信息，请参阅“**使用日历**”。（第 42 页）

3. 屏幕上将列出特定日期的录制数据。
显示栏会由于数据类型的不同而存在差异。因此请根据左侧窗格中的颜色检查数据类型。

■ 如果配置了 DST（夏令时），可能会在某个时间点产生多个重叠录制数据。此类时间段用红色突出显示，用来表明其属于 DST 时间段。

4. 使用遥控器上的方向按钮 (▲▼◄►)，可以设置搜索条件或按 [ENTER] 按钮。

- 转至第一：转到最早的录制日期。
- 转至末尾：转到最晚的录制日期。
- 时间：选择要执行搜索的时间，或者使用向上/向下按钮 <⬍> 来选择时间。
- 放大：画面细节放大。
  将按照 24 小时 - 12 小时 - 6 小时 - 2 小时 - 1 小时的顺序切换。
- 缩小：画面将以上述详细模式的相反顺序切换。
  将按照 1 小时 - 2 小时 - 6 小时 - 12 小时 - 24 小时的顺序切换。
- 预览：单击 <**频道**> 并在 <**警报持续时间**> 中选择（单击、拖动）时间来显示该部分的静止图像。
  - 如果所选频道不包含任何录制数据，将标为黑色。

5. 选择一个数据项并单击 <**播放**>。
屏幕会切换为数据播放模式。

根据当前录制状态的颜色指示

录制数据类型通过使用不同的颜色来表示。每种颜色对应于一种录制类型。

事件搜索

您可以按频道搜索事件和播放它们。

1. 在 <**搜索**> 菜单中选择 <**事件搜索**>。
2. 使用遥控器上的方向按钮 (▲▼◄►)，可以设置通道、搜索日期、搜索条件，然后按 [ENTER] 按钮。
   ■ 根据所选菜单，将搜索所有/运动检测/视频分析/音频检测/传感器/预定/常规录制事件。

- 日期/时间预览：如果选择列表中的数据项，在左侧预览窗格中将显示所选数据的静止图像。
- 事件：显示所发生事件的类型。

3. 选择一个数据项并单击 <**播放**>。
屏幕会切换为事件数据播放模式。

搜索和播放

备份搜索

搜索所连接备份设备中的备份数据。
这里只搜索采用 NVR 格式的数据。

1. 在 <**搜索**> 菜单中选择 <**备份搜索**>。
2. 使用遥控器上的方向按钮 (▲▼◄►)，可以设置通道、搜索日期、搜索条件，然后按 [**ENTER**] 按钮。

- 频道：显示所录制的频道。
- 录制时间段：显示所录制的频道。
- 播放开始时间：选择您开始播放的时间。

3. 选择一个数据项并单击 <**播放**>。
   屏幕切换为备份数据播放模式。

播放

播放

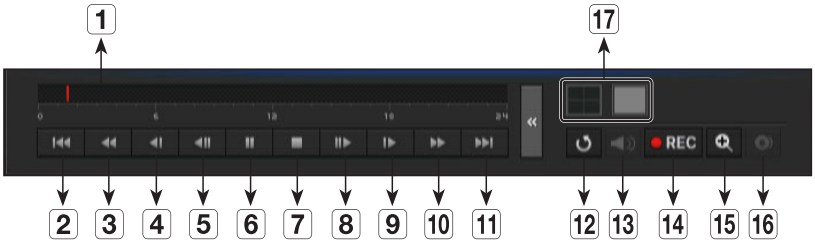
您可以播放存储在硬盘中的数据并备份所需部分的数据。

1. 在现场菜单屏幕中，选择 <**播放**> 菜单或单击启动菜单中的 < ▶ > 或者按遥控器上的 [▶] 按钮。
2. 使用上/下 (▲▼) 按钮，选择搜索菜单。
   - 如果这是您首次尝试播放，您将从数据搜索窗口开始。
     有关数据搜索的信息，请参阅“**搜索**”。（第 88 页）
3. 选择数据项目，然后在搜索菜单中单击 <**播放**>。
   屏幕上播放所选数据，而且出现播放启动器。
   - 如果已经存在数据，将立即开始 <**播放**> 而不执行搜索。

- 播放信息：在上角中显示当前数据的日期和时间。
- 备份：单击 < ◉ > 框当前时间设置为备份的开始时间；您可以使用鼠标指定备份区域（黄色三角形）。
  再次单击 < ◉ > 将当前设置时间设置为备份的结束时间，“**备份范围**”窗口随即出现。
  - 类型：支持 NVR 和 SEC 的格式。
  - 设备：选择备份设备。
  - 检查容量：您可以检查所选存储设备的容量。
4. 如果想在播放时返回现场屏幕，请单击启动菜单上的 < ■ > 或按遥控器上的 [■] 按钮。

搜索和播放

使用播放按钮

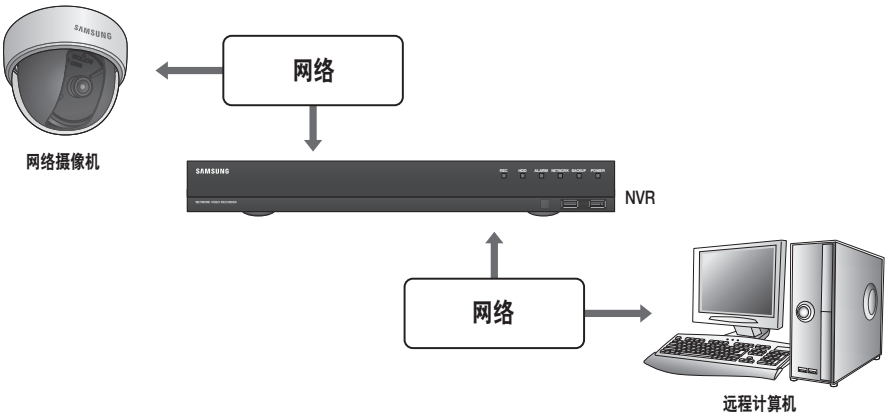


名称		描述
1	**播放时间线**	指示当前播放点，而且可用来移动播放点。
2	**反向跳跃**	向后移动单位时间。
3	**反向快放**	用于在播放中快速反向搜索。
4	**反向慢放**	用于在暂停时反向逐帧搜索。
5	**反向分步**	一次一帧地反向移动。
6	**暂停**	暂时停止播放当前视频。
7	**停止**	停止播放并转到现场屏幕。
8	**正向分步**	一次一帧地正向移动。
9	**正向慢放**	在分屏模式下可能不支持实时播放，具体取决于录制质量、分辨率和频道。可能支持一些帧速率。
10	**正向快放**	用于快速正向播放
11	**正向跳跃**	向前移动单位时间。
12	**返回**	返回到搜索设置屏幕。
13	**音频**	设置音频的打开/关闭状态。
14	REC	录制处于现场模式中的所有频道。
15	**缩放**	此项在单画面模式中可用，用于放大来自所选频道的视频。 要取消缩放，只需双击放大图像，或者在现场屏幕菜单中选择 <**关闭缩放**>。
16	**部分备份**	使用指定的开始/结束点，开始备份正在播放的所选视频部分。
17	**模式开关**	单击所需的播放模式或按 [MODE] 按钮更改分屏模式。

启动 Web Viewer

什么是 WEB VIEWER?

WebViewer 是一个软件程序，操作人员可以通过这个程序访问远程 NVR（网络视频录像机，Network Video Recorder），以进行实时监视、PTZ 控制（如果已配置）或搜索。



产品特色

- 使用浏览器进行的远程连接
- 已启用 PTZ 摄像机控制
- 支持 1、4 个摄像机查看格式（列表中最多为 4 个摄像机）。
- 以 JPEG/BMP/PNG 图像格式保存以方便打印和存储的功能。
- 以 AVI 格式录制视频 - 与流行的媒体播放器兼容。（需要集成的编解码器）
- 如果想在Windows Media Player播放, 就需要在www.windows7codecs.com 下载安装编解码器。(版本4.0.3以上)

系统要求

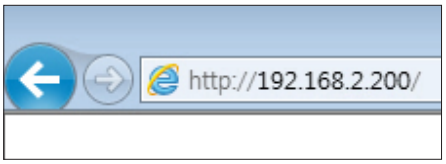
下面列出运行 Web Viewer 所需的最低建议硬件和操作系统要求。

项目	最低	建议
CPU	Intel Core 2 四核 2.5GHz 或更高	Intel i7 (3.5GHz) 或更高
RAM	2GB 或更多	4GB 或更多
硬盘	200GB 或更多	500GB 或更多
VGA 内存	512MB 或更多	1GB 或更多
显示器分辨率	1024 x1024 或更高	
操作系统	Window XP（SP 2 或更高）、Vista、7、8、Mac OS X（10.6 或更高） OpenGL（支持 GPU 加速器） Web 浏览器 Windows 环境：安装最新安全补丁，IE 8 或更高版本且安装漏洞补丁（建议使用 IE 9），IE 10, Chrome 26.x 或更高版本，FireFox 19.x 或更高版本 Mac OS X 环境：安装最新安全补丁，Safari 6.0.3 或更高版本且安装漏洞补丁	
网络	10/100 以太网卡	

启动 Web Viewer

连接 WEB VIEWER

1. 打开 Web 浏览器并在 URL 地址框中输入 NVR 的 IP 地址或 URL。



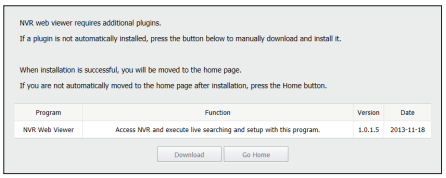
- 您需要首先连接网络 2，然后才能访问 Web Viewer。
- “192.168.2.200”为默认情况下设置的 IP 地址。
- 您必须在“**网络** > **界面**”中设置 IP 地址。
- 仅当已完成 DDNS 连接设置时，URL 连接才可用。
  如需更多信息，请参阅“**网络配置** > **DDNS**”。（第 80 页）

2. 具有管理权限的用户应该提供管理员 ID 和密码。已注册的用户应该提供用户 ID 和密码。

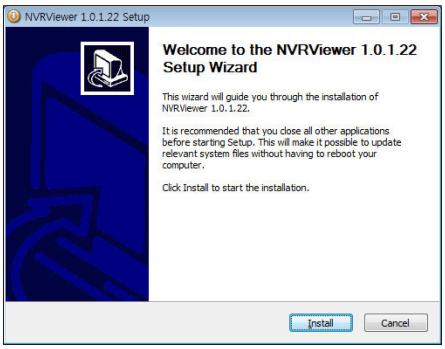
- Web 查看器的初始管理 ID/密码为“**admin**”和“**4321**”，在简易设置阶段您需要重置它们。
  仅在产品的初始设置时才能使用简易设置。
- 如果要将产品与无线路由器配合使用，请设置无线网络的密码。
  不使用密码保护或使用默认无线路由器密码可能会使视频数据受到潜在威胁。
- 请每隔三个月更改密码来保护个人信息，并预防信息失窃造成的损失。
  请注意，安全性以及密码管理不善导致的任何问题须由客户负责。

- 最多允许 10 个用户同时访问，包括管理员和一般用户。
- 管理员和一般用户的密码可在 NVR 的 <**权限设置**> 菜单中更改。
- 普通用户在连接到 Web Viewer 之前，应在 <**网络访问限制**> 下将 <**Webviewer**> 设置为“使用”。（第 45 页）
- 根据 NVR 的设置应用所有设置。

