

Auto Tracking Server Software 操作手册

简介

Auto Tracking Server Software 是在 Windows 上运行的应用软件。

在连接了 Panasonic 远程摄像机的 Windows Server PC 上操作本软件,可同时通过多个远程摄像机跟踪远程摄像机拍摄的人员。

主要功能

本软件的主要功能如下所述。

1.人员跟踪协助

可协助跟踪从远程摄像机所拍图像中选择的人员。通过对已设置人员的面部进行检测的面部识别功能和基于深度学习的人体检测,可以执行稳定的跟踪操作。

2.多台远程摄像机同时跟踪

每台服务器可同时控制最多四台远程摄像机,从而进行跟踪操作。通过增加服务器的数量,可增加同时控制的远程摄像机数量。

3.自动检测跟踪目标

可自动检测远程摄像机所拍图像中人员的面部并进行跟踪。

4.设置跟踪目标的显示位置

可在屏幕上设置跟踪目标的显示位置。

5.设置跟踪期间的变焦倍率

可设置跟踪期间摄像机图像的变焦倍率。

6.远程摄像机的 PTZ 控制

可对远程摄像机执行云台控制和变焦位置控制。

可设置或取消云台全方位移动的工作范围限制。

7.注册/调用远程摄像机预设值

可作为预设值注册或调用远程摄像机的云台/变焦位置。

8.远程摄像机的图像调整

您可以调整远程摄像机的 聚焦/光圈/增益/白平衡/快门/减光镜。

注意

- 本软件仅检测并跟踪单个目标（如演讲录音中的讲师），无法跟踪多个目标中的一个，且不宜在摄像机角度内存在多个移动物体时使用。
- 由于本软件采用图像处理技术，因此可能出现目标检测错误。如要处理目标检测出错的情况，请在操作员可执行目标纠正的环境下使用本软件。
- 根据拍摄环境（摄像机角度、距离和速度），摄像机可能无法跟踪目标（跟踪目标可能丢失）。如要处理目标丢失的情况，请在操作员可执行目标纠正的环境下使用本软件。

操作环境

必须在下述环境下使用本软件：

- 服务器

- CPU

- 最多可同时连接 2 个摄像机

- Core i7-9700 3.00GHz 1P/8core 或以上

- 最多可同时连接 4 个摄像机

- Xeon W-2255 3.70GHz 1P/10core 或以上

- 内存 16 GB 或以上

- 操作系统 Windows Server 2012 R2

- Windows Server 2016

- Windows Server 2019

- Windows 10

- 如需进行基于深度学习的人体检测

- NVIDIA 产 GPU

- NVIDIA GeForce GTX 1080 以上

- NVIDIA Quadro P4000 以上

- NVIDIA GeForce RTX 2080/2080Ti

- NVIDIA Quadro RTX 4000 以上

- 或

- 物理 8 核以上的 Xeon CPU

- * GPU 中使用 GeForce RTX 或 Quadro RTX 时，

- OS 请使用 Windows10 或 Windows Server 2016 或 Windows 2019。

- 客户端

- CPUCore i5-2520M 2.50 GHz 或以上

内存 4 GB 或以上
显示屏 1920 x 1080 或以上
Web 浏览器: Google Chrome

Panasonic 远程摄像机

AW-UE100
AW-UE155
AW-UE70
AW-HE130
AW-HE65
AW-HE68
AW-UE4

<注释>

- 使用本软件前，您必须在客户端安装 Google Chrome。您可以从 Google 网站下载并安装。
- 使用最新版本的远程摄像机固件。您可以从以下网站下载固件：
<http://pro-av.panasonic.net/en/>
- Panasonic 建议在服务器和远程摄像机之间进行有线网络连接。如果进行无线连接，则可能达不到足够的跟踪性能。

关于服务器配置

尽管本软件也可在一台服务器上运行，但通过多台服务器配置软件，可增加能同时控制的远程摄像机数量。在配置本软件的服务器中，一台服务器设置为 Main 服务器，进行集中管理，其余服务器设置为 Sub 服务器，用于扩展。

关于设置服务器的详细信息，请参见安装程序。

关于许可证

本软件为付费软件。

我们提供 90 天的试用期（自本软件试用开始日起），以供您测试软件功能。因此，您可在此期间免费使用本软件，但在试用期结束后必须购买密钥代码（许可证），并激活软件。

详情参见本手册“许可证”一节。

关于本文件中的描述

- 本文件中的图示和屏幕显示可能与实际情况有所不同。
- 在本文件中，将个人计算机称为“PC”。

关于注册和注册商标

- Microsoft、Windows 和 Internet Explorer 是 Microsoft Corporation 在美国的注册商标。
- Intel、Intel Core i7 和 Intel Xeon 是 Intel Corporation 或其附属公司在美国和其他国家/地区的商标或注册商标。
- 所有其他名称、公司名和产品名均属其各自公司的商标或注册商标。本手册中未指定 TM 和 ® 标记。

