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Installation guide



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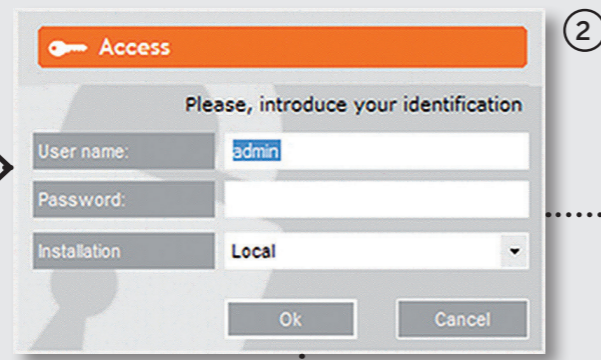
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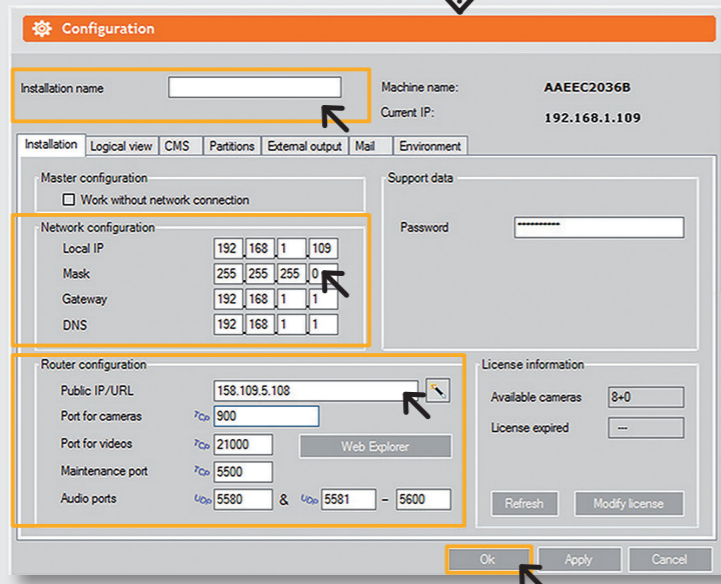
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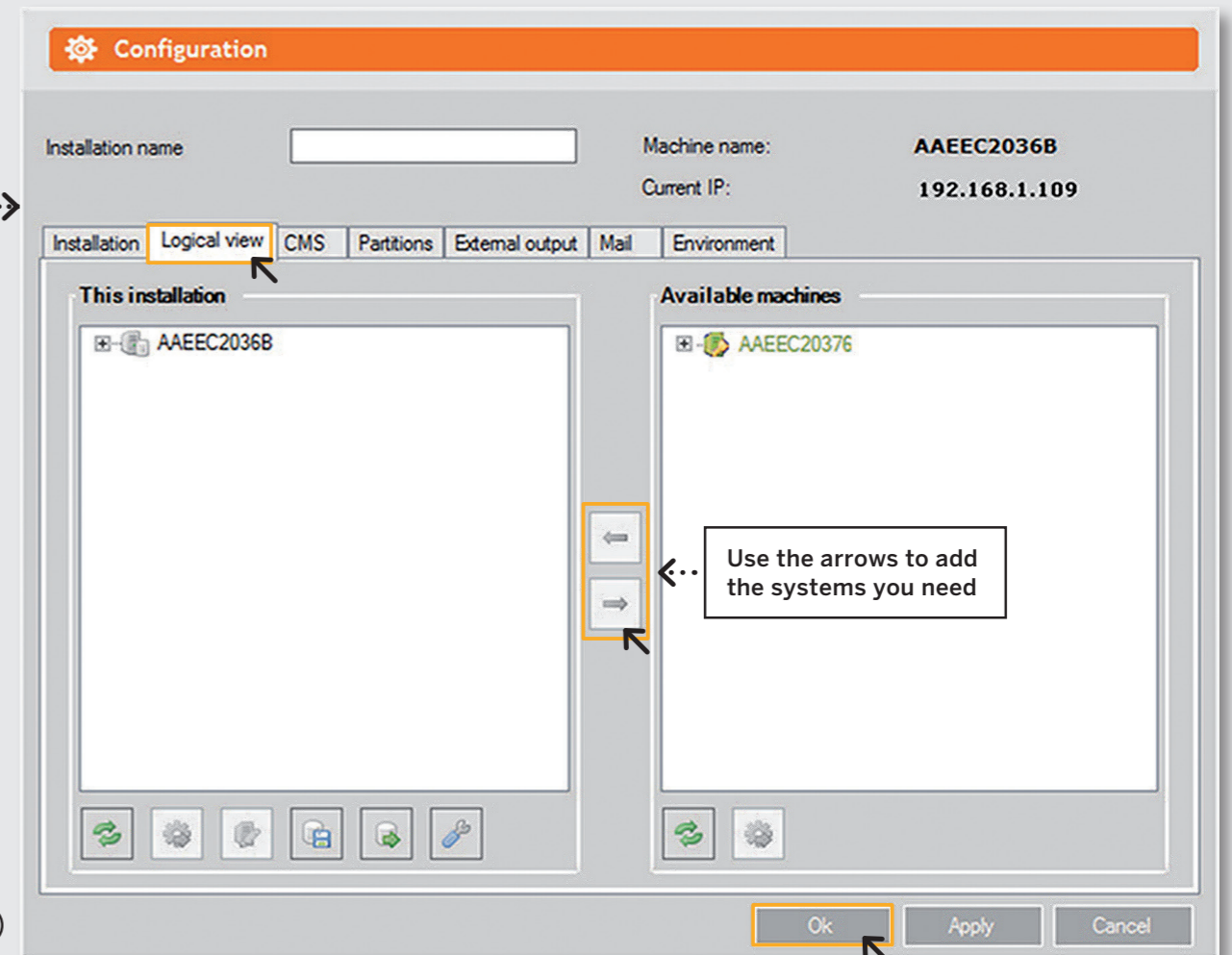
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01. Physical Installation