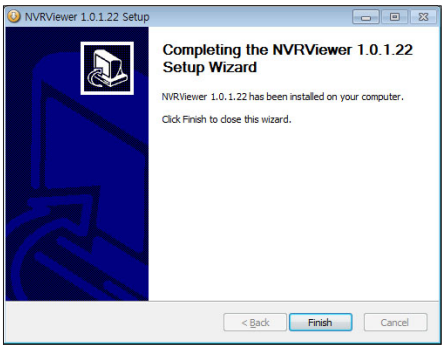
3. 此时将弹出插件安装确认窗口。



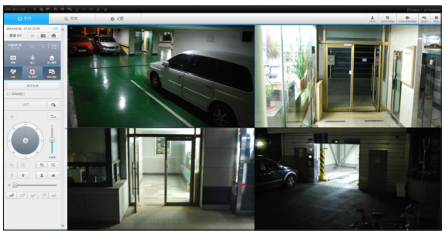
4. 显示程序安装向导窗口时，单击 [Install] 按钮以安装程序。
   - 安装程序的版本可能会因更新版本而有所不同。



5. 程序安装完成后，单击 [Finish] 按钮。



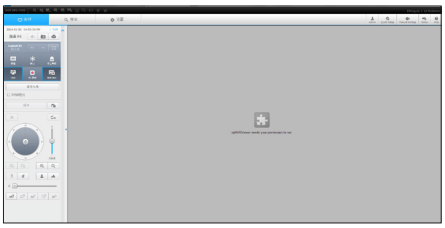
6. 安装完成并成功登录之后，将显示现场查看器主屏幕。



如果您想通过多个浏览器访问 Web 查看器

则在您第一次访问的浏览器菜单中设置插件 (npNVRViewer) 的自动执行并在激活该插件或选择插件可靠性之后刷新屏幕。

- 以后每次升级浏览器时，都可以更改插件激活方法。插件设置菜单可以参考浏览器手册。



- 对于 Chrome 浏览器，“Plug in is not activated. Please select 'Always run on this site' and refresh”，则选择浏览器顶部的“always execute on this site”按钮。

现场查看器

现场查看器

您可以在从远程计算机连接时检查 NVR 中已注册摄像机的视频。此外，您还可以调整摄像机并检查网络传输状态。

现场查看器屏幕

菜单		描述
1	系统状态指示符	显示图标以显示屏幕或或系统状态。
2	选择菜单	通过单击每个菜单切换到相应的菜单屏幕。
3	日期/频道	显示访问日期/时间和所选频道。
	声音	将连接到每个频道的声音设置为打开/关闭。
	捕捉	将所选频道的当前视频保存到用户指定的路径。
	打印	通过指定的打印机打印所选频道的当前视频图像。
4	频道更改/全屏	切换到上一个/下一个频道组。 从全屏切换到分屏。

菜单		描述
5	频道信息	显示所选频道信息。
	静止	暂时停止所有频道中的视频或取消激活处于暂停状态的暂停功能。
	停止警报	出现警报发生时取消激活。
	OSD	选中 OSD 项目以在 Web 查看器窗口中显示 OSD 屏幕信息。
	计算机录制	将所选的实时视频以AVI格式 保存在PC的指定文件夹里。
	NVR 录制	开始和停止 NVR 录制。
6	保存布局	保存布局。
7	切换	设置顺序。
8	PTZ	控制连接 PTZ 摄像机。
9	显示窗格	显示连接到 NVR 的摄像机的视频。
10	ID	显示所连接用户的 ID。
	快速设置	简便摄像机注册和录制设置。
	手动备份	手动备份所连接摄像机的视频。
	状态	显示摄像机现场和录制状态。
	帮助	转到帮助窗口。
11	注销	执行注销过程。
	关闭	关闭 NVR 系统。

现场查看器

现场屏幕配置

系统状态

您可以使用现场屏幕上的图标来检查 NVR 的状态或操作。

项目		描述
系统操作		风扇存在问题时显示。
		硬盘空间已满和 NVR 录制空间不足时显示。
		未安装硬盘或现有硬盘需要更换时显示。
		硬盘需要技术检测时显示。
		超出每个频道最大允许数据量时显示。
		网络过载时显示。网络过载时显示。 ■ 超出最大接收性能并导致 CPU 过载时显示。如果您修改摄像机设置或者删除摄像机来减轻性能过载程度，此项会消失。
		存在服务器固件更新时显示。存在服务器固件更新时显示。
		NVR 设备的电池电量用尽时显示。
		按下屏幕停止按钮时显示。
		以设定时间间隔切换所有频道时显示。

捕捉屏幕

1. 单击 < > 按钮。
   弹出窗口出现时，选择所捕捉图像的保存路径。
2. 选择路径并命名文件。然后单击 [**确定**] 按钮。
3. 将当前摄像机的视频图像为保存 .bmp、.jpg 或 .png 文件。

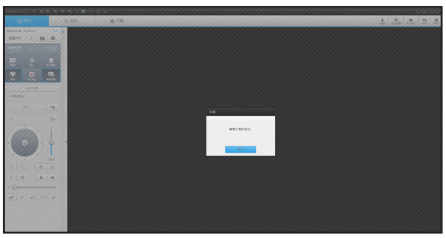
- 如果在 Windows Vista/7 中运行查看器但不具有管理员权限，您可能无法将捕捉的图像保存为 .bmp、.jpg 或 .png 文件。

打印屏幕

1. 单击 < > 按钮。
2. 使用连接到运行 Web Viewer 的计算机的打印机，打印当前摄像机的视频图像。

正在保存布局

单击 < 保存布局 >。
系统即保存所更改的布局。



现场查看器

更改分屏模式

如果您想保持当前屏幕比率

当您从分屏做出更改时，选中 <**保持高宽比**> 来保持比率并更改为其他尺寸。

转至所需的频道屏幕

按 < ← → > 按钮转至上一个/下一个频道组。

切换至全屏幕模式

单击 < ⛶ >。

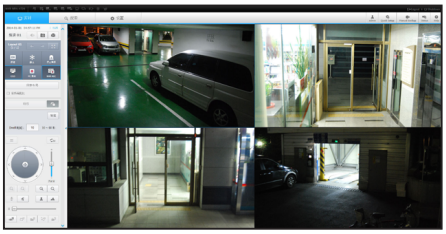
当前分屏会以全屏幕显示。

按 [ESC] 键可以退出全屏幕模式。

- MAC Safari 不支持全屏。

设置屏幕切换

如果您没有注册该布局，将不能执行屏幕切换功能。
您可以逐个查看布局。
单击 < > 按钮来启动切换设置窗口。



1. 输入所需的屏幕切换时间。

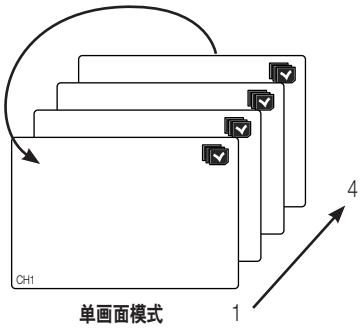
2. 单击 <**确定**> 按钮来保存指定顺序。

执行切换

单击 <**顺序**> 按钮来激活切换模式并运行顺序。

现场查看器

自动顺序

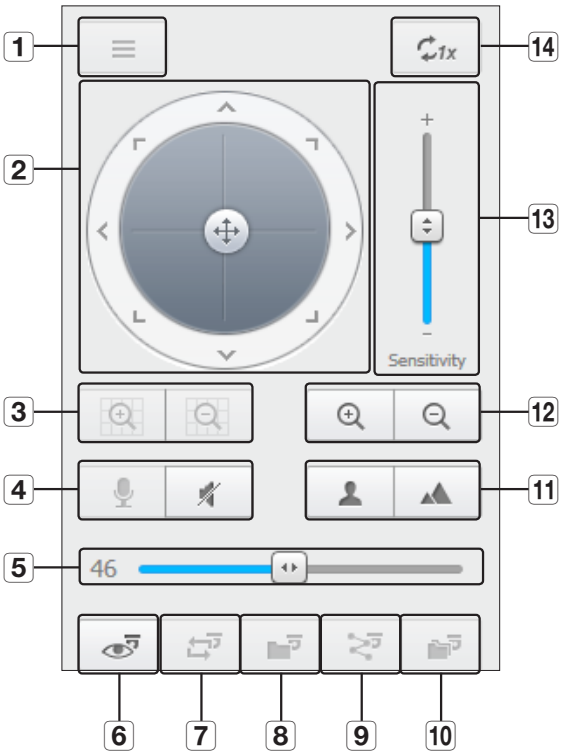


- 当切换到另一个频道时，视频可能会稍微延迟，具体视网络状态而定。
- 如果执行单画面屏幕的自动切换，在运行期间将取消激活布局设置菜单。

控制连接的网络摄像机。

控制 PTZ

如果已连接 PTZ 摄像机，< PTZ> 图标会出现在屏幕上。当选择相应的摄像机频道时，会提供 PTZ 选项卡以允许您控制 PTZ。



项目		描述
1	摄像机	菜单 显示摄像机设置菜单。
2	方向调整	在摄像机菜单中可以点击方向操作和中间的十字形图标用作确认键。
3	数字缩放	调整数字缩放以使图像更大或更小。
4	声音	为 PC 和摄像机的音频通话设置音频静音。
5	音量控制	更改介于 0 和 100 之间的 PC 音量。
6	预设	设置摄像机取景框的预设位置并在选择所需预设时移动到指定的预设位置。
7	摆动	在预设起始点和结束点之间移动。

现场查看器

项目		描述
8	分组	通过结合预设在指定的路径中移动。
9	跟踪	在预先定义的路径中移动摄像机的取景框。
10	巡视	通过结合多个分组在指定的路径中移动。
11	对焦	调整摄像机的焦点。
12	缩放	通过控制摄像机的缩放来放大或缩小图像。
13	灵敏度	调整摄像机操作的灵敏度
14	数字变焦关闭	从数字变焦状态返回原状。

设置预设

1. 单击 < > 按钮以显示“**预设**”窗口。
2. 单击 < > 来选择预设顺序。
3. 输入预设的名称。
4. 使用方向键调整摄像机对准的方向。
5. 单击 < > 按钮。

激活预设

1. 单击 < > 按钮以显示“**预设**”窗口。
2. 从列表中选择要激活的预设。
   摄像机取景框转到预设位置。

激活摆动（自动平移）、分组（扫描）、跟踪（模式）和巡视

可以通过激活预设的相同方式激活列出的功能。有关更多信息，请参阅适用摄像机的相应用户手册。

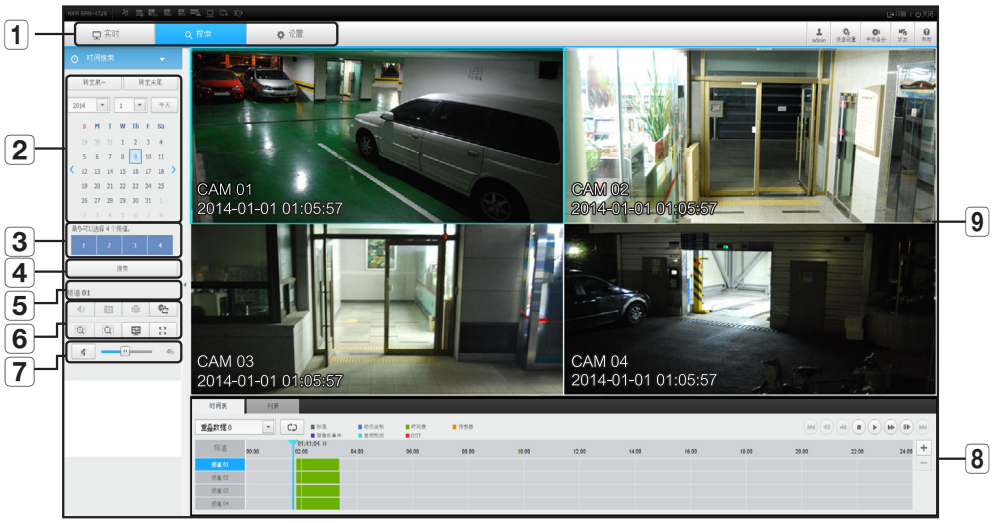
- 根据摄像机，仅支持摄像机的选择性功能。

搜索查看器

搜索查看器

您可以通过远程访问 NVR，搜索并播放保存在 NVR 中的视频录制内容。

搜索查看器屏幕



项目		描述
1	选择菜单	通过单击每个菜单切换到相应的菜单屏幕。
2	日历	蓝色显示视频录制日期，红色显示今天日期。单击蓝色的日期以在时间线中显示录制的视频信息。
3	频道选择	显示搜索频道。
4	搜索	搜素所选日期的用户指定频道。
5	频道显示	显示所选频道编号。