屏幕说明

登录屏幕

从 Web 浏览器连接到本软件的 Main 服务器时，出现以下登录屏幕。



1. 用户名输入

输入登录到此软件的用户名。

2. 密码输入

输入用户密码。

3. 登录按钮

使用输入的用户名和密码登录到软件。

<注释>

·关于初始用户名、密码及用户帐户注册，请参见安装程序手册中的“管理员设置”。

预览 屏幕

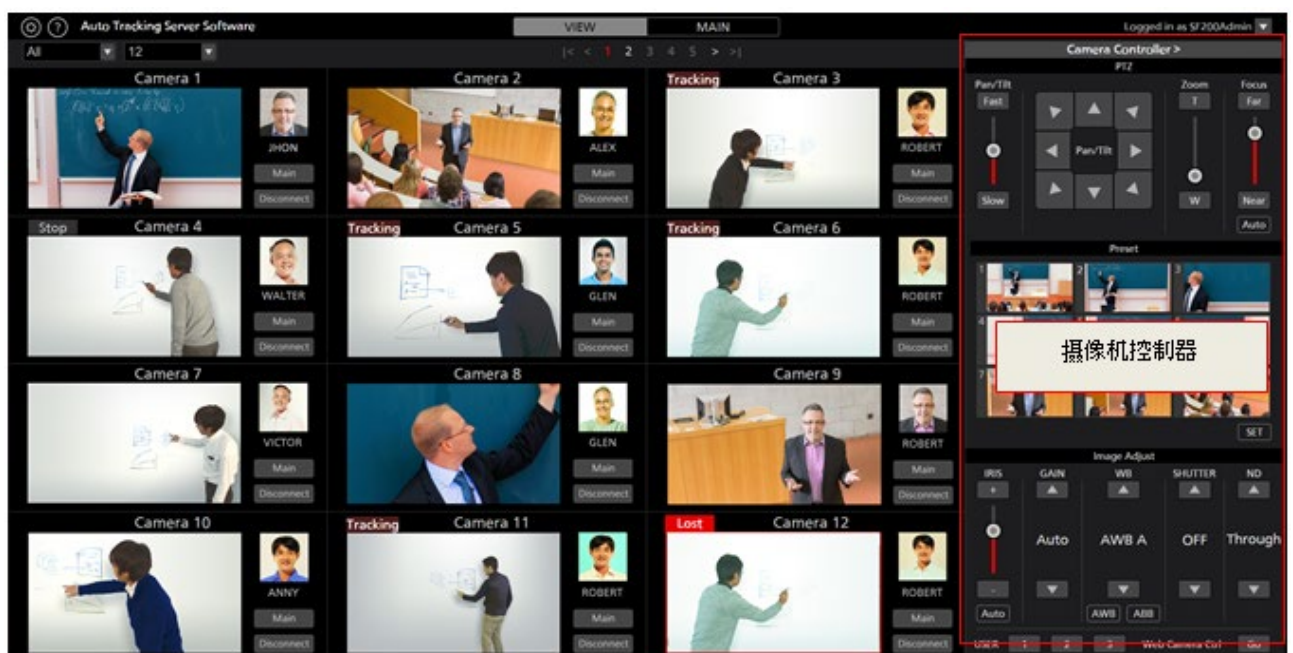
当登录到此软件时将显示如下“预览”屏幕。

该“预览”屏幕可通过以下四个区域进行配置，它将显示注册的远程摄像机以及缩略图等信息。

- 预览/操作 共用部分
- 摄像机列表显示控制部分
- 摄像机列表显示
- 摄像机控制器（当显示开启）



预览 屏幕（摄像机控制器显示关闭）



预览 屏幕（摄像机控制器显示开启）

•预览/操作共用部分

“预览”屏幕和“操作”屏幕的顶部显示相同。



1. 设置 按钮

用于移动到“设置”屏幕。

2. 帮助按钮

用于在 Web 浏览器的另一个选项卡中显示帮助文件（本文档）。

3. 预览/操作 选项卡

用于在“预览”屏幕和“操作”屏幕之间切换。

4. 许可证状态显示

显示本软件的许可证状态。

关于许可证状态的详细信息，参见本手册“许可证”一节。

5. 注销/版本信息菜单

单击 ▼ 以查看下述菜单。

注销：用于从本软件登出，返回登录界面。

版本信息：用于查看本软件版本信息。

• 摄像机列表上部

按钮位于摄像机列表显示上部，用于切换列表显示。



1. 显示摄像机列表已筛选显示内容的列表

从下拉列表中筛选待显示的摄像机。

可以根据以下条件进行筛选：

全部：显示所有摄像机

丢失：仅显示跟踪目标消失的摄像机

追踪中：仅显示正在进行跟踪操作的摄像机

停止：仅显示处在开始跟踪以前状态的摄像机

[类别名称]：仅显示在“设置”屏幕“Category”中已注册类别的摄像机

2. 从摄像机列表中选择显示计数的列表

每页待显示的摄像机数量从下拉列表中更改。

3. 页面选择按钮

用于在摄像机列表显示屏中选择一个页面。

4. 显示/隐藏摄像机控制器选择按钮

用于显示或隐藏摄像机控制器。

• 摄像机列表显示

显示摄像机列表显示屏中每个摄像机的内容。所选摄像机的背景显示为红色。



1. 状态显示

显示该摄像机的状态。

丢失：这是跟踪目标已丢失的状态。

追踪中：这是跟踪期间的状态。

停止：这是开始跟踪前的状态。

未连接：这是未与摄像机建立连接的状态。

2. 摄像机名称显示

显示注册摄像机的名称。

3. 缩略图显示

显示摄像机图像的缩略图。

如果摄像机未找到（电源关闭，或者摄像机未连接到网络等），显示“OFF”。

4. 跟踪目标面部图像显示

显示选为跟踪目标的人员面部图像。

5. 跟踪目标姓名显示

显示选为跟踪目标的人员姓名。

6. 操作 屏幕显示按钮

用于切换到“操作”屏幕。

7. 连接/断开连接 按钮

用于连接远程摄像机或断开其连接。

• 摄像机控制器

摄像机控制器可提供摄像机的各种操作功能。摄像机列表显示中选择的摄像机为操作目标。

关于操作方法的详细信息，请参见本手册“摄像机控制器操作”一节。



1. 方向调整 控制部分

您可以为远程摄像机进行云台全方位移动/变焦控制。

2. 对焦 控制部分

您可以为远程摄像机进行对焦控制。

3. 预设 控制部分

您可以为远程摄像机进行预设值控制。

4. 图像调整部分

您可以调整远程摄像机拍摄的图像。

5. 用户 按钮

当前版本不使用此按钮。

6. 网络摄像头设置 按钮

单击“跳转”按钮，在 Web 浏览器中打开远程摄像机的 Web 管理屏幕。

操作 屏幕

如果您单击该屏幕顶部的“操作”选项卡，将会出现“操作”屏幕。

“操作”屏幕通过以下三个区域进行配置：

- 摄像机列表显示
- 跟踪操作区域
- 摄像机控制器



操作 屏幕

- 摄像机列表显示

在“操作”屏幕的摄像机列表显示区域中，每个摄像机垂直排列。



1. 显示 ON / OFF 切换按钮

打开/关闭摄像机列表显示。

2. 显示摄像机列表已筛选显示内容的列表

从下拉列表中筛选待显示的摄像机。

该功能与“预览”屏幕上的功能相同。

3. 页面选择按钮

用于在摄像机列表显示屏中选择一个页面。

4. 摄像机列表显示

显示各摄像机的状态。

除了没有“操作”按钮以外，该区域与“预览”屏幕相同。

• 跟踪操作区域

进行跟踪操作的按钮位于此区域。摄像机列表显示中选择的摄像机为操作目标。



1. 摄像机名称

显示待执行操作的摄像机注册名称。

如果跟踪目标消失，背景颜色将变为红色。

2. 摄像机图像

显示从远程摄像机获取的图像。

3. 跟踪目标显示屏

这是一个显示跟踪目标的矩形显示屏。

- 跟踪方式为“模板匹配”时

蓝框表示跟踪目标的位置。

另外，检测到跟踪目标的面部时将显示黄框。

如果不存在跟踪目标或丢失了跟踪目标，将不会显示框。

- 跟踪方式为“深度学习(CPU)”或“深度学习(GPU)”时

蓝框表示跟踪位置，红框表示检测到的人体。

另外，检测到跟踪目标的面部时将显示黄框。

如果不存在跟踪目标或丢失了跟踪目标，将不会显示框。

4. 遮罩区域设置滑块

当检测到跟踪目标时，用于设置遮罩区域（检测期间不使用的摄像机图像区域）。

可在屏幕的顶部和底部设置此区域。

5. 追踪控制 开始/停止 按钮

存在跟踪目标时，可使用此按钮设置是否执行远程摄像机的云台全方位移动操作。

开始（红色）：

根据跟踪目标的移动执行云台全方位移动操作。

停止（灰色）：

不执行云台全方位移动操作。

6. 跟踪设置按钮

单击以查看“跟踪设置”窗口。

7. 人脸识别 开/关 按钮

可使用此按钮设置面部识别功能的操作。

开（红色）：

使用面部识别功能。

将设置为识别源的人员面部与在摄像机图像中检测到的面部进行对比，且仅将确定为同一个人的面部设置为跟踪目标。

如果未设置识别源，摄像机图像中检测到的所有面部均被设置为跟踪目标，而不管其面部如何。

关（灰色）：

不使用面部识别功能。

8. 面部设置显示

显示设置为面部识别源的人员面部照片和名称。

9. 选脸 按钮

用于显示“面部认证”窗口。

在“面部认证”窗口中，您可以选择和注册要用作面部识别源的面部数据。

10. 检索所有的用户 复选标记

选中后，将对注册用于面部识别的人员面部和在摄像机图像中检测到的面部进行对比，当检测到任意一个人员时，都会将其作为跟踪目标。

11. 添加脸 按钮

显示“添加面部”屏幕，用于注册面部识别用的人员的面部数据。

12. 目标位置 按钮

用于设置左键单击摄像机图像时的操作。

开启（红色）：

当您左键单击摄像机图像时，跟踪目标的显示位置更改为单击的位置。

关闭（灰色）：

当您左键单击摄像机图像时，存在于该位置的物体设置为跟踪目标。

13. 追踪角度

可使用此按钮指定跟踪期间的视角。

上半身：

设置视角，以便显示跟踪目标胸部以上的身体部位。

全身：

设置视角，以便显示跟踪目标的全身。

全屏：

设置视角，以便显示跟踪目标及其周围环境。

关闭：

保持当前视角。

14. 摄像机转动限制器 开启/关闭按钮

可使用此按钮设置摄像机的云台全方位移动限制。使用四个顶部/底部/左侧/右侧按钮可将各个方向的限制设置为开启/关闭。

• 摄像机控制器

该功能与“预览”屏幕上的功能相同。

•跟踪设置 窗口

当您单击“操作”屏幕“追踪控制”字段的“设置”按钮时，将显示该窗口。
您可以在此窗口进行跟踪操作的设置。



1. 自动跟踪开始

设置当检测到跟踪目标时要执行的操作。

如果复选标记为开启，则在检测到跟踪目标时自动启动摄像机的跟踪操作。

2. 使用手动预设停止跟踪

设置调用预设时的动作。

如果勾选此项，会在进行了调用预设时停止跟踪操作。

3. 检测不到人脸时转换到 lost 模式

设置进行 lost 判定的对象。

人体：

未检测到人体时，判定为 lost。

脸：

规定时间内未检测到人脸时，即使检测到人体，仍判定为 lost。

4. 检测不到人脸时等待几秒后转换到 lost 模式

在**检测不到人脸时转换到 lost 模式**下，设置选择脸时，从未检测到人脸至判定为 lost 为止的时间（秒数）。

可设置 1~30 范围内的数字。

5. 丢失设置

设置当跟踪目标丢失时要执行的操作。

无：

在跟踪目标丢失后，摄像机位置保持不变。

预设 1~预设 9:

当跟踪目标丢失超过规定的时间，摄像机位置返回到指定预设位置。

6. 丢失操作等待时间

当“丢失设定”设置为“预设 1”~“预设 9”时，设置从跟踪目标丢失时起到摄像机位置返回预设位置的时间（秒）。

您可以在 1 至 30 的范围内设置一个值。

7. 灵敏度级别

将摄像机的跟踪操作相对于跟踪目标运动的灵敏度设置为介于 1 至 10 范围内的值。

此值越高，灵敏度越高。

8. 跟踪禁用区域

设置不执行摄像机跟踪操作的区域。

可将宽度设置为高达 640，高度设置为高达 360。

当跟踪目标移动到此处设置的区域内时，摄像机不会执行跟踪操作。

也可通过右键单击摄像机图像并拖动来设置此区域。

当取消设置时，右键单击摄像机图像范围外的位置。

9. 确定 按钮

用于启用设置并关闭窗口。

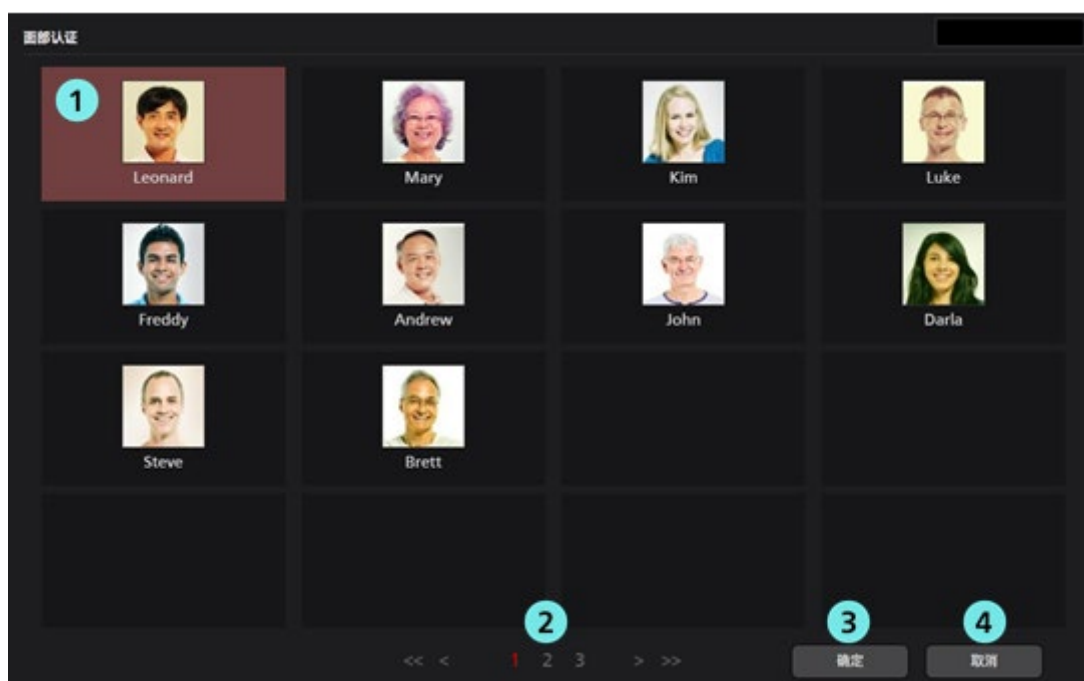
10. 取消 按钮

用于取消设置并关闭窗口。

•面部认证 窗口

当您单击“操作”屏幕“选脸”按钮时，将显示该窗口。

在此窗口中，您可以设置跟踪目标人员的面部。



1. 面部数据列表显示

这是已注册面部数据的列表。

您可以通过单击来选择或取消面部数据。所选面部数据的背景显示为红色。

2. 页面选择按钮

您可在面部数据列表显示屏中选择一个页面。

3. 确定 按钮

用于启用设置并关闭窗口。

4. 取消 按钮

用于取消设置并关闭窗口。

设置 - 控制器 屏幕

此屏幕用于设置配置此软件的服务器。

单击屏幕左上角的“设置”按钮，然后单击屏幕中间的“控制器”选项卡以移动到此屏幕。

关于服务器设置的详细信息，请参见本手册的“默认设置 - 服务器安装设置”。



1. 主机名

显示注册服务器的 IP 地址。

2. 端口号

显示用于通信的各服务器的端口号。

3. 描述

显示各服务器的说明。

4. 主要标识

为 Main 服务器显示 ● 标记。

5. 搜索框

用于按 IP 地址搜索服务器。

如果您输入数值，列表中仅显示 IP 地址包含该数值的服务器。

要返回到原始显示，清除输入的内容。

6. 添加 按钮

用于移动到“添加”屏幕。

7. 编辑 按钮

用于移动到“编辑”屏幕。

8. 删除 按钮

用于删除所选服务器。

您只能删除 Sub 服务器。

9. 页面选择按钮

用于选择待显示的页面。

•添加/编辑 服务器 屏幕

当您单击“添加”按钮/“编辑”按钮时，显示屏移动到此屏幕。

您可以注册新服务器并编辑已注册服务器的信息。

系统设置

控制器 摄像机 用户 类别 人脸识别

添加

1 主机名: 192.168.0.201

2 端口号: 8181

3 描述: Slave Server

4 确定

5 取消

1. 主机名

输入服务器的 IP 地址。

2. 端口号

输入用于通信的服务器端口号。

3. 描述

输入任何可选的服务器说明。

4. 确定 按钮

用于应用设置并返回到“控制器”屏幕。

5. 取消 按钮

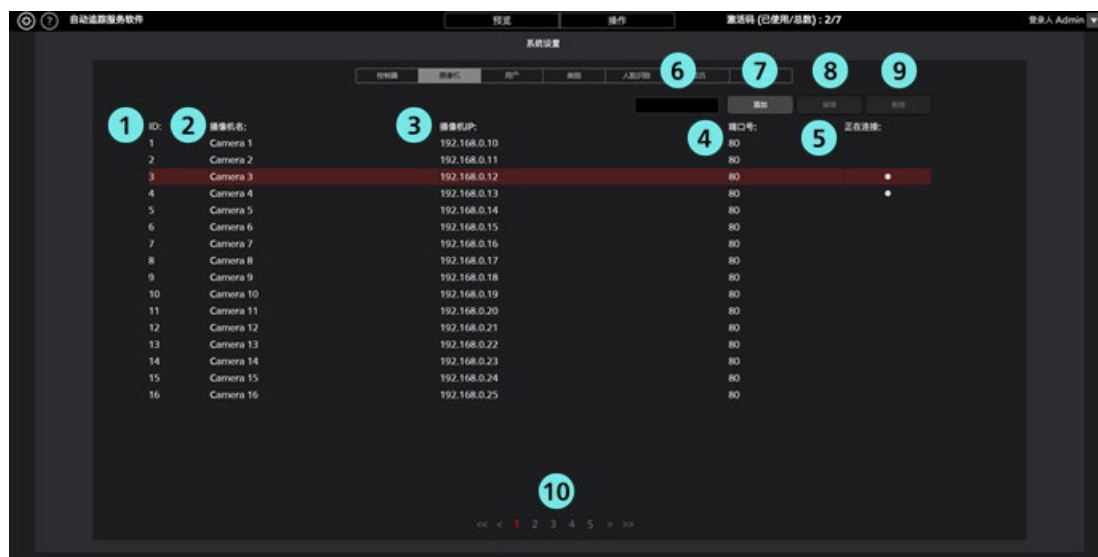
用于取消设置并返回到“控制器”屏幕。

设置 - 摄像机 屏幕

此屏幕用于设置此软件中使用的远程摄像机。

单击屏幕左上角的“设置”按钮，然后单击屏幕中间的“摄像机”选项卡以移动到此屏幕。

关于远程摄像机设置的详细信息，请参见本手册的“默认设置 - 远程摄像机安装设置”。



1. ID

显示所注册的摄像机的注册编号。

2. 摄像机名

显示注册摄像机的名称。

3. 摄像机 IP

显示各摄像机的 IP 地址。

4. 端口号

显示用于通信的各摄像机的端口号。

5. 正在连接

为正在建立连接的摄像机显示 ● 标记。

6. 搜索框

用于按名称搜索摄像机。

如果您输入字符串，列表中仅显示名称包含该字符串的摄像机。

要返回到原始显示，清除输入的内容。

7. 添加 按钮

用于移动到“添加 摄像机”屏幕。

8. 编辑 按钮

用于移动到“编辑 摄像机”屏幕。

9. 删除 按钮

用于删除所选摄像机。

您无法删除正在建立连接的摄像机。

10. 页面选择按钮

用于选择待显示的页面。

•添加/编辑 摄像机 屏幕

当您单击“添加”按钮/“编辑”按钮时，显示屏移动到此屏幕。

您可以注册新摄像机并编辑已注册摄像机的信息。

系统设置

控制器 摄像机 用户 规则 人脸识别 进行中

添加摄像机 自动检索 13

1 摄像机名: AW-UE70

2 摄像机IP: 192.168.0.20

3 端口号: 80

4 登录名: admin

5 密码: *****

6 高度: 250 厘米

7 距离: 1000 厘米

8 最大焦距: 100 %

9 角度缩放比例(上半身): 0 % 自动

10 角度缩放比例(全身): 0 % 自动

11 角度缩放比例(全屏): 0 % 自动

12 图像采集类型: JPEG H.264

14 设备连接后:

面向前方

移动到预设位置 预设 1

无操作

15 确定 16 取消

1. 摄像机名

输入任何可选的远程摄像机名称。

2. 摄像机 IP

输入远程摄像机的 IP 地址。

3. 端口号

输入用于通信的远程摄像机端口号。

4. 登录名

输入远程摄像机的用户名。

5. 密码

输入远程摄像机的密码。

6. 高度

设置远程摄像机的安装高度（以 cm/ft 为单位）。

7. 距离

设置从远程摄像机的安装位置直至跟踪目标主要位置的距离（以 cm/ft 为单位）。

8. 最大焦距

设置远程摄像机的最大变焦倍率。

您可以在 0 至 100 的范围内设置一个值。

9. 角度缩放比例(上半身)

设置在主屏幕的“追踪角度”规格中选择了“上半身”时的变焦倍率。

您可以在 0 至 100 的范围内设置一个值。

仅当自动检测为关闭时才启用变焦倍率设置。当自动检测为开启时，会根据“高度”和“距离”的值自动决定变焦倍率。

10. 角度缩放比例(全身)

设置在主屏幕的“追踪角度”规格中选择了“全身”时的变焦倍率。

您可以在 0 至 100 的范围内设置一个值。

仅当自动检测为关闭时才启用变焦倍率设置。当自动检测为开启时，会根据“高度”和“距离”的值自动决定变焦倍率。

11. 角度缩放比例(全屏)