搜索查看器

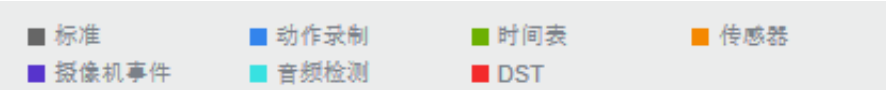
项目		描述
6	声音	更改介于 0 和 100 之间的 PC 音量。
	捕捉	在指定的路径中保存所选频道的当前视频。
	打印	通过指定的打印机打印所选频道的当前视频图像。
	章节备份	备份所选章节的视频。
	放大/缩小	放大或缩小所选频道的当前视频。
	OSD	显示频道信息。
	全屏幕	在全屏中显示四向分屏。
7	声音控制	调整所搜索视频的声音。
8	录制颜色	如果您将鼠标光标放置在该区域上，则会根据录制的数据类型，显示相应的颜色。
9	显示窗格	如果您选择搜索结果，则在屏幕上播放相应的数据。

按日期搜索

您可以使用日历选择搜索日期。

1. 单击 < <、> > 来选择搜索的年份/月份。
   如果某日期有关联数据，则显示为蓝色。当前日期显示为蓝色框。
2. 在日历中单击要搜索的日期。
   在该日期上搜索到视频数据的第一个图像会显示在屏幕上，而数据会显示在时间线中。
3. 要搜索当天的视频数据，请单击 <**今天**>。
   当天日期即被选中。

根据当前录制状态的颜色指示



根据录制的数据类型显示相应的颜色。

- 如果相同的时间线混合 2 种或更多种录制类型，则仅显示优先级较高的录制类型。
  （优先级：标准 > 动作录制 > 时间表 > 传感器 > 摄像机事件 > 音频检测 > DST）

调整时间线

如果搜索到的数据重叠，您可以选择所需的数据，移动其播放时间点，然后放大/缩小时间线。

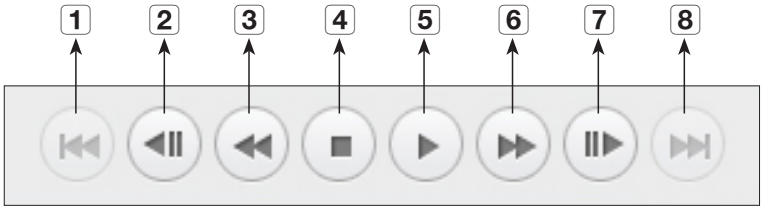
1. 如果数据重叠，选择要搜索的数据编号。
   仅当数据重叠时出现数据编号，并为最近期的数据分配编号 <0>。
2. 在时间线上单击要播放的时间点。
   系统移动播放起始点。
3. 单击 <+> / <-> 可放大/缩小缩放系数以显示时间。
4. 放大后，如果您希望查看前置/后置时间线，请点击时间线并朝向您希望移动的方向拖动。

如果您想检查录制列表

屏幕上将显示每个录制章节的结果。

搜索查看器

播放按钮的名称和功能



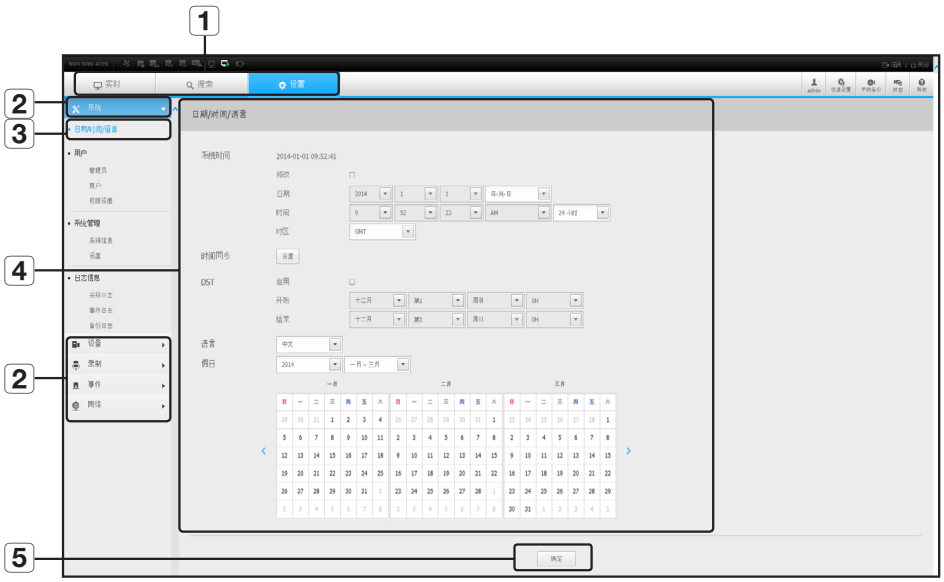
项目		描述
1	后退	以事件单位向后返回。
2	上一帧	向后移动 1 秒。
3	X 倍速反向播放	用于以 X 倍速倒回视频
4	停止	完成播放后，转到现场模式。
5	播放/暂停	播放和暂停播放视频。
6	X 倍速正向播放	以 X 倍速正向播放视频。
7	下一帧	向前移动 1 秒。
8	向前移动	以事件单位向前前进。

设置查看器

设置查看器

您可以在网络上远程配置 NVR 设置。
要配置 NVR 设置，请单击 <**设置**>。

设置屏幕



项目		描述
1	**选择菜单**	单击每个菜单以切换至相应的菜单屏幕。
2	**父菜单**	配置设置或选择父项目以更改现有的设置。
3	**子菜单**	在选择的父菜单的子菜单中，选择要设置的所需项目。
4	**禁用菜单**	单击要更改的所需项目的输入字段并输入所需值。
5	**确定**	应用修改的设置。

设置查看器

系统

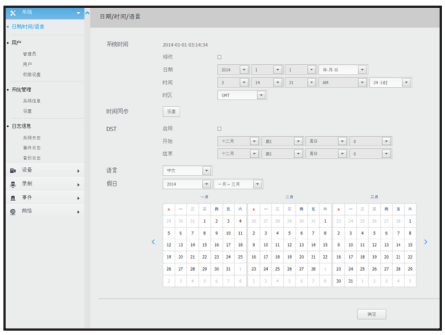
您可以配置 NVR 系统的各项设置。

日期/时间/语言

有关详细信息，请参阅“**系统**”菜单中的“**日期/时间/语言**”。（第 41 页）

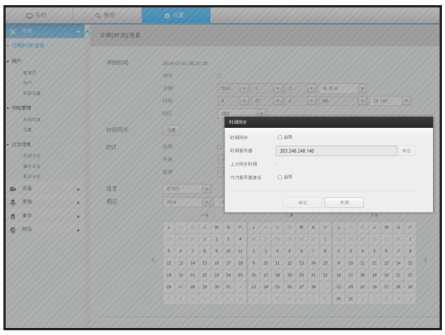
日期/时间

设置日期和时间。



时间同步

设置时间同步。



DST（夏令时）

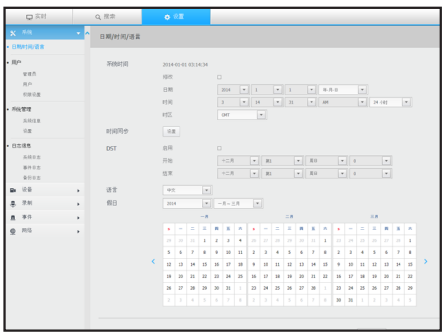
DST (Daylight Saving Time/夏令时系统) 是将显示时间比该地区的标准时间提前一小时的时间。

语言

为 NVR 选择您需要的语言。

假日

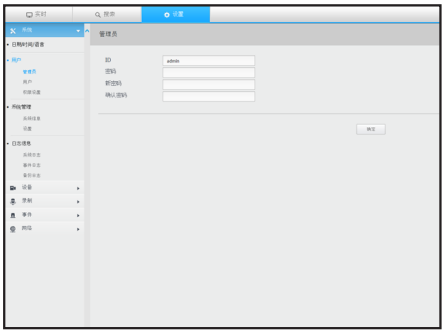
用户可以根据自己的偏好选择某些日期为假日。



许可权管理

有关详细信息，请参阅“**系统设置**”菜单中的“**用户**”。（第 43 页）

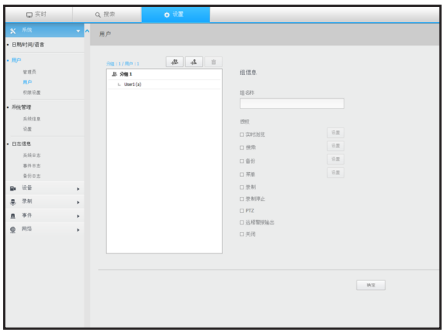
管理员



您可以更改管理员 ID 或密码。

- ID 只允许使用字母数字字符。
- 如果不使用管理员 ID 进行访问，您就不能更改 ID。
- 如果您更改正在使用的 ID，系统会自动将您注销。

用户



您可以添加、更改或删除用户。

权限设置

您可以设置用户许可权。

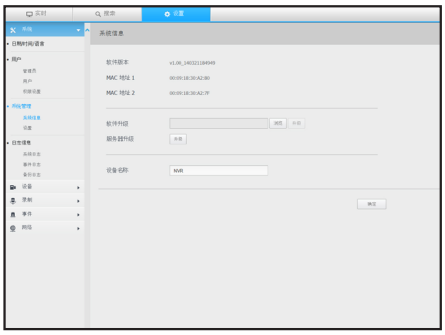
设置查看器

系统管理

有关详细信息，请参阅“**系统**”菜单中的“**系统管理**”。（第 47 页）

系统信息

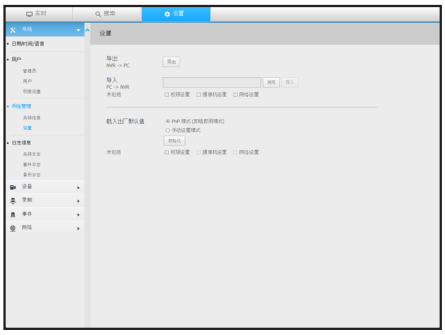
您可以查看当前系统的信息。
检查软件版本和 MAC 地址。



设置

您可以使用存储设备 NVR 的当前配置应用到其他 NVR。

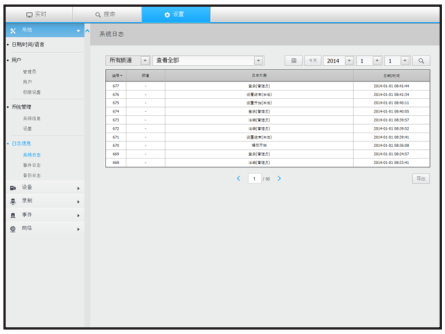
单机初始化按钮将网络信息和设置值还原到出厂时的状态。
<**未包括**> 选项将被排除在外。



日志信息

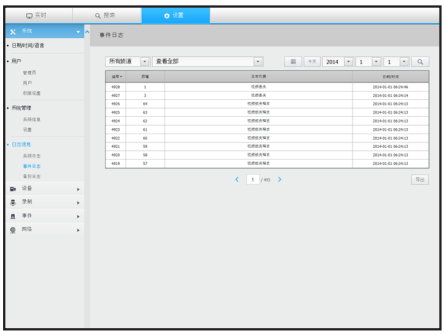
系统日志

系统日志中记录的数据显示多种与系统相关的日志/日期/时间，如系统启动、系统停止运行和菜单设置更改。



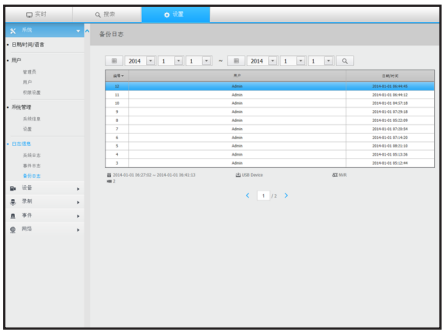
事件日志

可以搜索传感器、摄像机事件、视频丢失等事件记录。



备份日志

您可以查询执行备份的用户、执行时间以及详细信息（备份时间、备份设备、备份文件类型）。



设置查看器

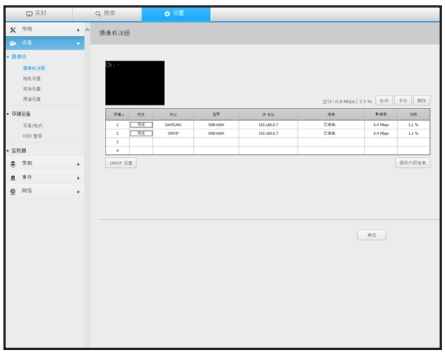
设备

您可以查看连接到 NVR 的设备列表并配置所需设置。
在菜单屏幕中单击 <**设备**>。
如需更多信息，请参阅“**设置设备**”。（第 52 页）

摄像机

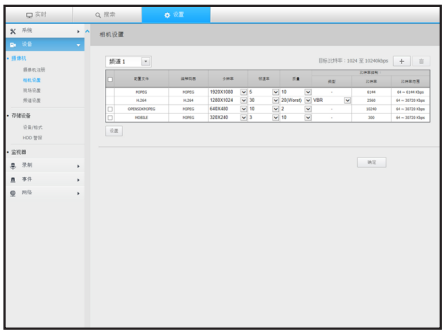
摄像机注册

您可以添加网络摄像机



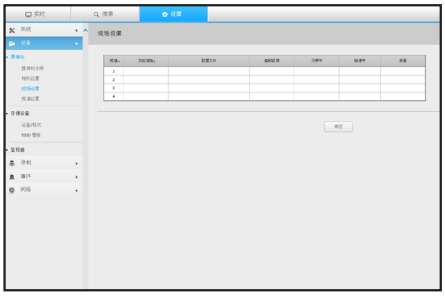
相机设置

您可以更改所连接网络摄像机的设置。



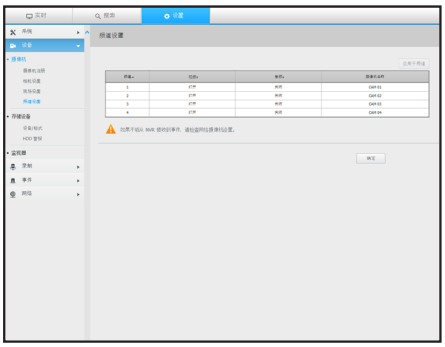
现场设置

您可以更改网络摄像机的当前传输设置。



频道设置

您可以配置每个频道的视频设置。

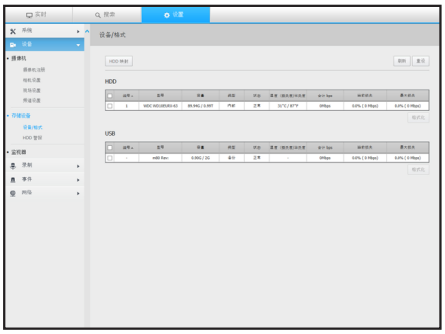


存储设备

您可以检查和更改与数据存储设备有关的设置。

设备/格式

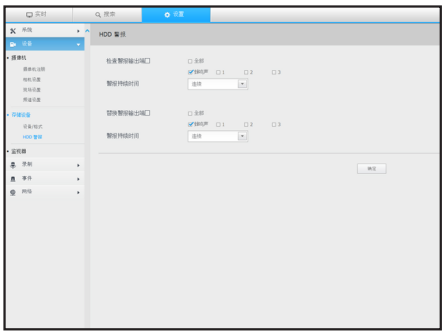
您可以检查存储设备及其已用空间数量、空间使用类型和状态。



设置查看器

HDD 警报

可以设置发生故障时警报输出端口和持续时间。

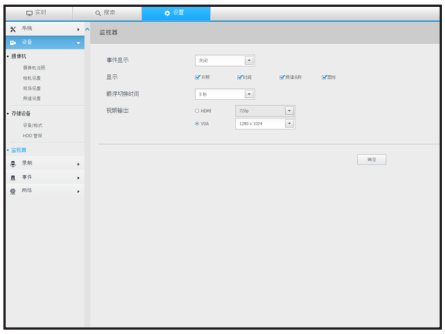


监视器

监视器

您可以配置监视器屏幕设置和设置输出系统。

- 如果视频未正常播放，请参考本手册后面的故障排除部分。（第 138 页）
- 显示器设置是针对连接 NVR的显示器的设置。

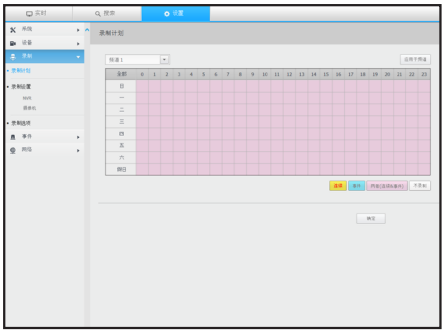


录制

如需更多信息，请参阅“**设置录制**”。（第 69 页）

录制计划

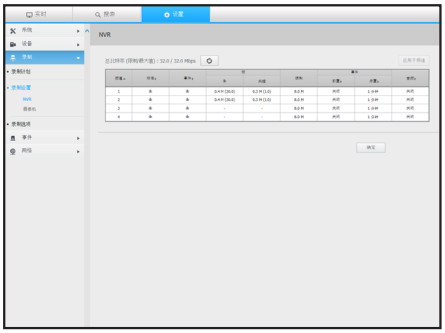
如果您设置了某日期和时间的录制计划，在该时间将开始录制。



录制设置

NVR

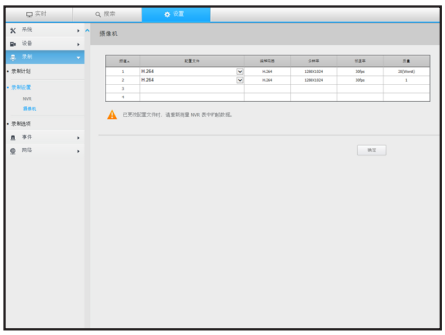
为每个频道选择常规/事件录制帧速率的类型。



设置查看器

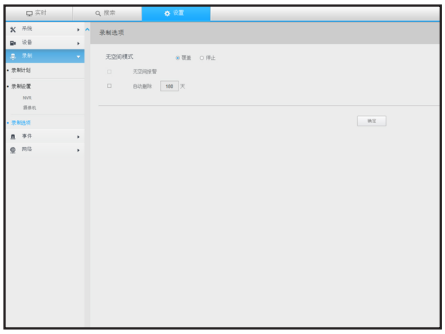
摄像机

您可以设置网络摄像机的录制配置文件。



录制选项

您可以设置无空间模式。



事件

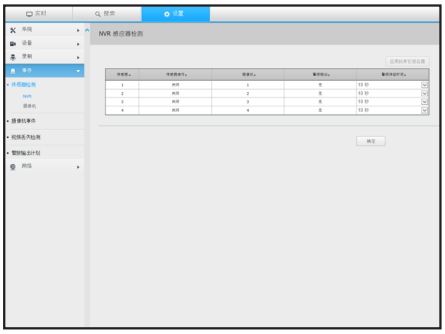
如需更多信息，请参阅“**设置事件**”。（第 73 页）

传感器检测

NVR / 摄像机

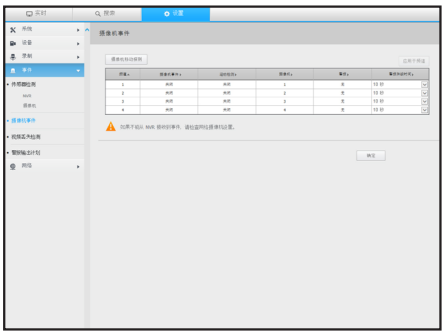
您可以设置传感器操作模式和同步摄像机以及警报输出类型和持续时间。

- 如果连接的网络摄像机（已配置警报输入/输出设置）触发警报，则 NVR 将执行警报输出。



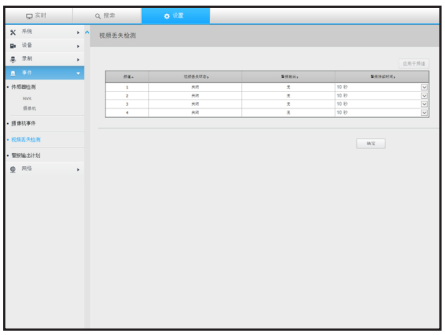
摄像机事件

可以设置摄像机事件模式、警报输出类型以及警报时间。



视频丢失检测

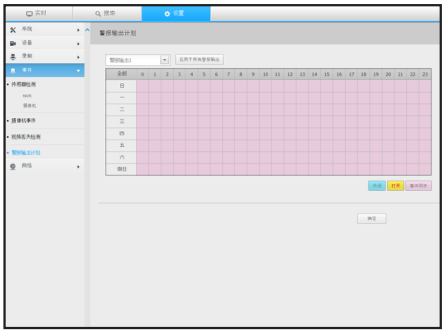
可以设置为在发生视频丢失时触发警报。



设置查看器

警报输出计划

您可以根据周日期和时间安排警报输出计划。
默认设置为“事件同步”，即仅在发生事件时激活警报。



网络

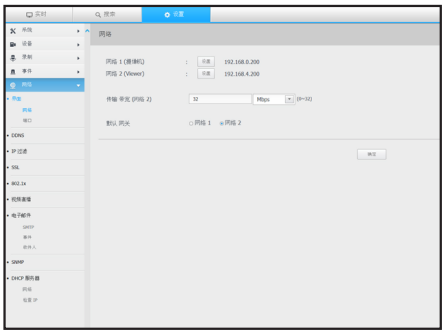
如需更多信息，请参阅“**网络配置**”。（第 76 页）

界面

远程用户可以通过网络访问 NVR 来检查当前模式和 IP 地址。

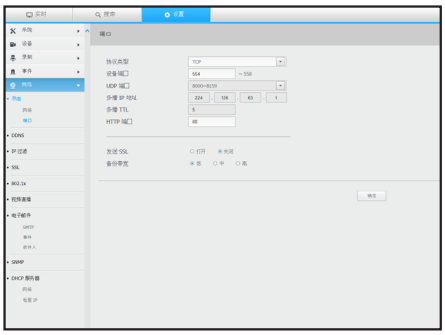
网络

指定网络连接路径。



端口

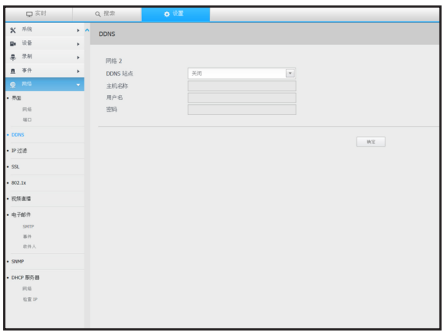
您可以配置协议相关设置。



DDNS

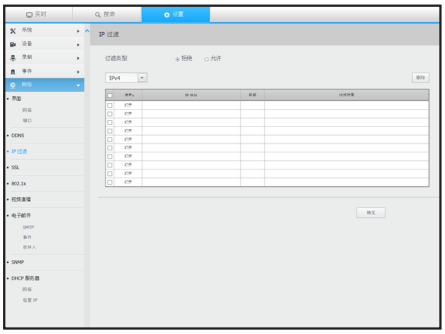
网络 2

您可以检查 DDNS 设置。



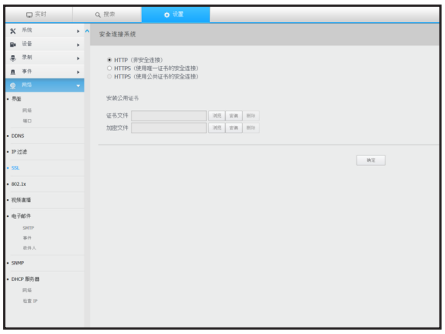
IP 过滤

您可以准备 IP 地址列表来允许或阻止对某个 IP 地址的访问。



SSL

您可以选择安全连接系统或安装公共证书。

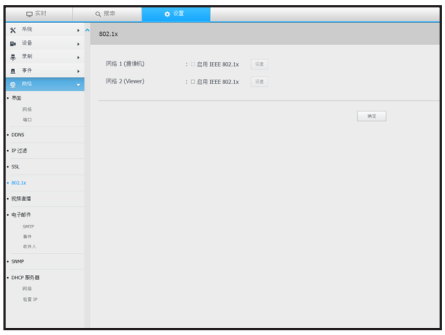


- 在使用 HTTPS 时，如果您希望切换到 HTTP，那么由于浏览器中包含的设置值，可能会发生异常操作。您需要将 URL 更改为 HTTP，然后重新连接或初始化浏览器的 cookie 设置。