设置在主屏幕的“追踪角度”规格中选择了“全屏”时的变焦倍率。

您可以在 0 至 100 的范围内设置一个值。

仅当自动检测为关闭时才启用变焦倍率设置。当自动检测为开启时，会根据“高度”和“距离”的值自动决定变焦倍率。

12. 图像采集类型

可以选择从摄像机获取图像的方式。

JPEG：按照 JPEG 图像格式获取图像。

H.264：按照 H.264 码流格式获取图像。

需要根据各个图像获取方式设置摄像机主机。

详情请参见本手册的“默认设置 - 远程摄像机主机设置”。

13. 自动检索 按钮

单击“自动检索”按钮时，将显示网络上出现的摄像机列表。

当您选择该列表的任何一台摄像机，然后通过单击“确定”按钮关闭窗口，将自动输入某些项目的值。

14. 设备连接后

面向前方：连接后，相机转向前方。

移动到预设位置：连接后，摄像机移至所选的预设位置。

无操作：相机在连接前保持其位置。

15. 确定 按钮

用于应用设置并返回到“摄像机”屏幕。

16. 取消 按钮

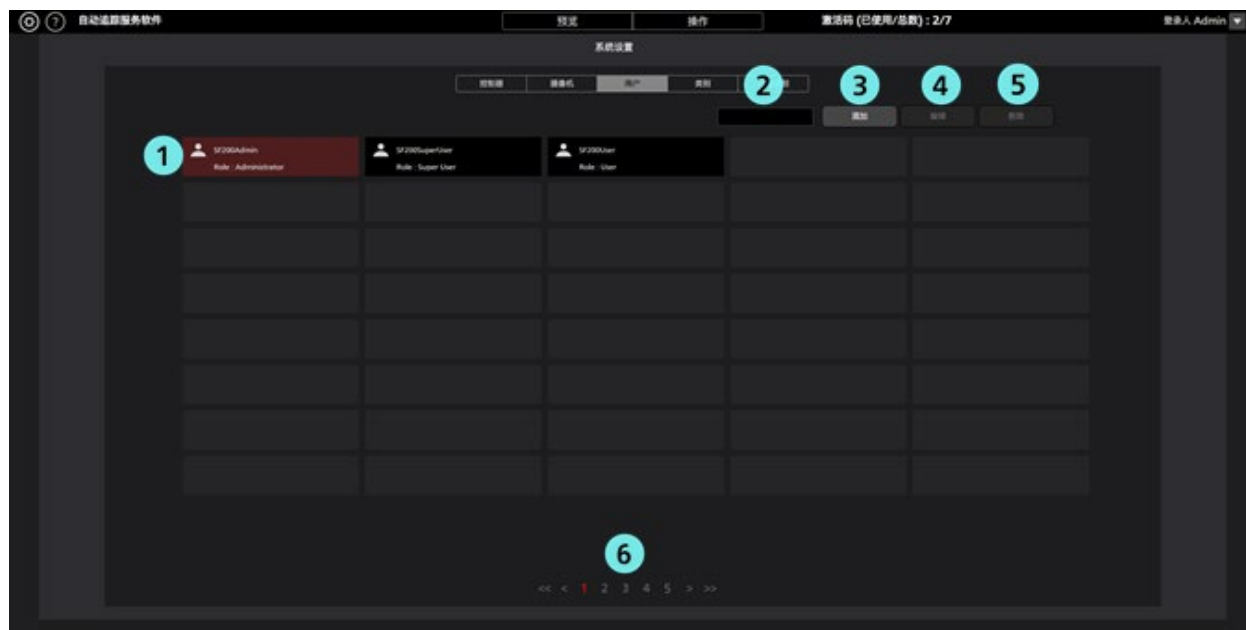
用于取消设置并返回到“摄像机”屏幕。

设置 - 用户 屏幕

此屏幕用于对使用此软件的用户进行帐户设置。

单击屏幕左上角的“设置”按钮，然后单击屏幕中间的“用户”选项卡以移动到此屏幕。

关于帐户设置的详细信息，参见本手册的“默认设置 - 用户帐户设置”。



1. 帐户列表显示

显示已注册帐户的列表。

帐户名显示在各帐户的上面一行，权限显示在下面一行。

2. 搜索框

用于按帐户名搜索帐户。

如果您输入字符串，列表中仅显示帐户名包含该字符串的摄像机。

要返回到原始显示，清除输入的内容。

3. 添加 按钮

用于移动到“添加 用户”屏幕。

4. 编辑 按钮

用于移动到“编辑 用户”屏幕。

5. 删除 按钮

用于删除所选帐户。

6. 页面选择按钮

用于选择待显示的页面。

•添加/编辑 用户 屏幕

当您单击“添加”按钮/“编辑”按钮时，显示屏移动到此屏幕。

您可以注册新帐户并编辑已注册帐户的信息。

系统设置

控制器 摄像机 用户 类别 人脸识别

添加用户

1 登录名: SF200User

2 密码: *****

3 密码(再次输入): *****

4 角色: User

5 确定

6 取消

1. 登录名

输入帐户名。

2. 密码

输入密码。

3. 密码(再次输入)

重新输入密码以确认。

4. 角色

设置帐户权限。

5. 确定 按钮

用于应用设置并返回到“用户”屏幕。

6. 取消 按钮

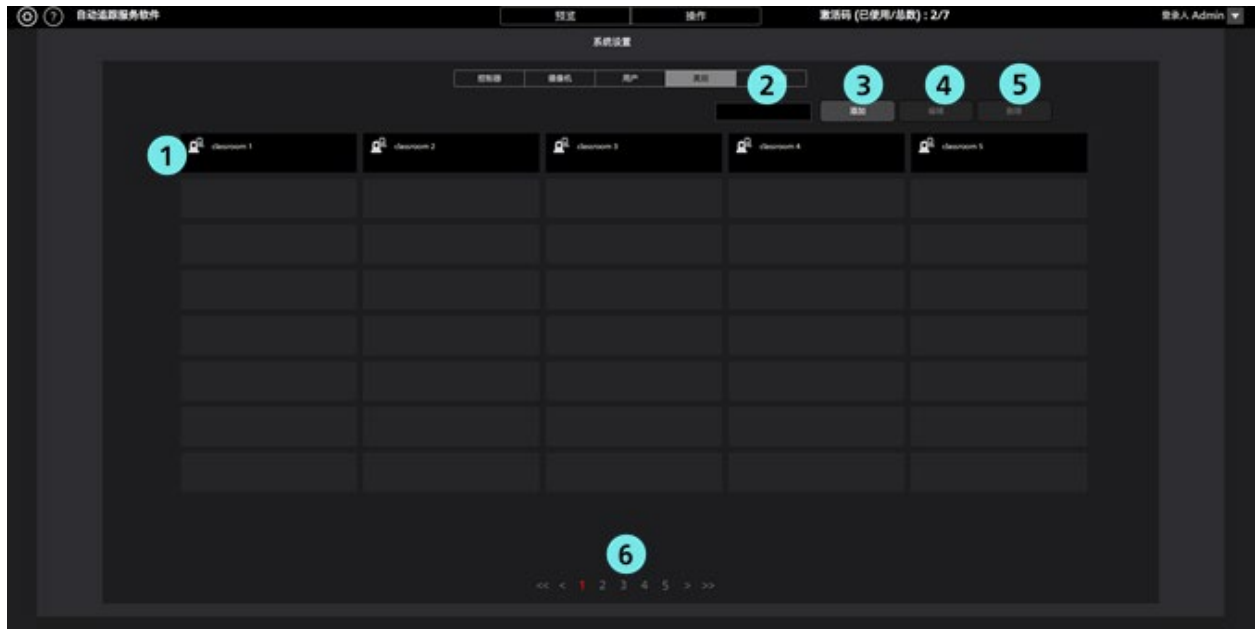
用于取消设置并返回到“用户”屏幕。

设置 - 类别 屏幕

此屏幕用于设置已注册远程摄像机的类别（组）。

单击屏幕左上角的“设置”按钮，然后单击屏幕中间的“类别”选项卡以移动到此屏幕。

关于类别设置的详细信息，请参见本手册的“默认设置 - 摄像机类别设置”。



1. 类别列表显示

显示已注册类别的列表。

2. 搜索框

用于搜索类别。

如果您输入字符串，列表中仅显示名称包含该字符串的类别。

要返回到原始显示，清除输入的内容。

3. 添加 按钮

用于移动到“添加 类别”屏幕。

4. 编辑 按钮

用于移动到“编辑 类别”屏幕。

5. 删除 按钮

用于删除所选类别。

6. 页面选择按钮

用于选择待显示的页面。

•添加/编辑 类别 屏幕

当您单击“添加”按钮/“编辑”按钮时，显示屏移动到此屏幕。

您可以注册新类别并编辑已注册类别。



1. 类别名

输入类别名。

2. 搜索框

如果您输入字符串，仅在 (3) 所示摄像机列表中显示名称中包含该字符串的摄像机。

3. 不属于该类别的摄像机列表

显示不属于当前注册或编辑类别的摄像机列表。

4. 属于该类别的摄像机列表

显示属于当前注册或编辑类别的摄像机列表。

5. 添加 按钮

如果您选择 (3) 所示摄像机列表中的摄像机，然后单击此按钮，选择的摄像机将添加到此类别中。

6. 删除 按钮

如果您选择 (4) 所示摄像机列表中的摄像机，然后单击此按钮，选择的摄像机将从此类别中删除。

7. 确定 按钮

用于应用设置并返回到“类别”屏幕。

8. 取消 按钮

用于取消设置并返回到“类别”屏幕。

设置 - 人脸识别 屏幕

该屏幕用于对跟踪目标人员进行面部数据设置。

单击屏幕左上角的“设置”按钮，然后单击屏幕中间的“人脸识别”选项卡以移动到此屏幕。

关于面部数据设置的详细信息，请参见本手册的“面部识别数据设置”。



1. 面部数据列表显示

显示已注册面部数据的列表。

2. 搜索框

用于搜索面部数据。

如果您输入字符串，列表中仅显示名称包含该字符串的面部数据。

要返回到原始显示，清除输入的内容。

3. 添加 按钮

用于移动到“添加 人脸识别”屏幕。

4. 编辑 按钮

用于移动到“编辑 人脸识别”屏幕。

5. 删除 按钮

用于删除所选面部数据。

您无法删除在任何远程摄像机中被设置为跟踪目标的面部数据。

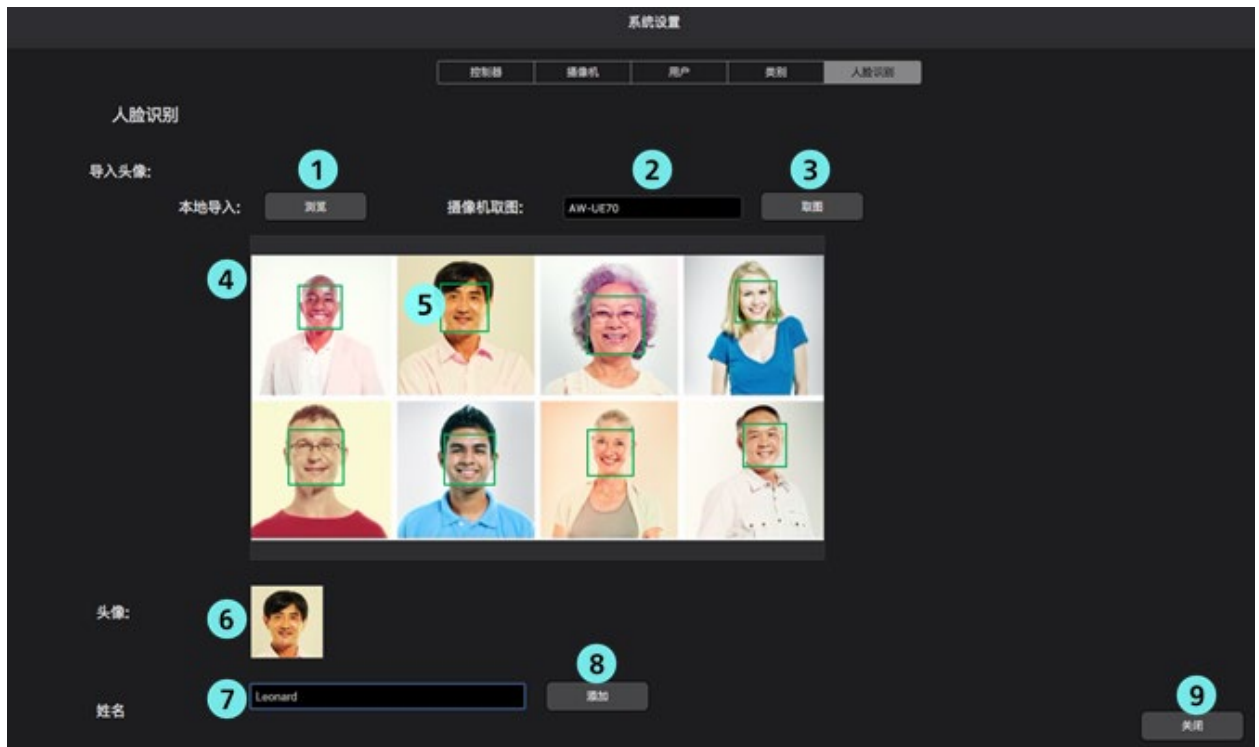
6. 页面选择按钮

用于选择待显示的页面。

•添加/编辑 人脸识别 屏幕

当您单击“添加”按钮/“编辑”按钮时，显示屏移动到此屏幕。

您可以注册新面部数据并编辑已注册的面部数据。



1. 浏览 按钮

如果您单击此按钮，会显示图像选择对话框，且您可导入现有 JPEG 图像。

2. 摄像机选择框

选择采集图像的目标摄像机。列表中仅显示已连接的摄像机。

3. 取图 按钮

如果您单击此按钮，将采集并导入在摄像机选择框中选择的摄像机的图像。

4. 图像显示区域

显示通过“浏览”按钮或“取图”按钮的操作导入的图像。

5. 面部检测显示框

当在导入的图像中检测到面部时，面部周围会显示一个框。

如果单击该显示框，面部将被选为目标。

6. 面部图像显示

显示所选面部的图像。

7. 名称输入字段

输入所选面部的注册名称。

8. 添加 按钮

如果单击此按钮，将注册所选面部图像和姓名。

9. 关闭 按钮

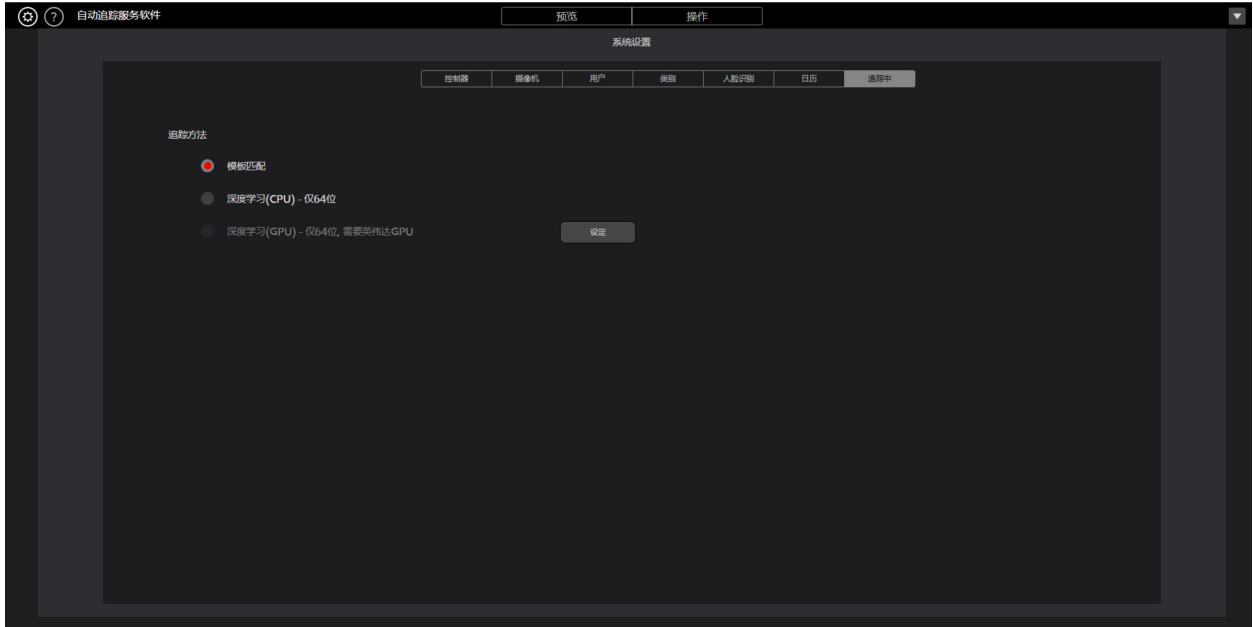
单击此按钮以返回到“人脸识别”屏幕。

设置 - 追踪中 屏幕

这是跟踪方式设置屏幕。

单击屏幕左上角的“设置”按钮后单击“跟踪”选项卡，将移动至本屏幕。

详情请参见本手册的“默认设置 - 跟踪方式设置”。



默认设置

远程摄像机主机设置

在使用本软件之前，请在远程摄像机的主机侧进行设置。

从远程摄像机获取图像的方法可以选择 JPEG 图像采集或 H.264 码流采集。

如需使用 JPEG 图像采集，请在本软件的“设置 - 摄像机”屏幕中注册摄像机时将“图像采集类型”设置为“JPEG”。

如需使用 H.264 码流采集，请在本软件的“设置 - 摄像机”屏幕中注册摄像机时将“图像采集类型”设置为“H.264”。

■AW-UE100 的设置

使用 JPEG 图像采集的跟踪性能更高。

- 以 JPEG 图像格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> IP 视频 -> JPEG(1),并对 JPEG(1)进行如下设置

Image capture size: 1280 x 720 以上

Refresh interval: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

- 以 H.264 码流格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> IP 视频 -> H.264(1),并对 H.264(1)进行如下设置

H.264 transmission: On

Image capture size: 1280 x 720 以上

Transmission priority: Frame rate

Frame rate: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

■AW-UE155 的设置

使用 JPEG 图像采集的跟踪性能更高。

- 以 JPEG 图像格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> IP 视频 -> JPEG(1),并对 JPEG(1)进行如下设置

Image capture size: 1280 x 720 以上

Refresh interval: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

- 以 H.264 码流格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> IP 视频 -> H.264(1),并对 H.264(1)进行如下设置

H.264 transmission: On

Image capture size: 1280 x 720 以上

Transmission priority: Frame rate

Frame rate: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

■AW-HE130 的设置

使用 H.264 码流采集的跟踪性能更高。

- 以 JPEG 图像格式获取图像时

在摄像机的 Web 屏幕中，对各项目进行如下设置

Initial display settings for “Live” page

Stream: JPEG(1)

Refrash interval (JPEG): NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

JPEG(1)

JPEG transmission: On

Image capture size: 1280 x 720

H.264(1)

H.264 transmission: Off

H.264(2)

H.264 transmission: Off

H.264(3)

H.264 transmission: Off

H.264(4)

H.264 transmission: Off

- 以 H.264 码流格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> 图像/视频 -> H.264(1), 并对 H.264(1)进行如下设置

H.264 transmission: On

Image capture size: 1280 x 720 以上

Transmission priority: Frame rate

■AW-UE70 / AW-HE68 的设置

使用 JPEG 图像采集的跟踪性能更高。

- 以 JPEG 图像格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> 图像/视频 -> JPEG(1)，并对 JPEG(1)进行如下设置

Image capture size: Priority Mode 为 IP 时: 1280 x 720

Priority Mode 非 IP 时: 640 x 360

- 该软件不能在 USB 模式下使用。

Refresh interval: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

Image quality: Normal

- 以 H.264 码流格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> 图像/视频 -> H.264(1)，并对 H.264(1)进行如下设置

H.264 transmission: On

Image capture size: 1280 x 720 以上

Transmission priority: Frame rate

Frame rate: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

■AW-HE65 的设置

使用 JPEG 图像采集的跟踪性能更高。

- 以 JPEG 图像格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> 图像/视频 -> JPEG(1)，并对 JPEG(1)进行如下设置

Image capture size: Priority Mode 为 IP 时: 1280 x 720

Priority Mode 非 IP 时: 640 x 360

- 该软件不能在 USB 模式下使用。

Refresh interval: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

Image quality: Normal

- 以 H.264 码流格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> 图像/视频 -> H.264(1)，并对 H.264(1)进行如下设置

H.264 transmission: On

Image capture size: 1280 x 720 以上

Transmission priority: Frame rate

Frame rate: NTSC 时: 15fps 以上, PAL 时: 12.5fps 以上

■AW-UE4 的设置

使用 JPEG 图像采集的跟踪性能更高。

- 以 JPEG 图像格式获取图像时

在摄像机的 Web 屏幕中，单击设置 -> 基本-> 优先模式设置 IP

单击设置 -> 图像/视频 -> JPEG 如下

Image capture size : 1280 x 720

Frame rate : NTSC 时: 10, PAL 时: 10

·以 H.264 码流格式获取图像时

在摄像机的 Web 屏幕中, 单击设置 -> 基本-> 优先模式设置 IP
单击设置 -> 图像/视频 -> H.264/H.265 如下

Stream transmission : On

Codec : H.264

Image capture size : 1280 x 720 以上

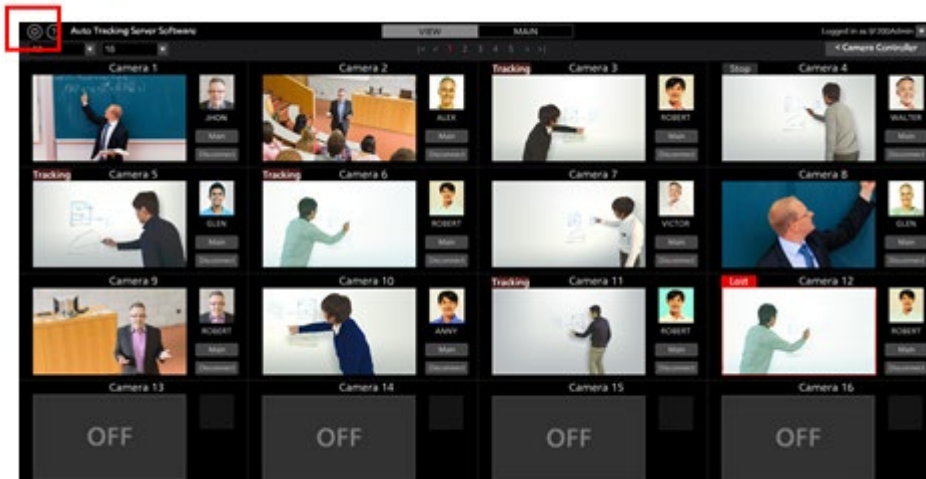
Frame rate : NTSC 时: 15 以上, PAL 时: 10 以上

服务器安装设置

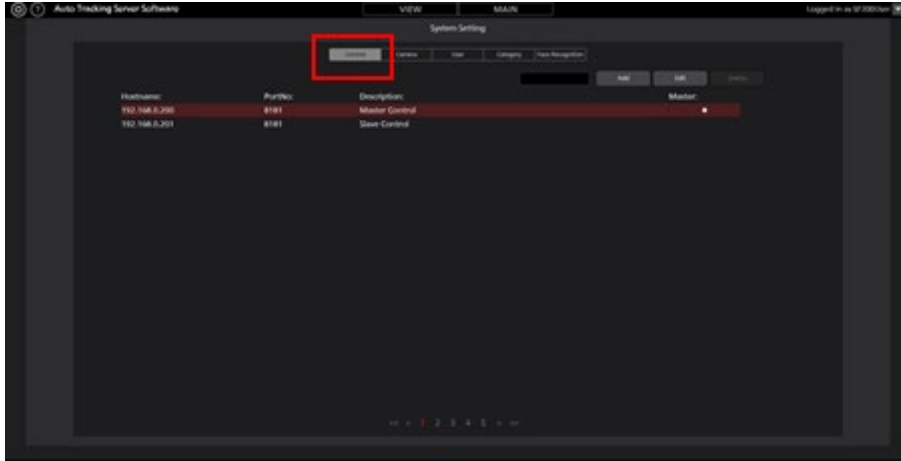
通过多台服务器配置此软件时, 在首次启动时进行服务器安装设置。

通过单台服务器配置此软件时, 无需进行此设置。

- 1.登录到此软件。
- 2.显示“预览”屏幕。单击屏幕左上角的设置按钮。



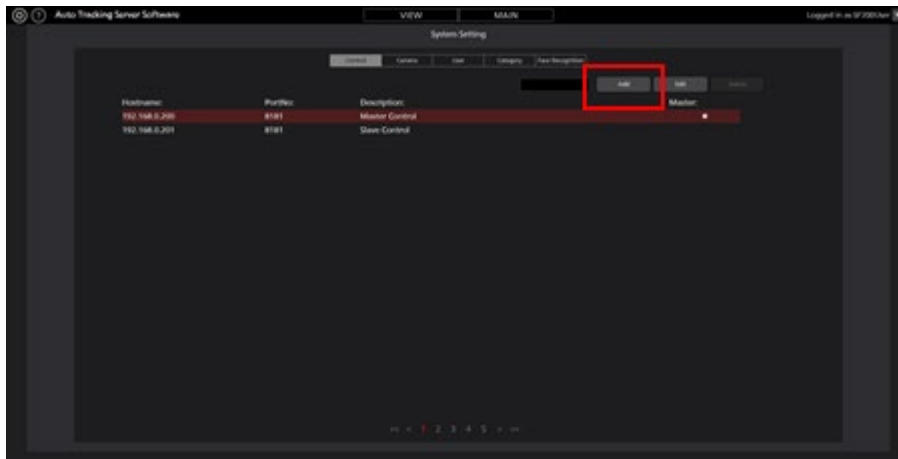
- 3.单击“设置”屏幕中间的“控制器”选项卡。



4.注册 Sub 服务器。

按照 Sub 服务器的数量执行下述注册任务。

- (1) 单击“添加”按钮以移动到“添加 服务器”屏幕。



- (2) 输入以下项目。

主机名: Sub 服务器的 IP 地址

端口号: Sub 服务器使用的端口号 (默认值为 8190)