设置查看器

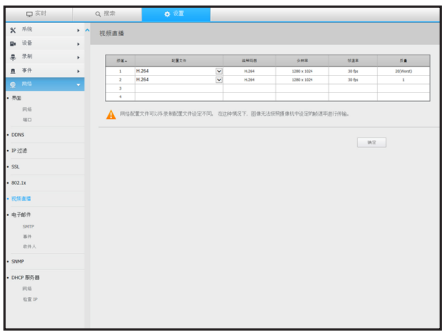
802.1x

连接至网络时，您可以选择是否使用 802.1x 协议并安装相应的证书。



视频直播

您可以配置网络摄像机的网络传输设置。

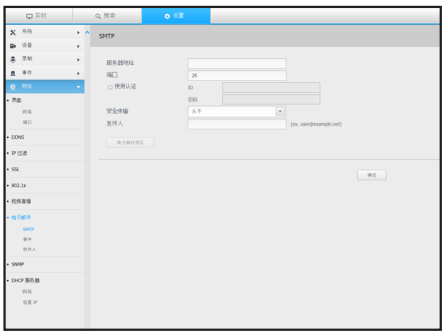


电子邮件

您可以指定 SMTP 服务器在发生事件时发送电子邮件，还可以设置收件人组和用户。

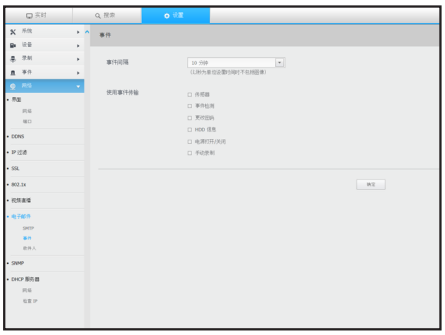
SMTP

您可以设置服务器发送邮件，并指定您是否使用身份验证流程。



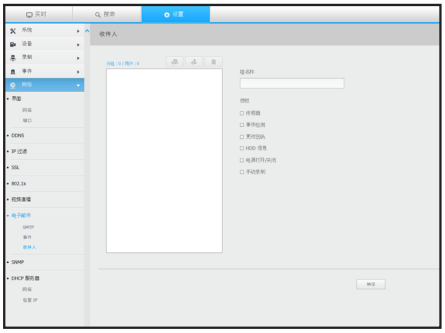
事件

您可以设置事件间隔并指定服务器对哪些事件发送邮件。



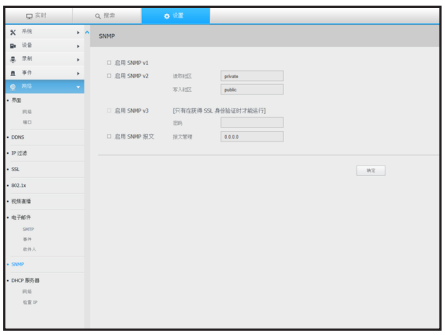
收件人

您可以设置接收电子邮件的用户组和收件人。



SNMP

使用 SNMP 协议，系统或网络管理员可以远程监控网络设备并设置环境。

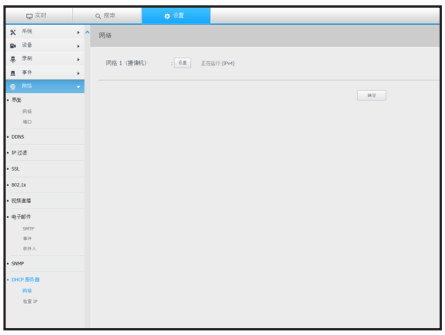


设置查看器

DHCP 服务器

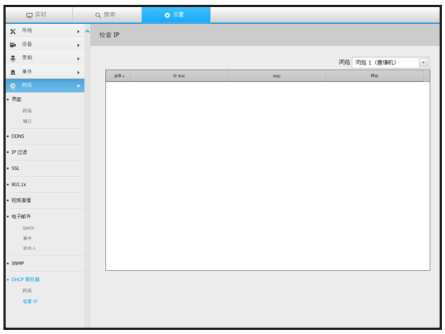
网络

您可以设置内部 DHCP 服务器，并且可以为网络摄像机分配 IP 地址。



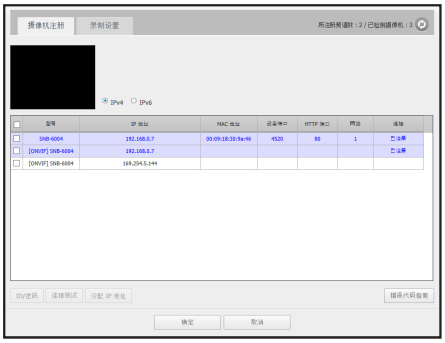
检查 IP

您可以通过 DHCP 服务器检查当前使用的 IP 和 MAC 以及所连接的网络端口。



使用设置图标

- admin：显示所连接用户的 ID。
- 快速设置：您可以为每个频道注册一部网络摄像机，轻松设置分辨率，以及发生事件或手动录制时的镜头数。
  - 有关如何注册摄像机的更多信息，请参阅“**注册摄像机**”。（第 52 页）



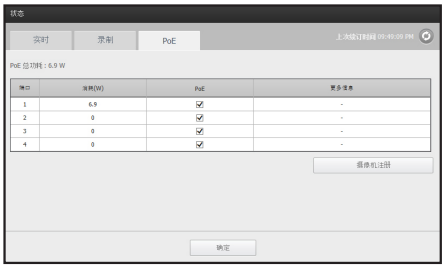
- 手动备份：您可以手动输入所需的备份频道和时间/日期来备份录制的视频。

设置查看器

- [状态]：您可以检查录制状态以及所连接摄像机的状态。
  - 实时：选择 <**实时**> 来检查连接到每个频道的摄像机的状态以及传输信息。

  - 录制：选择 <**录制**> 来检查每个频道的以下项目：配置文件、录制类型、输入/录制传输速率、设置/输入/录制数据量。

  - PoE : 选择 <**PoE**> 以查看通过 PoE 连接到每个通道的功耗。
    - 单击 < 摄像机注册 > 以移动到“设备 > 摄像机 > 摄像机注册”。
      For more on camera registration, refer to "**Registering Camera**". (第 52 页)

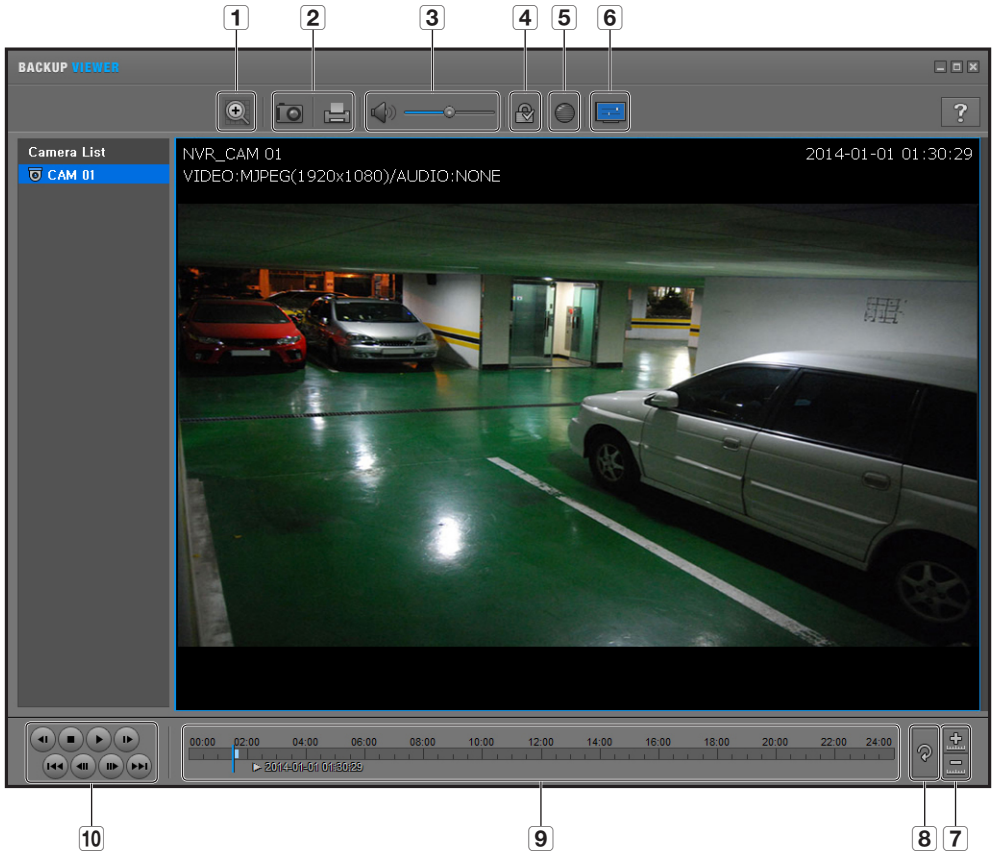


- < [帮助] >：您将立即转到 Samsung 的主页。

备份查看器

SEC 备份查看器

您可以播放以 SEC 格式备份的文件。
以 SEC 格式备份会产生备份数据文件、库文件和自行执行的查看器文件。
如果您运行备份文件查看器、备份数据文件将会播放。



建议的系统要求

低于以下建议规格配置的计算机可能无法正常支持前进/后退功能和高速播放。

- OS : Windows XP professional、Windows Vista、Windows 7
- CPU : Intel Core 2 四核 2.5GHz 或更高
- RAM : 3GB 或更多
- VGA : Geforce 6200 或更高