描述: Sub 服务器的说明

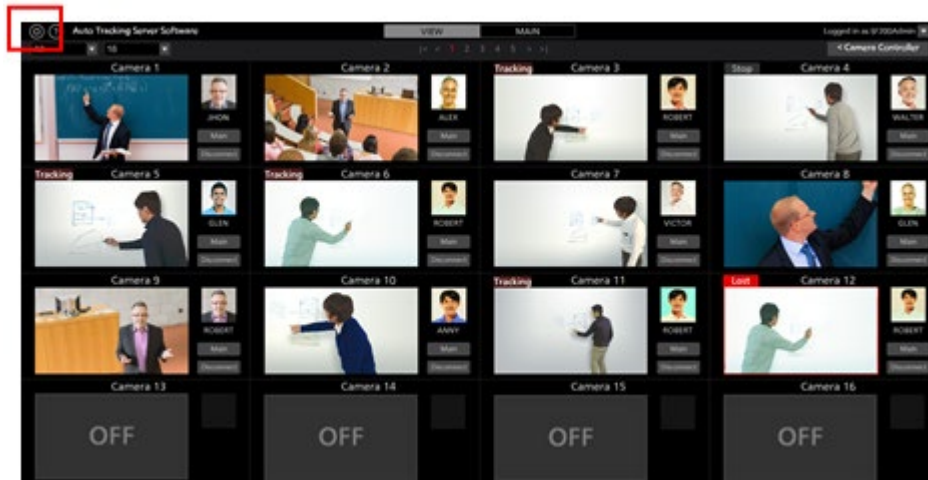


- (3) 单击“确定”按钮以完成注册。

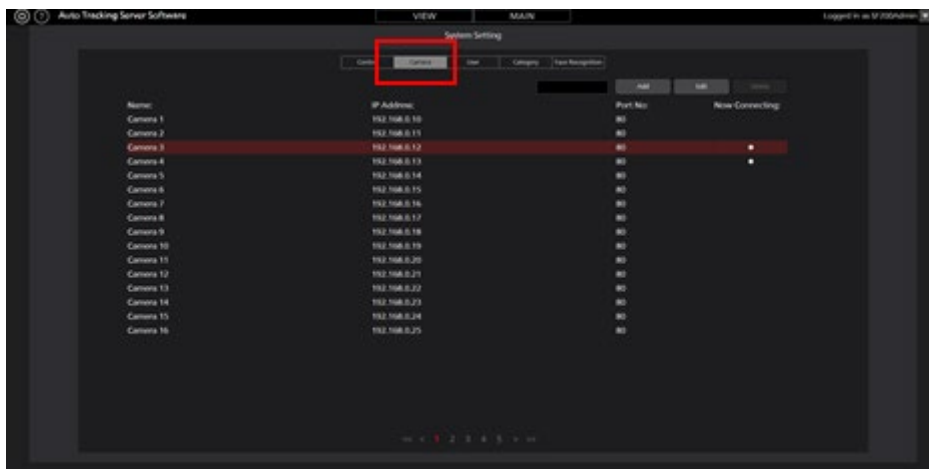
远程摄像机安装设置

在本软件的首次启动期间，对远程摄像机进行安装设置。

- 1.登录到此软件。
- 2.显示“预览”屏幕。单击屏幕左上角的设置按钮。



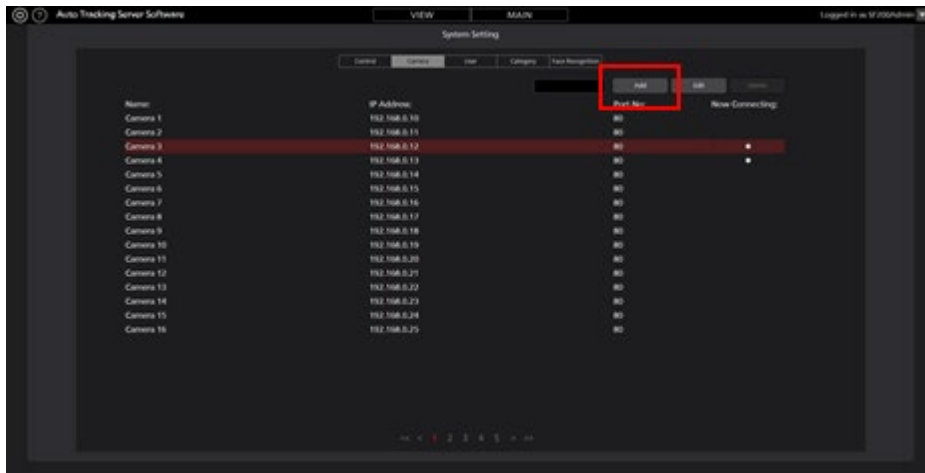
- 3.单击“设置”屏幕中间的“摄像机”选项卡。



- 4.进行摄像机设置。

按照摄像机的数量执行下述注册任务。

- (1) 单击“添加”按钮以移动到“添加 摄像机”屏幕。



(2) 输入以下项目。

您可以手动输入以下项目，或者通过搜索摄像机自动输入。

摄像机名：摄像机名称

摄像机 IP：摄像机 IP 地址

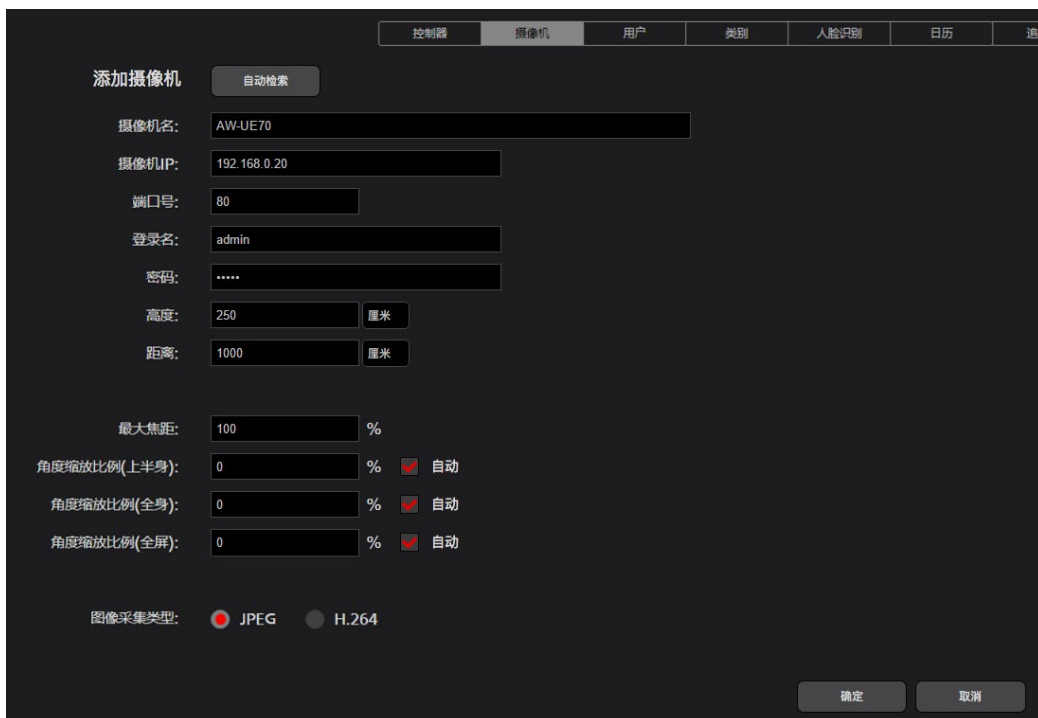
端口号：摄像机使用的端口号（默认值为 80）

登录名：摄像机帐户

密码：摄像机密码

高度：摄像机安装高度

距离：摄像机安装距离



- 手动输入时

移动到各项目框并输入值。

- 自动输入时

单击“自动检索”按钮时，将显示网络上出现的摄像机列表。

当您选择该列表的任何一台摄像机，然后通过单击“确定”按钮关闭窗口，将自动输入某些项目的值。

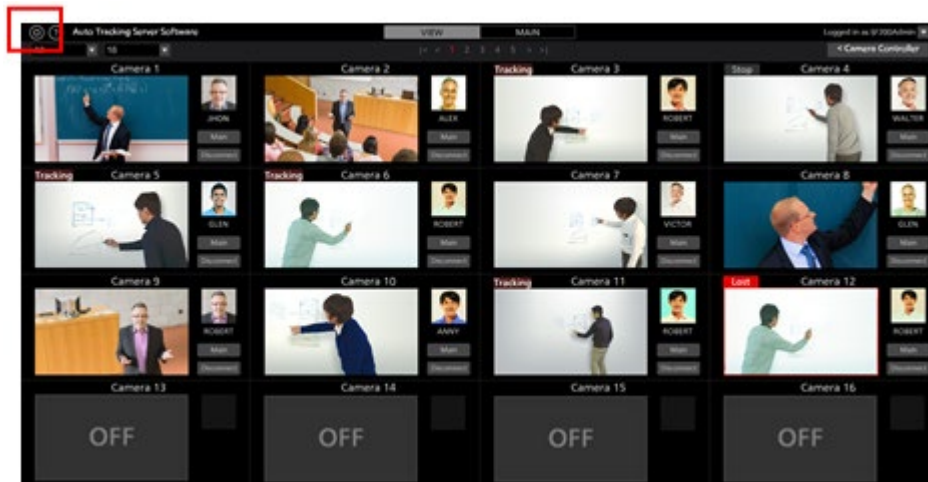
No:	Client Mac:	IP Address:	Port No:	Camera Name:	Camera Model:
1	20-C6-EB-E7-02-43	10.194.151.12	80	AIWHE70	CAMHE70
2	08-00-23-6F-02-21	192.168.0.99	80	SFN6310	SFN6310
3	00-80-45-2F-24-80	10.194.151.31	80		CAMHEA10