备份查看器

项目			描述
1	数字变焦		将图像最大放大为当前大小的 100 倍。 按 放大 ( ) 按钮可放大图像; 按 缩小 ( ) 按钮可缩小图像。 还可以在弹出窗口中使用滑块 ( ) 来放大/缩小。 在大小已更改的视频上按 ( ) 可恢复默认缩放系数 (100%)。 如果将图像放大超过 200%、则会在数字缩放屏幕上标记放大的区域。 单击标记的区域并将它移至所需位置。 数字缩放可应用于所有备份查看器。 取消数字缩放时，视频大小将恢复默认比率 100%。
2	屏幕打印输出		将当前视频的图像保存为图像文件。 支持 JPEG 文件格式。
			打印输出当前屏幕。在打印输出屏幕之前，您应安装适当的打印机驱动程序。
3	音频	/	切换按钮。每次按下此按钮时，音频输出均会在激活和取消激活之间进行切换。
			您可以按从 0 到 100 的级别调节音量。
4	水印	/	按该按钮可允许进行文件篡改检测，以检测文件伪造。
5	Deinterlace		可启用去隔行功能。
6	显示 OSD		选中 OSD 复选框以在备份播放屏幕上显示 OSD 信息。 将在屏幕上显示备份日期、星期几、时间、型号名称和频道编号等信息。
7	放大/缩小时间线		折叠显示在存储时间范围栏上的时间范围。您可以折叠范围栏，直到整个范围缩短到 24 小时。
			放大显示在存储时间范围栏上的时间范围。您可以扩大范围栏直到整个范围延长到 1 分钟。
8	还原时间线		将时间线还原为默认值。
9	显示存储时间范围		显示存储的视频文件的时间范围。 您可以移动范围栏的网格线选择播放的时间点。
10	播放控制		您可以调整时间轴，执行视频回放功能。

附录

产品规格

项目		详细信息
显示		
网络摄像机	输入	最多 4 个频道
	分辨率	CIF ~ 5MP
	协议	Samsung(SVNP), ONVIF 支持版本(1.0 ~ 2.22)
现场	本地显示	HDMI/VGA
	多频道显示	[本地监视器] 1 / 4 自动顺序 [Web] 1 / 4 自动顺序
	性能	[本地监视器] 5MP(30fps), 3MP(30fps), 2MP(120fps) [Web] 5MP(30fps), 3MP(60fps), 2MP(120fps)
性能		
操作系统	嵌入式	Linux
录制	压缩	H.264, MJPEG
	录制带宽	32Mbps（2MP 4 台摄像机实时录制）
	分辨率	CIF ~ 5MP
	类型	手动、计划、事件（前置/后置）
	事件触发器	- 警报输入(4) - 视频丢失 - 摄像机事件
	事件动作	电子邮件、PTZ 预设、警报输出、蜂鸣器、监
搜索和播放	播放带宽	32Mbps（4 个频道同时播放）
	性能	[本地监视器] 5MP(30fps), 3MP(30fps), 2MP(120fps) [Web] 5MP(30fps), 3MP(60fps), 2MP(120fps)
	模式	日期和时间（日历）/事件日志列表
	同时播放	4个频道（本地监视器） 4 个频道 (Web)，4 个频道 (CMS)
	分辨率	CIF ~ 5MP
	播放控制	快进/快退、上移一步/下移一步

附录

项目		详细信息
存储器	内置硬盘	最大 2 SATA HDDs
	外部（DAS）	N/A
	外部 (NAS)	N/A
	容量	内部 (8TB)
	RAID	N/A
备份	文件备份	BU/Exe(USB), JPG, AVI(Web, CMS)
	功能	单频道播放、日期-时间/标题显示
传感器	I/O	4/3（NO/NC 可选）
音频	输入	4 个频道（网络）
	压缩	G.711、G.726
	音频通信	双路
网络		
协议		TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, DHCP(Server, Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF
DDNS		Samsung iPOLiS DDNS
传输带宽		最小值 32mbps
最多远程用户数		搜索 (3)/现场单播 (10)/现场多播 (20)
IP 版本		IPv4/v6
安全		用户访问日志、IP 过滤、802.1x、加密

项目		详细信息
语言	GUI	英语、法语、德语、意大利语、西班牙语、俄语、土耳其语、波兰语、荷兰语、瑞典语、捷克语、葡萄牙语、丹麦语、罗马尼亚语、塞尔维亚语、克罗地亚语、匈牙利语、希腊语、挪威语、芬兰语、韩国语、中文、日语、泰语 (24)
	Webviewer	英语、法语、德语、意大利语、西班牙语、俄语、土耳其语、波兰语、荷兰语、瑞典语、捷克语、葡萄牙语、丹麦语、罗马尼亚语、塞尔维亚语、克罗地亚语、匈牙利语、希腊语、挪威语、芬兰语、韩国语、中文、日语、泰语 (24)
操作系统		支持的操作系统：Window XP（SP 2 或更高）、Vista、7、8、8.1 Mac OS X（10.7 或更高）
Web 浏览器		Microsoft Internet Explorer (Ver. 8~11), Mozilla Firefox (Ver. 19.x or higher), Google Chrome (Ver. 26.x or higher), Apple Safari (Ver. 6.0.3 or higher (Mac OS X 10.6 or higher))
查看器软件	类型	SSM., Webviewer, Smart Viewer, Mobile Viewer
	CMS 支持	支持 SDK/CGI
功能		
摄像机设置	注册	1) PnP 模式 2) 半自动 3) 手动
	设置项目	- IP 地址、添加配置文件、位速率、压缩、质量 - 视频设置（运动检测、ABF、亮度/分辨率、翻转/镜像、IRIS、宽动态、D&N、SSNR、快门）
PTZ	控制	通过 GUI、Webviewer
	预设	256 个预设
智能手机	支持型号	I-Phone、Android
	控制	现场（4 频道）/播放（1 频道）
系统控制		鼠标、 Web

附录

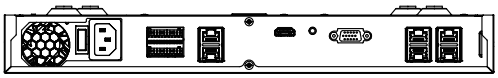
项目		详细信息
指示灯/界面		
前面	**指示灯**	电源状态 LED 1EA 硬盘操作 LED 1EA 警报状态 LED 1EA 录制状态 LED 1EA 网络操作 LED 1EA 备份状态 LED 1EA
	USB	每台 2 个
	开关	N/A
连接器	**VGA**	每台 1 个
	HDMI	每台 1 个
	音频	输出（每台 1 个，RCA，线性）
	DVD	不适用
	串行	不适用
	以太网	每台 4 个(PoE, 10/100Mbps)， 每台 2 个 (LAN, WAN, 100Mbps)
	警报器	输入（每台 4 个，接线端子） 输出（每台 3 个，接线端子）
	USB	每台 2 个（前面）
	重置	N/A
	电源线	交流插口
系统		
日志	**日志列表**	最多 20000 (系统日志, 事件日志, 备份日志/每台)
环境		
工作温度/湿度		+0° C 到 +40° C
湿度		20% ~ 85%

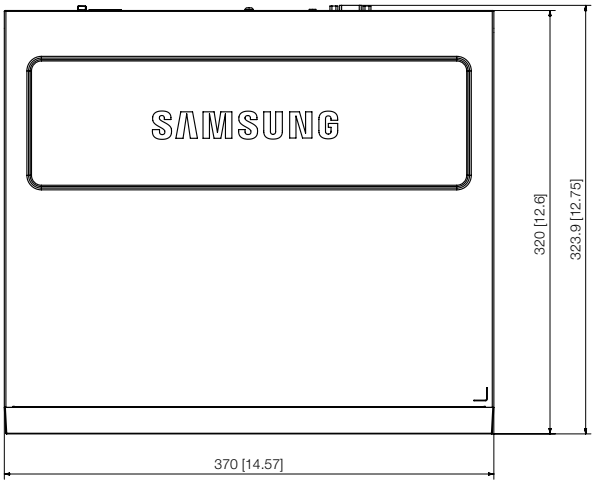
项目		详细信息
电气		
输入电压		100-240V / 3.5A 50Hz-60Hz
NVR功耗		最高 30W
摄像机功率输出		每个频道最高 15.4W，共 61.6W（PoE、IEEE802.3af）
机械		
颜色/材料		黑色/金属
尺寸（宽 x 深 x 高）		宽370 mm x 深44 mm x 高320 mm (1U)
重量		2.73公斤 （不含硬盘）
附件		
红外遥控器		包括
鼠标		包括
查看器 CD		备份查看器，安装手册
使用说明书		包括
电源线		包括
接线端子		包括
支架螺钉		包括
标准		
规		R82(France)
认证	安全	UL、KC
	EMC	CE、FCC、KCC、CCC、Gost-R

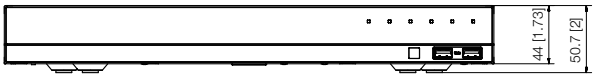
附录

产品视图

单位： 毫米(英寸)







默认设置

要重置系统、请移至“**系统管理** > **设置** > **载入出厂默认值**”、然后按 <**初始化**> 按钮。
这将恢复出厂默认设置。

- 如果初始化<**权限设置**> 项目之外的部分，重启后登录时ID、密码分别为“admin”，“4321”。
  请登录后重新设置密码。

- 初始管理员 ID 是“admin”，密码应在首次登录时设置。
- 请每隔三个月更改密码以保护个人信息并避免因信息失窃造成损失。
  请注意，用户应负责安全以及密码管理不善导致的其他问题。

类别	详细信息			出厂默认值
系统	日期/时间/语言	日期/时间/语言	日期	年-月-日
			时间	24 小时制
			时区	GMT
			时间同步	关闭
			DST	关闭
			语言	英语
	用户	管理员	ID	admin
		权限设置	受限访问	备份/录制/录制停止/录制停止/搜索/PTZ/远程警报输出/关闭
			网络访问限制	无
			自动注销	3 分钟
			手动输入 ID	关闭
	系统管理	系统信息	设备名称	NVR
设备	摄像机	频道设置	视频	打开
			音频	关闭
			摄像机名称	摄像机 01 ~ 摄像机 04
	存储设备	HDD 警报	检查警报输出端口	蜂鸣声
			警报持续时间	连续
			替换警报输出端口	蜂鸣声
			警报持续时间	连续
	远程设备	遥控器		打开
		ID		00
	监视器	监视器	事件显示	关闭
			显示	全部
			多频道切换时间	5 秒
			视频输出	VGA(1280x1024)
			显示位置设置	30

附录

类别	详细信息			出厂默认值
录制	录制计划	频道1~频道4		两者(连续&事件)
	录制设置	标准		全
		事件		全
		事件前		关闭
		事件后		1 分钟
	录制选项	无空间模式		覆盖
			无空间报警	关闭
		自动删除		180
事件	传感器检测	NVR	传感器操作	关闭
			摄像机	摄像机 编号
			警报输出	无
			警报持续时间	10 秒
		网络摄像机	传感器操作	关闭
			摄像机	摄像机 编号
			警报输出	无
			警报持续时间	10 秒
	摄像机事件		摄像机事件	关闭
			运动检测	关闭
			摄像机	摄像机 编号
			警报	无
			警报持续时间	10 秒
	视频丢失检测		视频丢失状态	关闭
			警报输出	无
			警报持续时间	10 秒
	警报输出计划			警报输出 1

类别	详细信息			出厂默认值
网络	界面	网络	IP 类型	静态
			网络 1(摄像机)	PnP 模式 : 192.168.231.200 手动 模式 : 192.168.1.200
			网络 2(Viewer)	192.168.2.200
			子网掩码	255.255.255.0
			网关	PnP 模式 : 192.168.2.1 手动 模式 : 192.168.1.1
			DNS	168.126.63.1
		端口	协议类型	TCP
			设备类型	554
			UDP 端口	8000~8159
			多播 IP 地址	224.126.63.1
			多播 TTL	5
			Web 直播端口	80
	DDNS	网络2	DDNS 站点	关闭
	IP 过滤		过滤类型	拒绝
	SSL		安全连接系统	HTTP（非安全连接）
	802.1x	网络2	启用 IEEE 802.1x	关闭
	电子邮件	SMTP	端口	25
			使用认证	关闭
			安全传输	从不
		事件	事件间隔	10 分钟
			使用事件传输	关闭
	SNMP		启用 SNMP v1	关闭
			启用 SNMP v2	关闭
			启用 SNMP v3	关闭
			启用SNMP报文	关闭
	DHCP 服务器	网络 1(摄像机)	IP 范围	PnP 模式 : 192.168.231.1 ~ 192.168.231.254 手动 模式 : 192.168.1.1 ~192.168.1.254
			IP 租约时间	86400