(3) 单击“确定”按钮以完成注册。

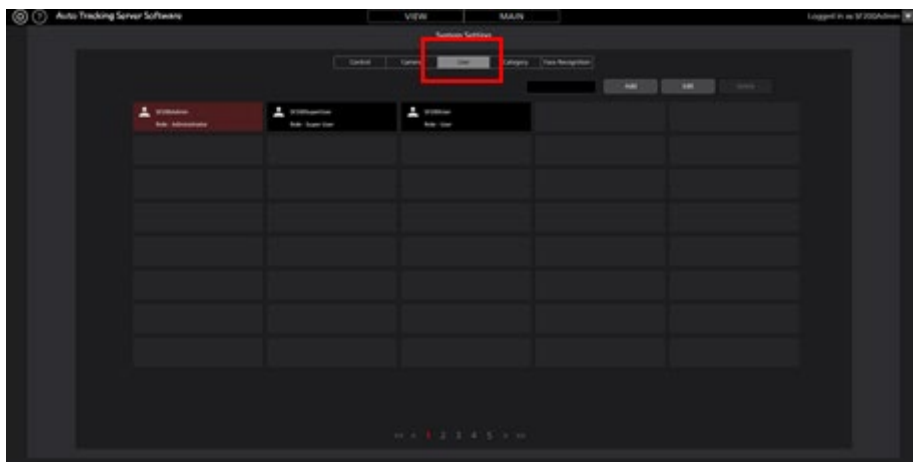
用户帐户设置

在本软件的初始启动期间，对使用本软件的用户帐户进行设置。

- 1.登录到此软件。
- 2.显示“预览”屏幕。单击屏幕左上角的设置按钮。



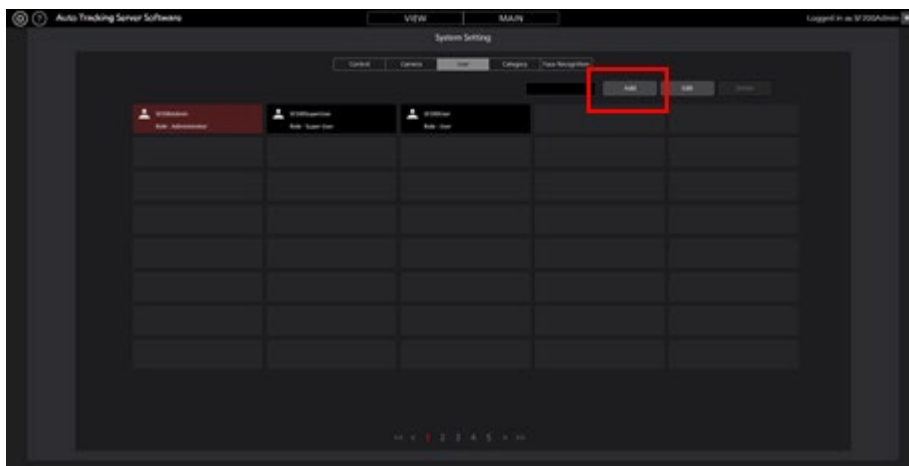
- 3.单击“设置”屏幕中间的“用户”选项卡。



4.进行用户帐户设置。

仅按照所需用户的数量执行下述注册任务。

- (1) 单击“添加”按钮以移动到“添加 用户”屏幕。



- (2) 输入以下项目。

登录名：用户帐户名

密码：密码

密码(再次输入)：密码（用于确认）

角色：帐户权限。您可以选择以下三种权限：

Administrator：可以使用全部功能

Super User：不能使用服务器设置（“控制器”屏幕）

User：不能使用服务器设置（“控制器”屏幕）和帐户管理（“用户”屏幕）

在**角色**栏选择了 User 时，可以设置可访问的摄像机类目。

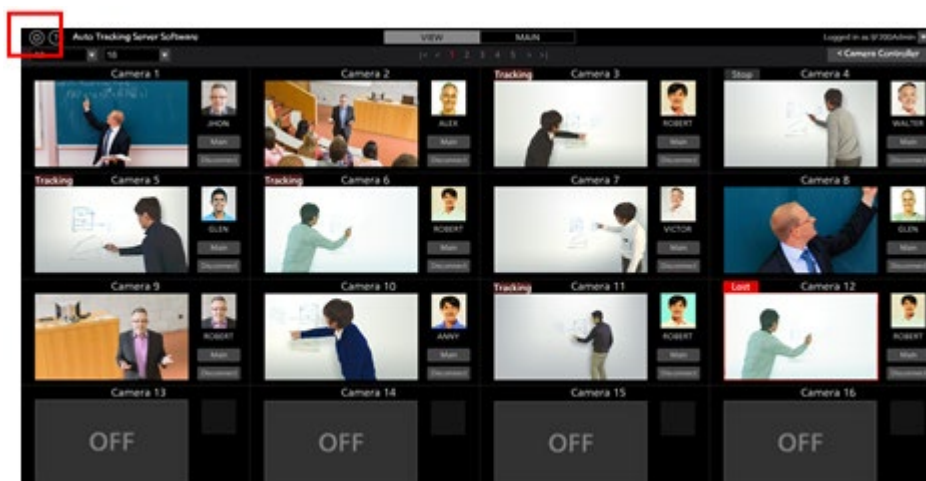


- (3) 单击“确定”按钮以完成注册。

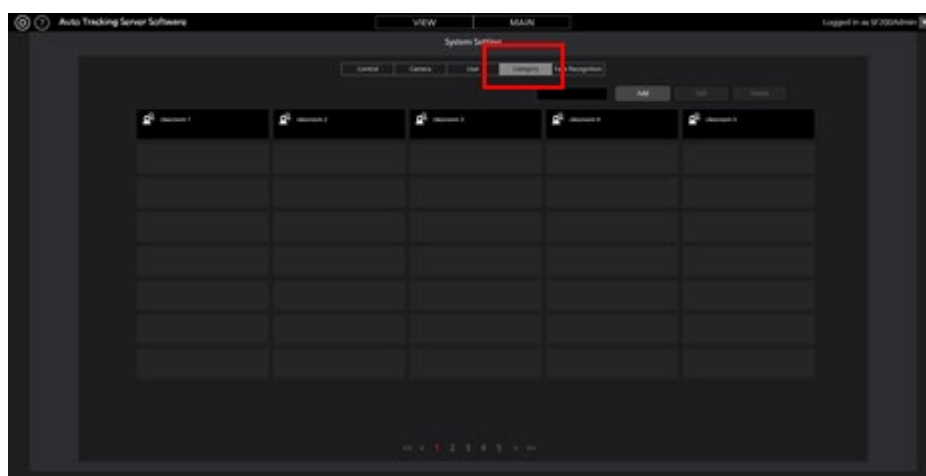
摄像机类别设置

如有必要，设置摄像机类别（摄像机组）。

- 1.登录到此软件。
- 2.显示“预览”屏幕。单击屏幕左上角的设置按钮。



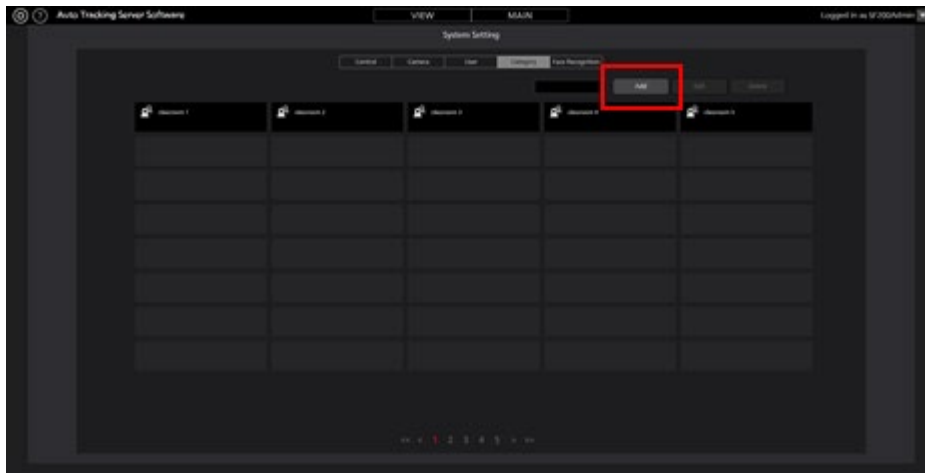
- 3.单击“设置”屏幕中间的“类别”选项卡。



- 4.进行类别设置。

仅按照所需类别的数量执行下述注册任务。

- (1) 单击“添加”按钮以移动到“添加 类别”屏幕。



(2) 在“类别名”中输入待注册的类别名。

(3) 如果您从左侧摄像机列表中选择待注册到类别的摄像机，然后单击“添加”按钮，将添加该摄像机到此类别中。

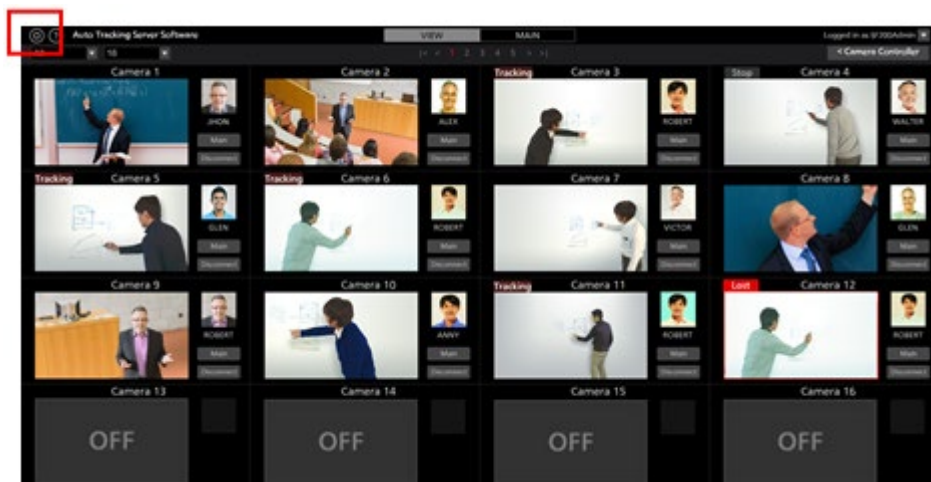


(4) 单击“确定”按钮以完成注册。

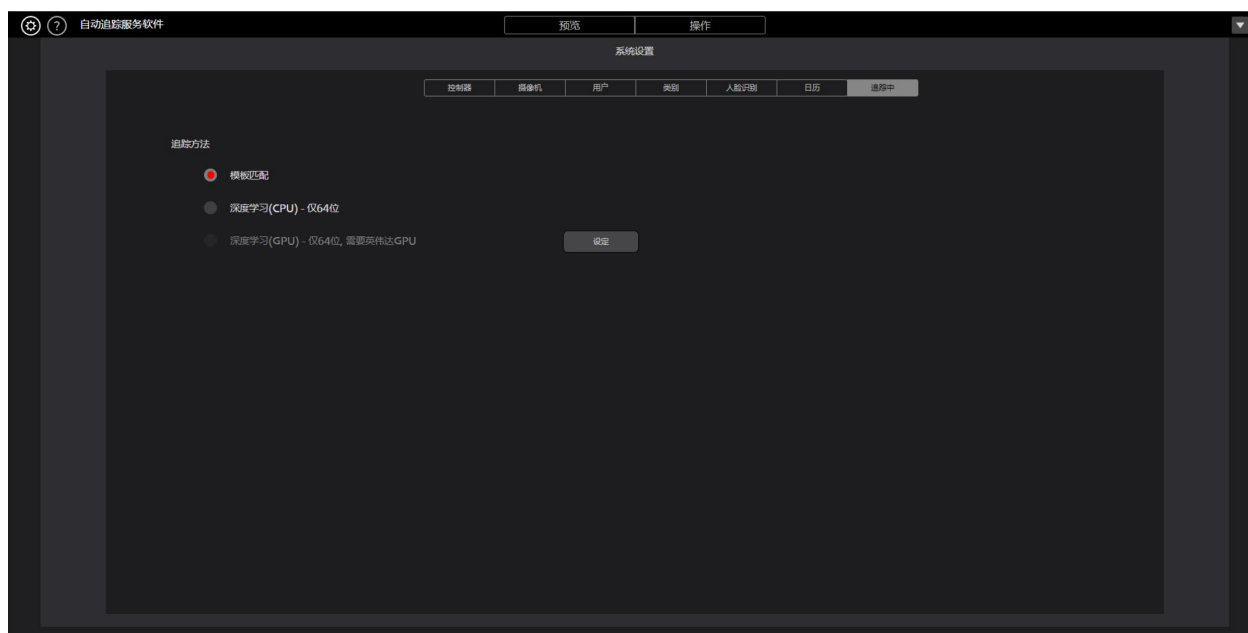
跟踪方式的设置

可以通过本软件对所要使用的跟踪方式进行设置。

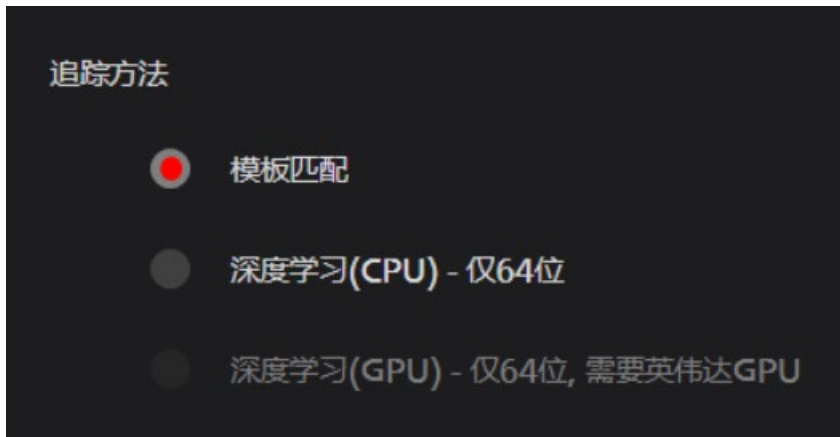
1. 单击屏幕左上角的“设置”按钮。



2. 单击“设置”屏幕的“跟踪”选项卡。



3. 在“跟踪方法”栏中选择要使用的跟踪方式。



模板匹配：这是一种常规的检测方式，CPU 负载较低。

深度学习(CPU)：这是一种使用 CPU 进行基于深度学习的人体检测的方式。

CPU 负载较“模板匹配”更高，可进行更高精度的检测。

深度学习(GPU)：这是一种使用 GPU 进行基于深度学习的人体检测的方式。

由于使用 GPU，CPU 负载较使用 CPU 时更低，因此检测速度将可能更快。

<注释>

• 如需使用“深度学习(GPU)”方式，PC 环境须满足以下条件。

- PC 上搭载有 NVIDIA 产 GPU 板。

所支持的 GPU 板如下。

Pascal 架构

NVIDIA GeForce GTX 1080 以上

NVIDIA Quadro P4000 以上

Turing 架构

NVIDIA GeForce RTX 2080/2080Ti

NVIDIA Quadro RTX 4000 以上

- OS 和本软件均为 64bit 版本。

使用 Turing 架构的 GPU 时，OS 请使用 Windows10 或 Windows Server 2016。

- PC 上安装有 NVIDIA CUDA Toolkit。

使用 Pascal 架构的 GPU 时，请从以下 HP 下载安装 CUDA Toolkit 8.0。

<https://developer.nvidia.com/cuda-80-ga2-download-archive>

使用 Turing 架构的 GPU 时，请从以下 HP 下载安装 CUDA Toolkit 10.1。

<https://developer.nvidia.com/cuda-10.1-download-archive>

面部识别数据设置

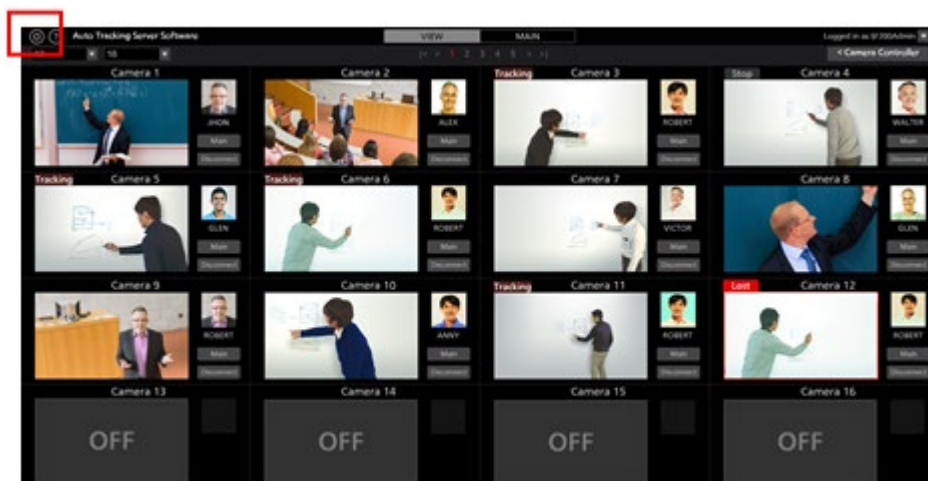
注册面部数据

由于此软件通过借助面部识别功能检测指定人的面部来实现跟踪，因此可执行稳定的跟踪操作。

您可事先注册用作待跟踪人员识别源的面部数据。有两种方法注册面部数据，即使用现有 JPEG 图像的方法和使用从摄像机图像采集图像的方法。

按照下述程序注册面部数据。

1. 登录到此软件。
2. 显示“预览”屏幕。单击屏幕左上角的设置按钮。



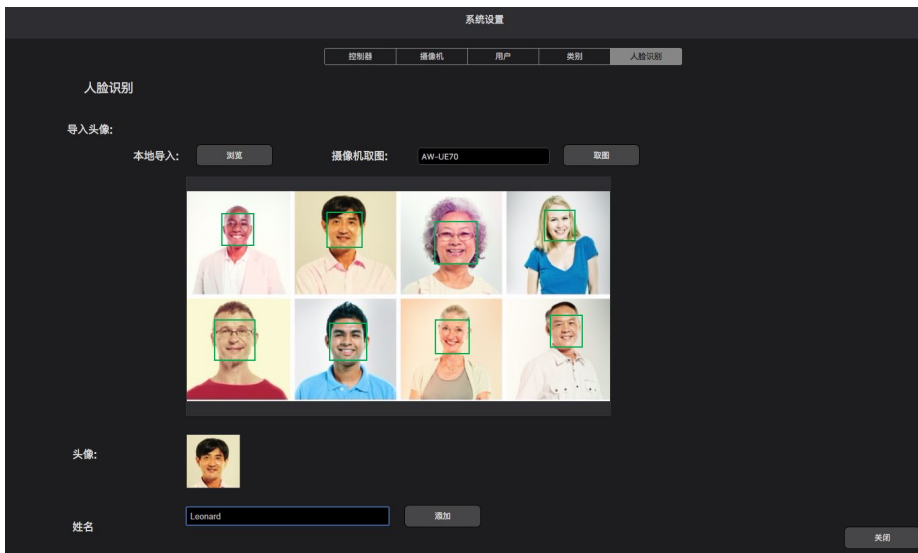
3. 要采集摄像机图像，单击要使用的摄像机“连接”按钮，将该摄像机设置成连接状态。
4. 单击“设置”屏幕中间的“人脸识别”选项卡。



5. 单击屏幕右上角的“添加”按钮。



6. 将显示“添加 人脸识别”屏幕。



7. 按照下述程序导入面部数据。

- 使用现有 JPEG 文件时：

如果您单击“本地导入”字段的“浏览”按钮，将显示一个用于选择图像文件的对话框。选择显示面部的 JPEG 图像。

- 采集摄像机图像时：

选择“摄像机取图”字段框中要使用的摄像机，然后单击“取图”按钮进行采集。

8. 图像显示在“添加 人脸识别”屏幕的中心。如果在图像中检测到面部，面部周围将显示一个框。
如果未出现框，重复步骤 7。
9. 单击您想要注册的面部的框。面部图像出现在“头像:”字段。
10. 在“姓名”字段输入面部数据的名称。
11. 如果您单击“添加”按钮，则会注册已选择的新面部数据。

<注释>

- 如果在图像中检测到多个面部，您可通过重复上述第 9 步至第 11 步来集体注册多个面部数据实例。
- 可在一个图像中检测最多 10 个面部。

编辑面部数据

您可更改已注册面部数据中的照片和名称。

有两种方法编辑面部数据，即使用现有 JPEG 图像的方法和使用从摄像机图像采集图像的方法。

按照下述程序编辑面部数据。

1. 执行“注册面部数据”步骤 1 - 4 的相同操作，以显示“人脸识别”屏幕。
2. 单击想要编辑的面部数据的编号部分将其设置为选定状态后，单击屏幕右上角的“编辑”按钮。
3. 如果您执行“注册面部数据”步骤 6 - 11 的相同操作，面部数据将改变。

删除面部数据

按照下述程序删除注册的面部数据。

1. 执行“注册面部数据”步骤 1 - 4 的相同操作，以显示“人脸识别”屏幕。
2. 单击想要删除的面部数据的编号部分将其设置为选定状态后，单击屏幕右上角的“删除”按钮。
3. 将显示一个用于确认数据删除的窗口。如果您单击“是”按钮，将删除面部数据。

<注释>

- 如果选择的面部数据正被某个摄像机使用，则会禁用“删除”按钮，且您无法删除面部数据。如要删除面部数据，确保其未被任何摄像机使用。

如果某个摄像机正在使用要删除的面部数据，则当您将鼠标光标放在面部数据上，该摄像机的名称显示为“已与以下摄像机绑定 Camera 01”或类似内容。

面部数据重排

可以重新排列已注册的面部数据的显示顺序。

面部数据的显示顺序会影响“自动面部搜索”为开启状态下进行跟踪时（从所有已注册面部数据的人员中检测出跟踪目标时）的检测优先级。ID 越小，检测优先级越高。

1. 执行与“面部数据注册”步骤 1~3 相同的操作，显示面部识别屏幕。
2. 单击并拖动想要重排的面部数据的面部图片。
3. 将已拖动的面部数据拖放至其他面部数据的位置上后，面部数据将移动至所拖放的位置。