附录

疑难解答

症状	对策
系统打不开、且前面板上的指示器根本不工作。	• 检查电源系统是否已正确连接。 • 检查系统以查看电源的输入电压是否适当。 • 如果在您采取以上措施之后问题仍存在、请检查电源、必要时要更换新电源。 • 检查内部以了解电线是否正确连接。(SMPS、前面)
一些频道即使接收到了视频源也只显示黑色屏幕。	• 检查摄像机是否与电源正确连接。 • 检查连接摄像机的 Web Viewer 的视频输出。 • 检查网络端口是否正确连接、以及网络设置是否正确设置。 • 更改集线器支持千兆位、可能可以解决问题。
即使您按遥控器上的 [录制 (REC)] 按钮，录制 LED 也不会打开并且不会进行录制。	• 检查硬盘中是否有录制空间。 • 在菜单中，检查录制模式是否设置为“开 ”。 • 在菜单中，检查常规录制的编号是否设置为 <关>。
屏幕重复显示徽标图像。	• 此情况可能因主板问题引起、或是相关的软件被破坏。 请联系就近的服务中心以获取更多信息。
频道按钮在现场屏幕上无法使用。	• 如果当前屏幕处于事件监视模式、频道按钮就无法使用。 如果是事件监视屏幕，则按 [ALARM] 按钮终止事件屏幕并选择一个通道。
当我开始日历搜索时、光标不会移到“开始”按钮上。	• 检查您想播放的频道和日期是滞标注了 V 符号。 在开始使用“开始”按钮进行播放之前、应检查频道和日期。
在连接的监视器上未播放任何视频。	• 检查是否将必要的电缆正确连接至监视器。 • 如果即使进行了连接也没有显示该屏幕，则检查遥控器并按 [STOP (■)] ➞[ZOOM] ➞[STOP (■)] ➞[ZOOM] ➞[MENU] 按钮启动基本分辨率窗口。您可以在这里设置所需的分辨率。如果一段时间之后没有显示该屏幕，则要等待，直到显示基本分辨率屏幕。再次切换到另一个分辨率并最终切换到最终输出分辨率。 • 有些监视器不支持 NVR 输出（HDMI 或 VGA）。 （NVR 输出分辨率： VGA： 1024*768、1280*1024，HDMI：720P、1080P）检查监视器分辨率。

症状	对策
出现警报时，我试图按遥控器上的 [ALARM] 按钮来取消警报，但警报却一直进行，无法取消。	• 按遥控器上的 [MENU] 按钮可取消该警报。 1) 事件监视屏幕取消：监视模式 - 关闭事件监视时间。 2) 取消警报声音：事件录制模式 - 警报（摄像机事件/视频丢失） - 使警报输出静音。 3) 取消事件：事件录制模式 - 警报（摄像机事件/视频丢失） - 关闭该模式。
在 Live Viewer 中控制 PTZ 时无响应	• 检查注册的摄像机是否支持 PTZ 功能。
未连接摄像机、或者计算机无法连接至产品。	• 检查网线是否正确连接。 • 请确保已设置“网络 – 连接模式”。 • 检查计算机或摄像机的 IP 设置。 • 尝试 Ping 测试。 • 检查产品附近是否有不同的设备使用相同的 IP。
我注册了一部摄像机，但 Web Viewer 没有显示现场视频。	• 在注册摄像机后，用户需要首先编辑/保存所需布局，然后才会出现适合该设置的分屏模式和现场屏幕。
在 Web Viewer 中，屏幕没有自动切换。	• 您需要在自动切换菜单中为顺序操作选择所需布局。
现场屏幕太亮或太暗。	• 检查已注册摄像机的视频设置。
“需要重设日期/时间。”的消息 会出现在屏幕上。	• 当内部时钟的时间设置出现问题或时钟本身出错时会显示该消息。 请联系零售商或服务中心以获取更多信息。
时间条没有显示在搜索模式中。	• 时间线可以在正常和扩展模式间进行切换。 在扩展模式下、时间条可能不会显示在当前时间线中。 切换至正常模式或使用向左或向右按钮浏览时间条。
显示“无硬盘”图标和错误消息。	• 检查硬盘是否连接正常。如果在正常情况下仍出现此问题、请联系就近的服务中心让服务专业人士检查硬盘。
我已在 NVR 上安装了其他硬盘、但是它无法识别该硬盘。	• 请查看兼容性列表以检查 NVR 是否支持其他硬盘。 有关兼容性列表、请联系您购买 NVR 的零售商。
我已将外部存储设备(USB 存储器、USB HDD)连接至 NVR、但是 NVR 好像无法识别它。	• 请查看外部存储设备的兼容性列表以检查 NVR 是否支持连接的设备。 有关兼容性列表、请联系您购买 NVR 的零售商。

附录

症状	对策
如果我在 Web 查看器的全屏模式下按 ESC 键、系统不能切换至正常的分割模式。	• 按 ALT+TAB 键选择‘ACTIVE MOVIE’、然后再按 ESC 键。系统将会切换到正常的分割模式。
如果使用默认搜索、备份和路由器设置、我发现很难配置网络设置。	• 有关详情、请参阅用户手册。 • 如果您要检查产品的基本部件以快速入门、请参阅快速入门指南(备份、搜索)。 • 如果您使用路由器来进行网络连接、请参阅本手册中的“**使用路由器连接至互联网**”一节。
我忘记了密码。	• 请联系 NVR 管理员以获得帮助。
计算机或 NVR 无法播放备份数据。	• 备份数据时、您可以选择以下播放器：计算机或 NVR。 请先选择再继续。 • 如果要使用计算机来播放数据、则备份文件的格式应为 SEC。 • 如果要使用 NVR 来播放数据、应由 NVR 编制备份文件的格式。
无法在播放视频时移动到现场屏幕。	• 在遥控器上，按“Stop [■]”按钮或按启动菜单中的 [■] 按钮可立即移动到现场屏幕。
录制不起作用。	• 如果播放器根本就不显示现场图像、则表示录制不起作用、因此请先检查您是否能在屏幕上看到图像。 • 如果未正确配置录制设置、则录制不起作用。 计划录制：在“菜单” – “录制” – “录制计划”中指定所需的时间。 录制将在指定的时间开始。 1) 直接录制：按 NVR 遥控器上的 [REC] 按钮可立即开始录制。 2) 计划录制：在菜单/录制/计划录制中，将所需的录制时间设置为在这个时间开始录制。 - <连续> 录制：必须当时开始录制。 - <事件> 录制：发生事件（警报、移动探测、视频丢失）时，开始录制。如果没有事件，则不会录制。 - <连续/事件 (Continuous/event)> 录制：如果没有事件，则进行连续录制；发生事件时，进行事件录制。
录制数据的图像质量不佳。	• 在“菜单 – 录制 – 质量/分辨率”中提高分辨率和质量级别。 1) 分辨率：当指定录制大小时指定较大的大小。 采用 CIF 格式的录制图像显示降低的质量、因为它是从小尺寸图像放大的。 2) 录制质量：为录制质量指定较高的级别。 • 如果提高分辨率和录制质量、数据大小也会相应增大。 因此、HDD 将会更快填满。覆盖 将会覆盖现有数据、因此录制将以较短的间隔进行。

症状	对策
实际录制的帧速率与为摄像机配置的帧速率不匹配。	• 如果将多个配置文件应用于一个摄像机以进行视频传输、则摄像机会以低于指定的帧速率处理实际视频流。 尽可能将摄像机配置为将一个配置文件用于数据流。 例如、如果为录制和网络配置文件设置相同的配置文件，就会以指定的帧速率进行实际录制。 根据所用的屏幕模式，使用分屏模式的现场视频显示仍然可能会将另一个配置文件应用于摄像机。 请注意、录制/录制设置的允许比特率限制应该设置为大于摄像机来源的值。
系统没有按照设置执行录制。	• 如果录制状态表明输入数据超出限制。 进入“菜单”－“录制”－“录制设置”，将最大数据容量设置得大于输入数据。
录制屏幕变慢。	• 检查每种硬盘条件的录制规格（参阅菜单中的录制设置）对于实际录制设置是否适当。 • 如果数据处理速度超出播放性能（参阅菜单中的产品规格），将只播放主视频帧。

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- LGPL Software : ffmpeg, QT 4.7.2, Live555, ntp 4.2.6p1
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TinyXML

TinyXML is a simple, small, C++ XML parser that can be easily integrated into other programs.

What it does.

In brief, TinyXML parses an XML document, and builds from that a Document Object Model (DOM) that can be read, modified, and saved. XML stands for "eXtensible Markup Language." It allows you to create your own document markups. Where HTML does a very good job of marking documents for browsers, XML allows you to define any kind of document markup, for example a document that describes a "to do" list for an organizer application. XML is a very structured and convenient format. All those random file formats created to store application data can all be replaced with XML. One parser for everything. The best place for the complete, correct, and quite frankly hard to read spec is at http://www.w3.org/TR/2004/REC-xml-20040204/. An intro to XML (that I really like) can be found at http://skew.org/xml/tutorial. There are different ways to access and interact with XML data. TinyXML uses a Document Object Model (DOM), meaning the XML data is parsed into a C++ objects that can be browsed and manipulated, and then written to disk or another output stream. You can also construct an XML document from scratch with C++ objects and write this to disk or another output stream. TinyXML is designed to be easy and fast to learn. It is two headers and four cpp files. Simply add these to your project and off you go. There is an example file - xmltest.cpp - to get you started. TinyXML is released under the ZLib license, so you can use it in open source or commercial code. The details of the license are at the top of every source file. TinyXML attempts to be a flexible parser, but with truly correct and compliant XML output. TinyXML should compile on any reasonably C++ compliant system. It does not rely on exceptions or RTTI. It can be compiled with or without STL support. TinyXML fully supports the UTF-8 encoding, and the first 64k character entities.

What it doesn't do.

TinyXML doesn't parse or use DTDs (Document Type Definitions) or XSLs (eXtensible Stylesheet Language.) There are other parsers out there (check out www.sourceforge.org, search for XML) that are much more fully featured. But they are also much bigger, take longer to set up in your project, have a higher learning curve, and often have a more restrictive license. If you are working with browsers or have more complete XML needs, TinyXML is not the parser for you. The following DTD syntax will not parse at this time in TinyXML: @verbatim]> @endverbatim because TinyXML sees this as a !DOCTYPE node with an illegally embedded !ELEMENT node. This may be addressed in the future.

Tutorials.

For the impatient, here is a tutorial to get you going. A great way to get started, but it is worth your time to read this (very short) manual completely. - @subpage tutorial0

Code Status.

TinyXML is mature, tested code. It is very stable. If you find bugs, please file a bug report on the sourceforge web site (www.sourceforge.net/projects/tinyxml). We'll get them straightened out as soon as possible. There are some areas of improvement; please check sourceforge if you are interested in working on TinyXML.

Related Projects

TinyXML projects you may find useful! (Descriptions provided by the projects.)

• TinyXPath (http://tinyxpath.sourceforge.net). TinyXPath is a small footprint XPath syntax decoder, written in C++.

• TinyXML++ (http://code.google.com/p/ticpp/). TinyXML++ is a completely new interface to TinyXML that uses MANY of the C++ strengths. Templates, exceptions, and much better error handling.

Features

Using STL

TinyXML can be compiled to use or not use STL. When using STL, TinyXML uses the std::string class, and fully supports std::istream, std::ostream, operator<<, and operator>>. Many API methods have both 'const char*' and 'const std::string&' forms. When STL support is compiled out, no STL files are included whatsoever. All the string classes are implemented by TinyXML itself. API methods all use the 'const char*' form for input. Use the compile time #define: TIXML_USE_STL to compile one version or the other. This can be passed by the compiler, or set as the first line of "tinyxml.h". Note: If compiling the test code in Linux, setting the environment variable TINYXML_USE_STL=YES/NO will control STL compilation. In the Windows project file, STL and non STL targets are provided. In your project, It's probably easiest to add the line "#define TIXML_USE_STL" as the first line of tinyxml.h.