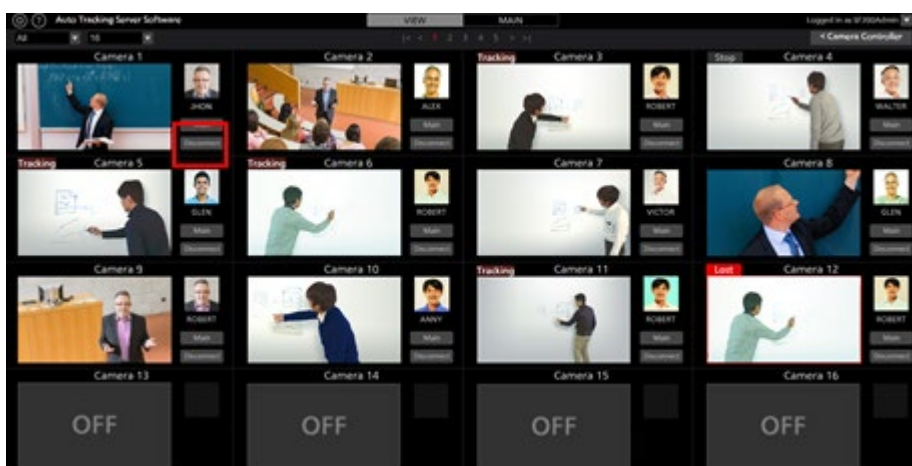
跟踪操作说明

连接远程摄像机或者断开连接

跟踪过程中，您必须连接到远程摄像机，并且当跟踪过程结束时，必须从远程摄像机断开连接。

- 连接步骤

1. 在“预览”屏幕或“操作”屏幕上，单击待连接摄像机的“连接”按钮。



2. 如果连接正确建立，“连接”按钮变为“断开连接”按钮。

- 断开连接的程序

1. 在“预览”屏幕或“操作”屏幕上，单击要断开连接的摄像机的“断开连接”按钮。

能连接的摄像机数量上限

本软件能连接多台远程摄像机，在每台摄像机中执行跟踪操作，但能连接的摄像机数量有限制。

能连接的摄像机数量上限是下述 A 或 B 中较小的值。

A: 根据服务器的数量进行限制

上限是配置此软件的服务器数量 $\times 4$ 。

B: 根据许可证进行限制

下述摄像机数量即为上限。

试用期间：16

激活完成时：根据激活许可证的摄像机数量

当尝试连接超过上限数量的摄像机时，则会显示一条错误消息。单击已连接摄像机的“断开连接”按钮以断开连接。

<注释>

- 许可使用状态在“预览”屏幕或“操作”屏幕的顶部显示为“激活码 (已使用/总数)”。

启动跟踪

• 自动启动跟踪时

可通过自动检测跟踪目标来启动跟踪。

下面描述的功能作为自动检测功能已准备就绪，您可设置是否使用各个功能。

通过面部识别功能检测指定人的面部

按照下述程序进行设置。



1. 在“预览”屏幕或“操作”屏幕上，单击要执行跟踪的摄像机的“连接”按钮以建立连接。
2. 显示“操作”屏幕。
3. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
4. 通过面部识别功能对已设置人员的面部进行检测时，需按照以下步骤设置面部识别功能。
 - 针对特定的目标人员
 - (1)单击“选脸”按钮显示“选脸”屏幕。
 - (2)在“选脸”屏幕选择作为跟踪目标的人员的面部数据后单击“确定”按钮，关闭“选脸”屏幕。
 - (3)将“人脸识别 开/关”按钮设置为开启状态。
 - (4)在摄像机图像内检测到跟踪目标的面部后，将开始进行跟踪。
 - 从所有已注册面部数据的人员中检测跟踪目标
 - (1)勾选“自动面部搜索”。
 - (2)将“人脸识别 开/关”按钮设置为开启状态。
 - (3)在摄像机图像内检测到任意一个已注册面部数据的人员后，
将开始进行跟踪。“设置 - 面部识别”屏幕中的面部数据 ID 越小，检测优先级越高。
5. 如果您将“追踪控制 开始/停止”按钮设置为开启，则会启用远程摄像机的云台全方位移动操作，且跟踪操作启动。

<注释>

- 在“追踪控制”字段的“设置”按钮显示的“跟踪设置”窗口中，如果“自动跟踪开始”的复选标记为开启，则会在检测到跟踪目标的同时启用远程摄像机的云台全方位移动操作。
- 将为每个摄像机存储面部识别功能的面部数据设置。
- 当远程摄像机为 AW-UE4 时，通过更改缩放图像的位置进行跟踪。相机本身的方向不会改变。

• 手动启动跟踪时

如要通过手动选择跟踪目标来启动跟踪，按照下述步骤操作。

1. 在“预览”屏幕或“操作”屏幕上，单击要执行跟踪的摄像机的“连接”按钮以建立连接。
2. 显示“操作”屏幕。
3. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
4. 如果已选择面部识别的面部数据，单击“选脸”按钮以显示“选脸”屏幕，并取消面部数据的选择。
5. 如果您在摄像机图像中左键单击要跟踪的位置，则通过假设位于该位置的物体为跟踪目标来启动跟踪。
6. 如果您将“追踪控制 开始/停止”按钮设置为开启，则会启用远程摄像机的云台全方位移动操作，且跟踪操作启动。

<注释>

- 如果在第 4 步中左键单击的位置检测到人员面部，则会将相应的面部数据自动设置为面部识别源。不会存储此面部数据。如需取消已设置的面部数据，请取消“自动面部搜索”的勾选。
- 在摄像机图像内检测到人员面部时，如果双击面部，则会将此面部数据设置为面部认证的认证源。不会存储此面部数据。如需取消已设置的面部数据，请取消“自动面部搜索”的勾选。
- 在“追踪控制”字段的“设置”按钮显示的“跟踪设置”窗口中，如果“自动跟踪开始”的复选标记为开启，则会在检测到跟踪目标的同时启用远程摄像机的云台全方位移动操作。
- 当远程摄像机为 AW-UE4 时，通过更改缩放图像的位置进行跟踪。相机本身的方向不会改变。

停止跟踪

如要停止跟踪，请执行下述操作：

1. 如果“人脸识别 开/关”按钮处于开启状态（红色），则单击“人脸识别 开/关”按钮以将其设置为关闭状态（灰色）。
2. 将“追踪控制 开始/停止”按钮设置为关闭状态（灰色）。
3. 此时，将停止跟踪。

更改跟踪目标

如要在跟踪操作期间更改跟踪目标，请执行下述操作：

- 当使用面部识别功能时
 1. 单击“选脸”按钮显示“选脸”屏幕。
 2. 在“选脸”屏幕上，选择要设置为新跟踪目标的人员面部数据，然后单击“确定”按钮关闭“选脸”屏幕。
 3. 将“人脸识别 开/关”按钮设置为开启。
 4. 如果在摄像机图像中检测到设置为新跟踪目标的人员面部，则启动跟踪。

<注释>

在摄像机图像内检测到人员面部时，如果双击面部，则会将此面部数据设置为面部认证的认证源。不会存储此面部数据。如需取消已设置的面部数据，请取消“自动面部搜索”的勾选。

- 当不使用面部识别功能时
 - 左键单击摄像机图像。
 - 左键单击位置的物体会被视作新跟踪目标开始处理。

更改跟踪目标的显示位置

在初始状态下，跟踪目标显示在摄像机图像的中央。

如要更改跟踪目标的显示位置，请执行下述操作：

1. 显示“操作”屏幕。
2. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
3. 将“目标位置 设定”按钮设置为开启状态（红色）。当前显示位置由十字形记号指示。
4. 左键单击摄像机图像以设置显示位置。

<注释>

- 无法在摄像机图像的外周边设置显示位置。

设置跟踪期间的变焦倍率

您可以根据下述程序设置跟踪期间的变焦倍率：



1. 显示“操作”屏幕。
2. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
3. 如要手动设置变焦倍率，请使用摄像机控制器的变焦位置控制滑块/按钮进行设置。
4. 如要设置为预定的变焦倍率，请单击“追踪角度”下的“上半身”/“全身”/“全屏”按钮之一。变焦倍率将按照所选项更改。

<注释>

- 如果短时段内变焦倍率变化明显，则跟踪目标可能会丢失。
- 如果在跟踪目标显示位置不处于屏幕中央时执行放大变焦，则跟踪目标可能会丢失。
- 如果在“追踪角度”下选择了“上半身”/“全身”/“全屏”之一，则变焦倍率将根据检测到跟踪目标时选择的项自动更改。如果不想更改变焦倍率，则将“Angle”设置为“OFF”。
- 当远程摄像机为 AW-UE4 时，无法使用此功能。

跟踪目标检测遮罩区域设置

当检测到跟踪目标时，您可以设置遮罩区域（检测期间不使用的摄像机图像区域）。

按照下述程序进行设置。



1. 显示“操作”屏幕。
2. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
3. 操作摄像机图像右侧的滑块旋钮，以在屏幕的顶部和底部设置遮罩区域。设置将立即反映出来。

设置不执行摄像机跟踪操作的区域

在摄像机图像中，您可以设置在跟踪目标移动时不执行摄像机跟踪操作的区域。

按照下述程序进行设置。



1. 显示“操作”屏幕。
2. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
3. 当您右键单击摄像机图像，然后拖动，则该区域以黄色线条显示。

鼠标的拖动操作完成后设置完成。

（在“追踪控制”窗口的“跟踪禁用区域”中设置的值，该窗口通过单击“追踪控制”字段的“设置”按钮而显示。）

4. 当取消区域指定时，右键单击摄像机图像范围外的位置。

（清除在“追踪控制”窗口的“跟踪禁用区域”中设置的值，该窗口通过单击“追踪控制”字段的“设置”按钮而显示。）

设置摄像机的云台全方位移动限制

您可以设置远程摄像机的云台全方位移动限制。



1. 显示“操作”屏幕。
2. 从屏幕左端显示的摄像机列表中选择要执行操作的摄像机。
3. 使用云台全方位移动限制项的各个按钮，在顶部、底部、左侧和右侧等各个方向设置限制。

当按钮从关闭（灰色）状态更改为开启（红色）状态时：

摄像机在开启时的位置被设置为摄像机在该方向的工作范围限制。

当按钮从开启（红色）状态更改为关闭（灰色）状态时：

则取消摄像机关闭方向的限制设置。

<注释>

- 当远程摄像机为 AW-UE4 时，无法使用此功能。

摄像机控制器的操作

关于摄像机控制器

摄像机控制器可用于执行远程摄像机的各种操作。

支持的操作如下。

- PTZ 操作
- 预设的注册/调用/删除
- 调整图像
- 调用 Web 屏幕

使用摄像机控制器时，您必须通过下述程序启用操作。

1. 从“预览”屏幕或“操作”屏幕连接到摄像机。
2. 从“预览”屏幕或“操作”屏幕的摄像机列表显示中选择要执行操作的摄像机。

摄像机的 PTZ 操作

您可以执行远程摄像机的云台全方位移动和变焦操作。



①云台全方位移动速度控制部分

设置通过 方向调整 按钮或滑块移动摄像机时的移动速度。当前设置值以红色滑动条显示。

②方向调整 制部分

如果您单击此按钮，摄像机将朝相应的方向移动。

单击操作部中央的圆形按钮，操作部的显示将切换，可通过拖拽鼠标使摄像机朝任意方向移动。

③变焦位置控制部分

通过 长/短 按钮或滑块设置远程摄像机的变焦位置。

当前设置值以红色滑动条显示。

<注释>

- 如果在跟踪操作期间操作“方向调整”按钮，则跟踪操作将中断。

摄像机预设的注册/调用/删除

可以注册/调用/删除远程摄像机的预设。



• 注册预设值

1. 使用“方向调整”按钮和变焦位置控制滑块/按钮将摄像机移动到想要注册的位置。
2. 单击“预设”区域左下角“设定”按钮，将摄像机设置为开启状态（红色）。
3. 单击“预设”区域任一预设 1~预设 9 按钮，将当前摄像机位置注册到预设值中。注册期间缩略图显示在按钮上。