UTF-8

TinyXML supports UTF-8 allowing to manipulate XML files in any language. TinyXML also supports "legacy mode" - the encoding used before UTF-8 support and probably best described as "extended ascii". Normally, TinyXML will try to detect the correct encoding and use it. However, by setting the value of TIXML_DEFAULT_ENCODING in the header file, TinyXML can be forced to always use one encoding. TinyXML will assume Legacy Mode until one of the following occurs:

1. If the non-standard but common "UTF-8 lead bytes" (0xef 0xbb 0xbf) begin the file or data stream, TinyXML will read it as UTF-8.

2. If the declaration tag is read, and it has an encoding="UTF-8", then TinyXML will read it as UTF-8.

3. If the declaration tag is read, and it has no encoding specified, then TinyXML will read it as UTF-8.

4. If the declaration tag is read, and it has an encoding="something else", then TinyXML will read it as Legacy Mode. In legacy mode, TinyXML will work as it did before. It's not clear what that mode does exactly, but old content should keep working.

5. Until one of the above criteria is met, TinyXML runs in Legacy Mode.

What happens if the encoding is incorrectly set or detected? TinyXML will try to read and pass through text seen as improperly encoded. You may get some strange results or mangled characters. You may want to force TinyXML to the correct mode. You may force TinyXML to Legacy Mode by using LoadFile(TIXML_ENCODING_LEGACY) or LoadFile(filename, TIXML_ENCODING_LEGACY). You may force it to use legacy mode all the time by setting TIXML_DEFAULT_ENCODING = TIXML_ENCODING_LEGACY. Likewise, you may force it to TIXML_ENCODING_UTF8 with the same technique. For English users, using English XML, UTF-8 is the same as low-ASCII. You don't need to be aware of UTF-8 or change your code in any way. You can think of UTF-8 as a "superset" of ASCII. UTF-8 is not a double byte format - but it is a standard encoding of Unicode! TinyXML does not use or directly support wchar, TCHAR, or Microsoft's _UNICODE at this time. It is common to see the term "Unicode" improperly refer to UTF-16, a wide byte encoding of unicode. This is a source of confusion. For "high-ascii" languages - everything not English, pretty much - TinyXML can handle all languages, at the same time, as long as the XML is encoded in UTF-8. That can be a little tricky, older programs and operating systems tend to use the "default" or "traditional" code page. Many apps (and almost all modern ones) can output UTF-8, but older or stubborn (or just broken) ones still output text in the default code page. For example, Japanese systems traditionally use SHIFT-JIS encoding. Text encoded as SHIFT-JIS can not be read by TinyXML. A good text editor can import SHIFT-JIS and then save as UTF-8. The Skew.org link does a great job covering the encoding issue. The test file "utf8test.xml" is an XML containing English, Spanish, Russian, and Simplified Chinese. (Hopefully they are translated correctly). The file "utf8test.gif" is a screen capture of the XML file, rendered in IE. Note that if you don't have the correct fonts (Simplified Chinese or Russian) on your system, you won't see output that matches the GIF file even if you can parse it correctly. Also note that (at least on my Windows machine) console output is in a Western code page, so that Print() or printf() cannot correctly display the file. This is not a bug in TinyXML - just an OS issue. No data is lost or destroyed by TinyXML. The console just doesn't render UTF-8.

Entities

TinyXML recognizes the pre-defined "character entities", meaning special characters. Namely: @verbatim & & < < > > " " ' ' @endverbatim These are recognized when the XML document is read, and translated to there UTF-8 equivalents. For instance, text with the XML of: @verbatim Far & Away @endverbatim will have the Value() of "Far & Away" when queried from the TiXmlText object, and will be written back to the XML stream/file as an ampersand. Older versions of TinyXML "preserved" character entities, but the newer versions will translate them into characters. Additionally, any character can be specified by its Unicode code point: The syntax " " or " " are both to the non-breaking space characher.

Printing

TinyXML can print output in several different ways that all have strengths and limitations. - Print(FILE*). Output to a std-C stream, which includes all C files as well as stdout. - "Pretty prints", but you don't have control over printing options. - The output is streamed directly to the FILE object, so there is no memory overhead in the TinyXML code. - used by Print() and SaveFile() - operator<<. Output to a c++ stream. - Integrates with standart C++ iostreams. - Outputs in "network printing" mode without line breaks. Good for network transmission and moving XML between C++ objects, but hard for a human to read. - TiXmlPrinter. Output to a std::string or memory buffer. - API is less concise - Future printing options will be put here. - Printing may change slightly in future versions as it is refined and expanded.

Streams

With TIXML_USE_STL on TinyXML supports C++ streams (operator <<,>>) streams as well as C (FILE*) streams. There are some differences that you may need to be aware of. C style output: - based on FILE* - the Print() and SaveFile() methods Generates formatted output, with plenty of white space, intended to be as human-readable as possible. They are very fast, and tolerant of ill formed XML documents. For example, an XML document that contains 2 root elements and 2 declarations, will still print. C style input: - based on FILE* - the Parse() and LoadFile() methods A fast, tolerant read. Use whenever you don't need the C++ streams. C++ style output: - based on std::ostream - operator<< Generates condensed output, intended for network transmission rather than readability. Depending on your system's implementation of the ostream class, these may be somewhat slower. (Or may not.) Not tolerant of ill formed XML: a document should contain the correct one root element. Additional root level elements will not be streamed out. C++ style input: - based on std::istream - operator>> Reads XML from a stream, making it useful for network transmission. The tricky part is knowing when the XML document is complete, since there will almost certainly be other data in the stream. TinyXML will assume the XML data is complete after it reads the root element. Put another way, documents that are ill-constructed with more than one root element will not read correctly. Also note that operator>> is somewhat slower than Parse, due to both implementation of the STL and limitations of TinyXML.

White space

The world simply does not agree on whether white space should be kept, or condensed. For example, pretend the '_' is a space, and look at "Hello____world". HTML, and at least some XML parsers, will interpret this as "Hello_world". They condense white space. Some XML parsers do not, and will leave it as "Hello____world". (Remember to keep pretending the _ is a space.) Others suggest that __Hello___world__ should become Hello___world. It's an issue that hasn't been resolved to my satisfaction. TinyXML supports the first 2 approaches. Call TiXmlBase ::SetCondenseWhiteSpace(bool) to set the desired behavior. The default is to condense white space. If you change the default, you should call TiXmlBase::SetCondenseWhiteSpace(bool) before making any calls to Parse XML data, and I don't recommend changing it after it has been set.

Handles

Where browsing an XML document in a robust way, it is important to check for null returns from method calls. An error safe implementation can generate a lot of code like: @verbatim TiXmlElement* root = document.FirstChildElement("Document"); if (root) { TiXmlElement* element = root->FirstChildElement("Element"); if (element) { TiXmlElement* child = element->FirstChildElement("Child"); if (child) { TiXmlElement* child2 = child->NextSiblingElement("Child"); if (child2) { // Finally do something useful. @endverbatim Handles have been introduced to clean this up. Using the TiXmlHandle class, the previous code reduces to: @verbatim TiXmlHandle docHandle(&document); TiXmlElement* child2 = docHandle.FirstChild("Document").FirstChild("Element").Child("Child", 1).ToElement(); if (child2) { // do something useful @endverbatim Which is much easier to deal with. See TiXmlHandle for more information.

Row and Column tracking

Being able to track nodes and attributes back to their origin location in source files can be very important for some applications. Additionally, knowing where parsing errors occured in the original source can be very time saving. TinyXML can tracks the row and column origin of all nodes and attributes in a text file. The TiXmlBase::Row() and TiXmlBase::Column() methods return the origin of the node in the source text. The correct tabs can be configured in TiXmlDocument::SetTabSize().

Using and Installing

To Compile and Run xmltest: A Linux Makefile and a Windows Visual C++ .dsw file is provided. Simply compile and run. It will write the file demotest.xml to your disk and generate output on the screen. It also tests walking the DOM by printing out the number of nodes found using different techniques. The Linux makefile is very generic and runs on many systems - it is currently tested on mingw and MacOSX. You do not need to run 'make depend'. The dependecies have been hard coded.

Windows project file for VC6

- tinyxml: tinyxml library, non-STL
- tinyxmlSTL: tinyxml library, STL
- tinyXmlTest: test app, non-STL
- tinyXmlTestSTL: test app, STL

Makefile

At the top of the makefile you can set: PROFILE, DEBUG, and TINYXML_USE_STL. Details (such that they are) are in the makefile. In the tinyxml directory, type "make clean" then "make". The executable file 'xmltest' will be created.

To Use in an Application:

Add tinyxml.cpp, tinyxml.h, tinyxmlerror.cpp, tinyxmlparser.cpp, tinystr.cpp, and tinystr.h to your project or make file. That's it! It should compile on any reasonably compliant C++ system. You do not need to enable exceptions or RTTI for TinyXML.

How TinyXML works.

An example is probably the best way to go. Take: @verbatim Go to the Toy store! Do bills @endverbatim Its not much of a To Do list, but it will do. To read this file (say "demo.xml") you would create a document, and parse it in: @verbatim TiXmlDocument doc("demo.xml"); doc.LoadFile(); @endverbatim And its ready to go. Now lets look at some lines and how they relate to the DOM. @verbatim @endverbatim The first line is a declaration, and gets turned into the TiXmlDeclaration class. It will be the first child of the document node. This is the only directive/special tag parsed by TinyXML. Generally directive tags are stored in TiXmlUnknown so the commands wont be lost when it is saved back to disk. @verbatim @endverbatim A comment. Will become a TiXmlComment object. @verbatim @endverbatim The "ToDo" tag defines a TiXmlElement object. This one does not have any attributes, but does contain 2 other elements. @verbatim @endverbatim Creates another TiXmlElement which is a child of the "ToDo" element. This element has 1 attribute, with the name "priority" and the value "1". @verbatim Go to the @endverbatim A TiXmlText. This is a leaf node and cannot contain other nodes. It is a child of the "Item" TiXmlElement. @verbatim @endverbatim Another TiXmlElement, this one a child of the "Item" element. Etc. Looking at the entire object tree, you end up with: @verbatim TiXmlDocument "demo.xml" TiXmlDeclaration "version='1.0'" "standalone=no" TiXmlComment " Our to do list data" TiXmlElement "ToDo" TiXmlElement "Item" Attribtutes: priority = 1 TiXmlText "Go to the " TiXmlElement "bold" TiXmlText "Toy store!" TiXmlElement "Item" Attributes: priority=2 TiXmlText "Do bills" @endverbatim

Documentation

The documentation is build with Doxygen, using the 'dox' configuration file.

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References

The World Wide Web Consortium is the definitive standard body for XML, and their web pages contain huge amounts of information. The definitive spec: http://www.w3.org/TR/2004/REC-xml-20040204/ I also recommend "XML Pocket Reference" by Robert Eckstein and published by OReilly...the book that got the whole thing started.

Contributors, Contacts, and a Brief History

Thanks very much to everyone who sends suggestions, bugs, ideas, and encouragement. It all helps, and makes this project fun. A special thanks to the contributors on the web pages that keep it lively. So many people have sent in bugs and ideas, that rather than list here we try to give credit due in the "changes.txt" file. TinyXML was originally written by Lee Thomason. (Often the "I" still in the documentation.) Lee reviews changes and releases new versions, with the help of Yves Berquin, Andrew Ellerton, and the tinyXml community. We appreciate your suggestions, and would love to know if you use TinyXML. Hopefully you will enjoy it and find it useful. Please post questions, comments, file bugs, or contact us at: www.sourceforge.net/projects/tinyxml Lee Thomason, Yves Berquin, Andrew Ellerton.

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