• 调用预设值

1. 单击“预设”区域左下角“设定”按钮，将摄像机设置为关闭状态（灰色）。
2. 单击“预设”区域任一预设 1~预设 9 按钮，以调用预设值。

·预设删除

1. 单击“预设”区域右下角的“清空”按钮将其设置为开启状态（红色）。
2. 单击“预设”区域的预设 1~预设 9 中任意一个按钮后，将删除预设。

<注释>

- 如果在跟踪操作期间执行预设调用操作，则跟踪操作将中断。

调整远程摄像机的图像

您可以调整远程摄像机拍摄的图像。

可以调整下述项目：

- 聚焦
- 光圈
- 增益
- 白平衡 (WB)
- 快门
- 减光镜



①聚焦 控制部分

单击“自动”以打开或关闭自动对焦。

当自动对焦为开启时，远程摄像机自动设置对焦。

当自动对焦为关闭时，远程摄像机对焦由“远”/“近”按钮和滑块进行设置。

②光圈 控制部分

单击“自动”以打开或关闭自动光圈。

当自动光圈为开启时，远程摄像机自动设置光圈。

当自动光圈为关闭时，远程摄像机光圈由 +/- 按钮和滑块进行设置。

③增益 控制部分

通过向上箭头/向下箭头按钮设置远程摄像机的增益。

④白平衡 控制部分

通过向上箭头/向下箭头按钮设置远程摄像机的白平衡模式。

如果您单击 自动白 按钮，远程摄像机自动执行白平衡调整。

如果您单击 自动黑 按钮，远程摄像机自动执行黑平衡调整。

⑤快门 控制部分

通过向上箭头/向下箭头按钮设置远程摄像机的快门。

⑥减光镜 控制部分

通过向上箭头/向下箭头按钮设置远程摄像机的中灰滤镜。

<注释>

- 根据远程摄像机的类型和操作模式组合，某些项目可能无法调整。详情参见各远程摄像机的操作手册。

调用摄像机的 Web 屏幕

您可以调用远程摄像机的 Web 屏幕。



单击摄像机控制器右下角的“跳转”按钮，在 Web 浏览器的另一个选项卡中打开远程摄像机的 Web 管理屏幕。

许可证

关于许可证

使用此软件时，连接一台摄像机需要一个许可证。因此，能同时连接的摄像机数量受到注册许可证的数量限制。许可证使用和返回条件如下所示。

许可证使用：

- 连接到一台远程摄像机时使用一个许可证。

许可证返回：

- 从一台远程摄像机断开连接时返回一个许可证。
- 当远程摄像机的通信断开状态持续五分钟或以上时，返回一个许可证。

<注释>

- 许可使用状态在“预览”屏幕或“操作”屏幕的顶部显示为“License (used/total)”。

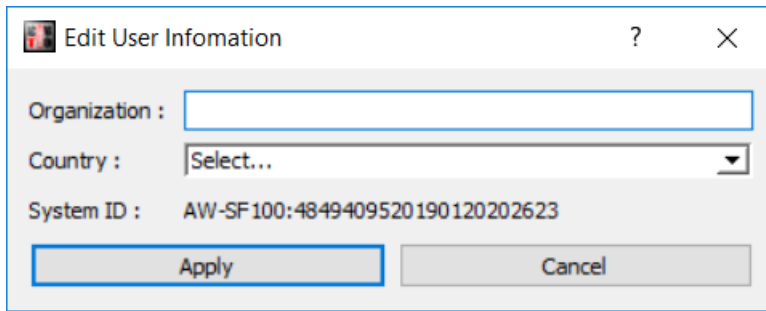
关于试用期

本软件试用期为 90 天，此期间可以免费使用 16 台远程摄像机的许可。

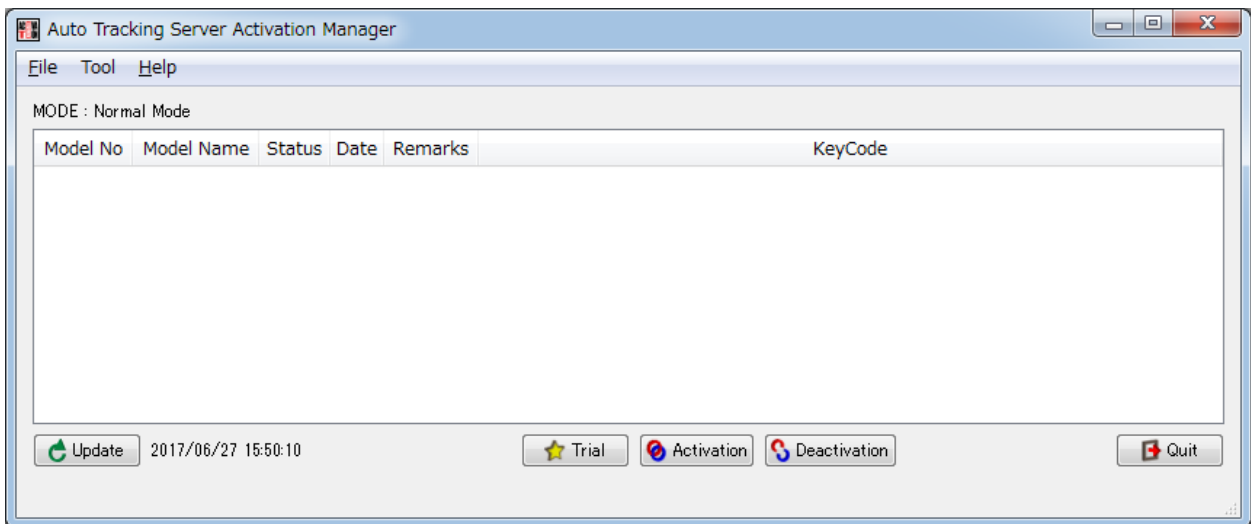
开始试用的程序如下所示。

开始试用程序

1. 登录到 Main 服务器 Windows。
2. 运行下载的文件 12_Activation¥PActivationManager.exe。
3. 首次启动激活程序时，会显示注册用户信息屏幕。在每一项中输入信息，然后单击“Apply”按钮。



4. 将显示激活程序的窗口。



5. 单击“Trial”按钮。

6. 您可以开始在试用期内使用本软件。

<注释>

- 试用期的剩余天数将显示在“预览”屏幕/“操作”屏幕的右上角。

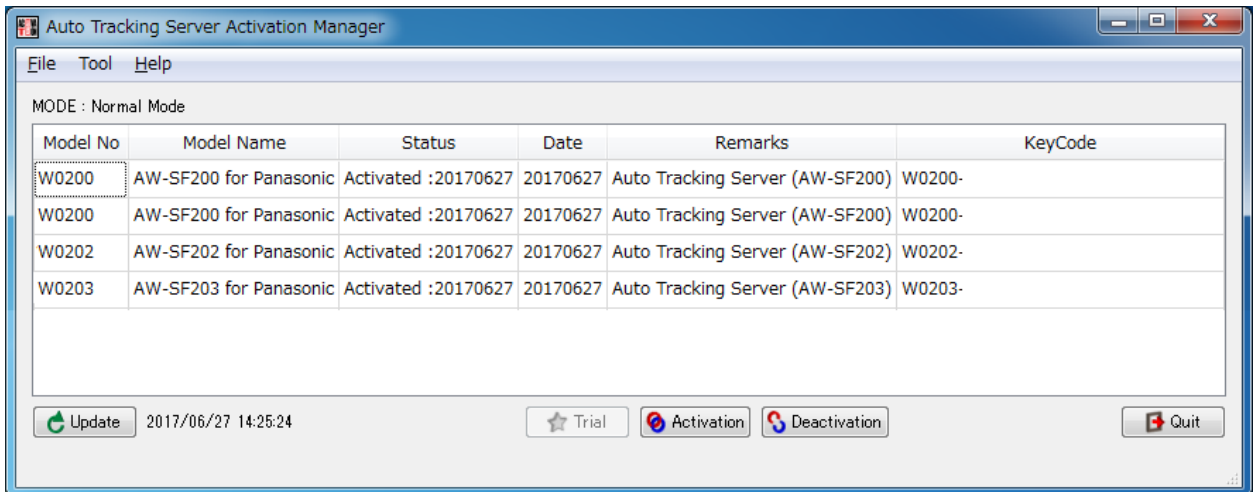
激活注册

试用期结束后，免费许可证失效，您将无法建立与远程摄像机的连接。

您必须购买密钥代码，并按照下述程序执行激活注册以添加许可证，方可继续使用该软件。

激活注册程序

1. 将 Main 服务器连接到互联网。
2. 登录到 Main 服务器 Windows。
3. 运行下载的文件的 12_Activation¥PActivationManager.exe。
4. 将显示激活程序的窗口。



5. 单击“Activation”按钮。
6. 将显示密钥代码输入屏幕。在密钥代码输入字段中输入已购买的密钥代码。
7. 当您单击“OK”按钮时，将进行激活并按照注册的密钥代码添加许可证。

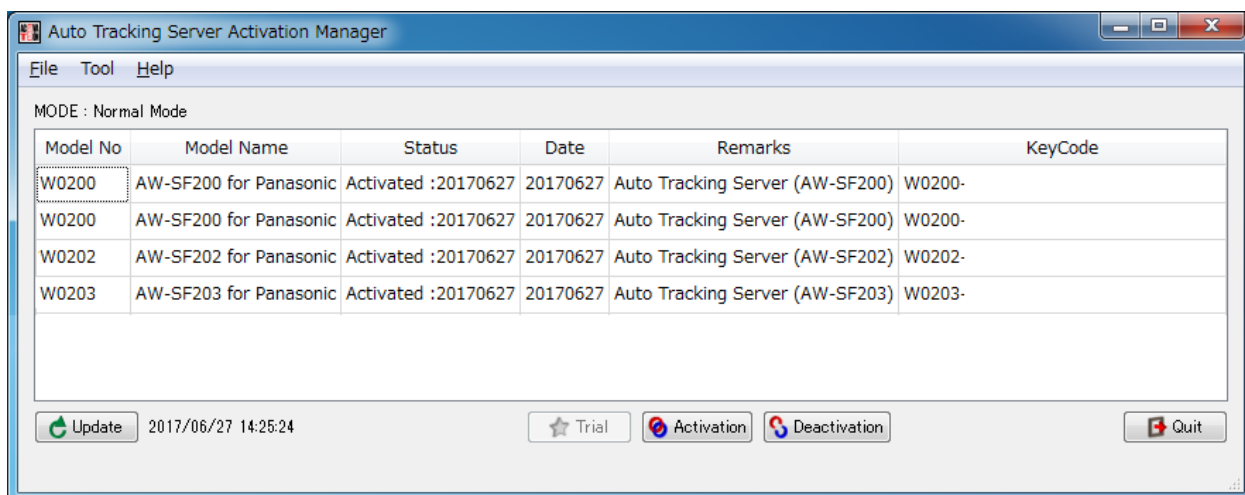
激活取消

如要更改使用本软件的 Main 服务器，按照下述程序取消激活，然后在新 Main 服务器上执行激活注册。

激活取消程序

1. 将 Main 服务器连接到互联网。
2. 登录到 Main 服务器 Windows。
3. 运行下载的文件的 12_Activation¥PActivationManager.exe。

4. 将显示激活程序的窗口。



5. 选择要取消的键代码的列，然后单击“Deactivation”按钮。

6. 激活已取消，并按照已取消的密钥代码删除许可证。

<注释>

- 取消激活后，您将无法在 Main 服务器上使用此软件，直到再次执行激活注册。

附录

键盘操作

可通过 PC 上所连接的键盘进行部分操作。

按键对应的操作如下。

按键	操作
F1	调用预设 1
F2	调用预设 2
F3	调用预设 3
F4	调用预设 4
F5	调用预设 5
F6	调用预设 6
F7	调用预设 7
F8	调用预设 8
F9	调用预设 9
↑	摄像机上下转动 上
↓	摄像机上下转动 下
←	摄像机左右转动 左
→	摄像机左右转动 右
↑+→	摄像机左右/上下转动 右上
→+↓	摄像机左右/上下转动 右下
↓+←	摄像机左右/上下转动 左下
←+↑	摄像机左右/上下转动 左上
Shift + ↑	摄像机上下转动 上 (高速)
Shift + ↓	摄像机上下转动 下 (高速)
Shift + ←	摄像机左右转动 左 (高速)
Shift + →	摄像机左右转动 右 (高速)
Shift + ↑ + →	摄像机左右/上下转动 右上 (高速)
Shift + → + ↓	摄像机左右/上下转动 右下 (高速)
Shift + ↓ + ←	摄像机左右/上下转动 左下 (高速)
Shift + ← + ↑	摄像机左右/上下转动 左上 (高速)

大写'T'	摄像机缩放 IN
大写'W'	摄像机缩放 OUT
大写'S'	Tracking Start/Stop 切换
Ctrl	仅按下按键期间 暂停跟踪

故障排除

本节显示执行本软件期间发生的故障原因，以及需采取的操作：

即使在执行远程摄像机连接程序后也无法连接到摄像机。

原因 1：

- 未适当连接 PC 和远程摄像机。

操作 1：

- 确保通过网络适当连接 PC 和远程摄像机，且已在此软件的 设置 - 摄像机 屏幕正确设置远程摄像机 IP 地址。

原因 2：

- 没有可用的许可证。

操作 2：

- 使用此软件时，连接一台摄像机需要一个许可证。因此，能同时连接的摄像机数量受到注册许可证的数量限制。

如果已连接摄像机的数量已达到许可证数量上限，断开任一台已连接的摄像机。

原因 3：

- 服务器的已连接远程摄像机数量达到上限。

操作 3：

使用此软件时，每台服务器可连接最多四台远程摄像机。如果已连接远程摄像机的数量已达到上限，断开任一台已连接的摄像机。

连接到远程摄像机后屏幕上的图像未正确显示。

原因 1：

- 您未使用最新版本的远程摄像机固件。

操作 1：

- 从下面提供的网站下载远程摄像机固件的最新版本，然后更新固件。

<http://pro-av.panasonic.net/en/>

原因 2:

- 未适当进行远程摄像机的设置。

操作 2:

- 请阅读本文件中的“默认设置 - 远程摄像机主机设置”，然后设置远程摄像机。

跟踪操作期间，跟踪目标切换到另一个物体。

原因 1:

- 有某个物体正在接近原始跟踪目标。

操作 1:

- 如果有移动物体接近跟踪目标（在白色矩形内），跟踪目标可能会切换到该物体。确保没有移动物体正接近要设置为跟踪目标的物体。

原因 2:

- 背景中存在具有较强直边的静止物体。

操作 2:

- 如果在跟踪期间静止物体（直边）进入红色帧内，则跟踪目标可能会切换到该物体。

跟踪操作期间，跟踪目标消失。

原因:

- 跟踪目标为静止物体。

操作:

- 如果跟踪目标是静止物体，跟踪目标可能消失。
即使跟踪目标消失，当跟踪目标再次进入摄像机图像框时跟踪恢复。

当摄像机图像中有多人时，将计划外人员设置为跟踪目标。

原因:

- 存在比设置为目标的物体移动更频繁的物体。

操作:

- 设置要跟踪的人员面部数据，然后将“Face Recognition ON/OFF”按钮设置为开启状态（红色）。由于面部识别开始发挥作用，且可检测到人员面部，跟踪操作很可能得到改进。
- 通过设置自动检测遮罩区域以及无须检测的区域，可改进跟踪操作。

卸载程序

1. 从 Windows Control Panel, 选择 [Programs and Features]。
2. 如果从程序列表中选择 [Auto Tracking Server Software], 然后单击 [Uninstall], 将出现确认屏幕。
3. 单击确认屏幕上的 [Yes] 以卸载软件。

<注释>

- 要停止此软件的操作, 从 Windows 服务管理屏幕进行下述设置。
 1. 停止两项服务, 即“Panasonic Auto Tracking Server (SF200)”和“Panasonic Tracking Control (SF200)”。
 2. 将“Panasonic Auto Tracking Server (SF200)”和“Panasonic Tracking Control (SF200)”服务的“Startup Type”更改为“Manual”。

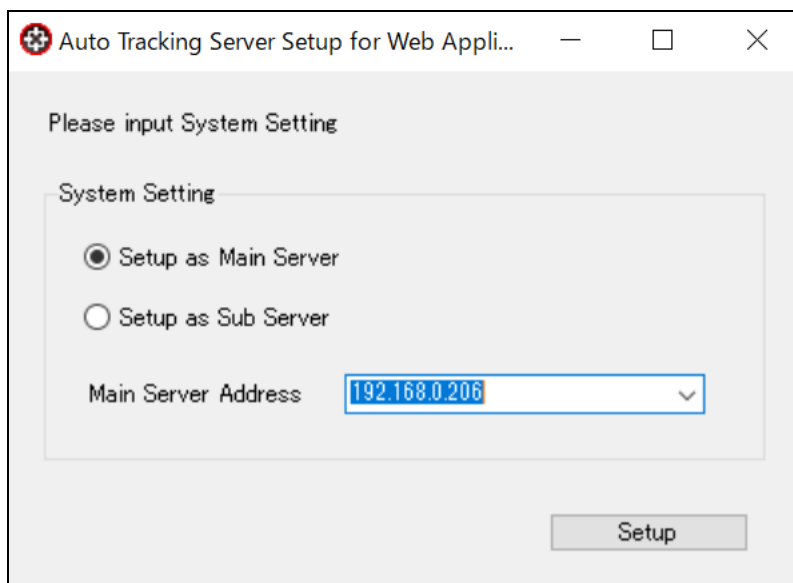
更改 Main 服务器的 IP 地址时

请于安装本软件之后，更改 Main 服务器的 IP 地址时，在 Main 服务器及各 Sub 服务器执行以下步骤，更改本软件的设置。

1. 运行所下载的本软件文件的 13_IpAddressSetup 文件夹中的 IpAddressSetupTool.exe。
2. 将显示以下画面。

如果在 Main 服务器上运行，则选择“Setup as Main Server”
并在 Main Server Address 栏输入 Main 服务器的 IP 地址。

如果在 Sub 服务器上运行，则选择“Setup as Sub Server”
并在 Main Server Address 栏输入 Main 服务器的 IP 地址。



3. 重启 Main 服务器及各 Sub 服务器。

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