Position the servers in their final locations, ensuring all connectors are properly plugged in.

Connect the monitor, keyboard and mouse to the main server (master). These devices are not included in the scope of the supply. Next, turn on all available servers (master and slave).

02. Configuration

Four options can be selected from the ① **Main Screen**: Cameras, Configuration, Support and Shutdown. To access any of the above options, the system requires a username and a password. By default, the username is 'admin' and the password must be left blank ②.

NOTE: The password can be changed later on. To do so, please read section **10. Passwords** of this guide.

On the Main Screen, click on ③ **Configuration** and fill in the parameters marked in orange: Installation name, Network configuration and Router configuration.

Enter the router public IP address. By default, ports 900, 21000 and 5500 have been preassigned. If required, they can be modified. To ensure proper communication, make sure you open the same router ports.

Once the IP and Ports have been entered, click on **OK** and restart the system.

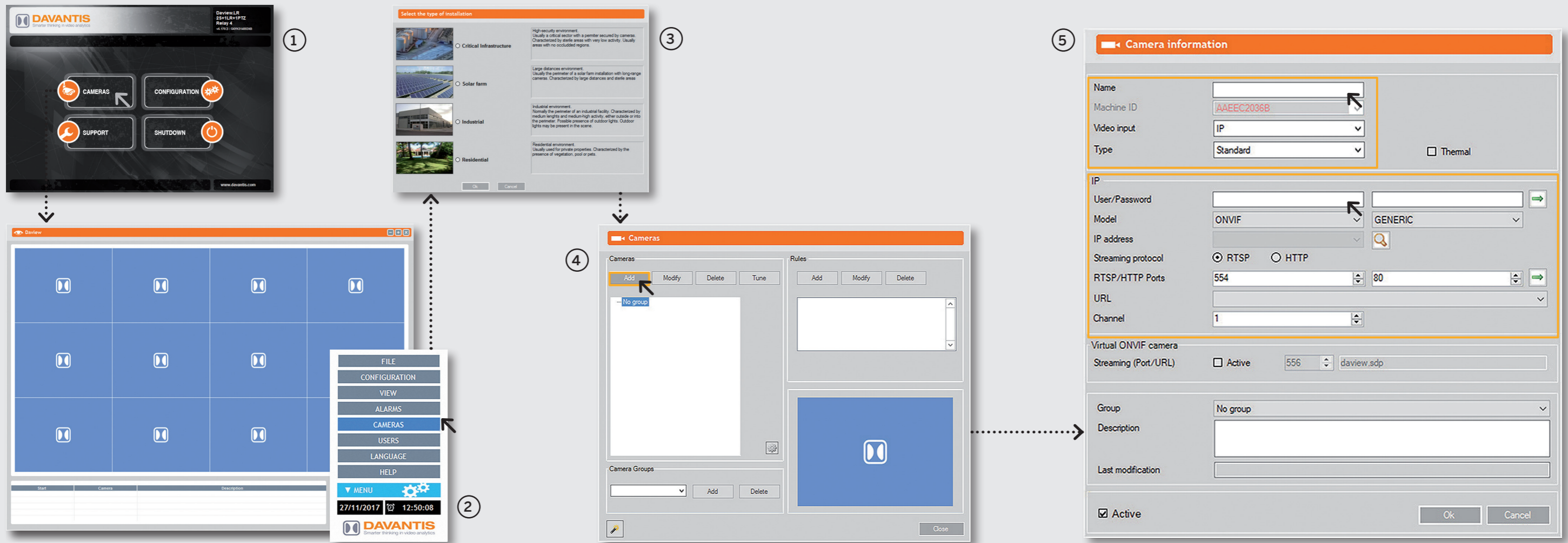
03. Multimachine

For installations with more than one server, go to **Configuration** from the ① **Main Screen**, click on tab ④ **Logical View** and use the arrows to add the systems you need.

To open slave server ports, we recommend you also open two ports for each slave server. These ports could be consecutive to the master server, for example.

Slave server 1 › 21001 and 5501
Slave server 2 › 21002 and 5502

IMPORTANT: Perform this step before creating a new camera.



04. Cameras, rules and relays

On the ① **Main Screen**, click on **Cameras** to access the ② **Viewer**. At the right bottom click on **Menu** and then **Cameras**. You must choose the ③ **Type of Installation** the first time you access this menu.

Once you have selected the type of installation, you will access the ④ **Camera Menu**, where you can add or modify different cameras and detection rules.

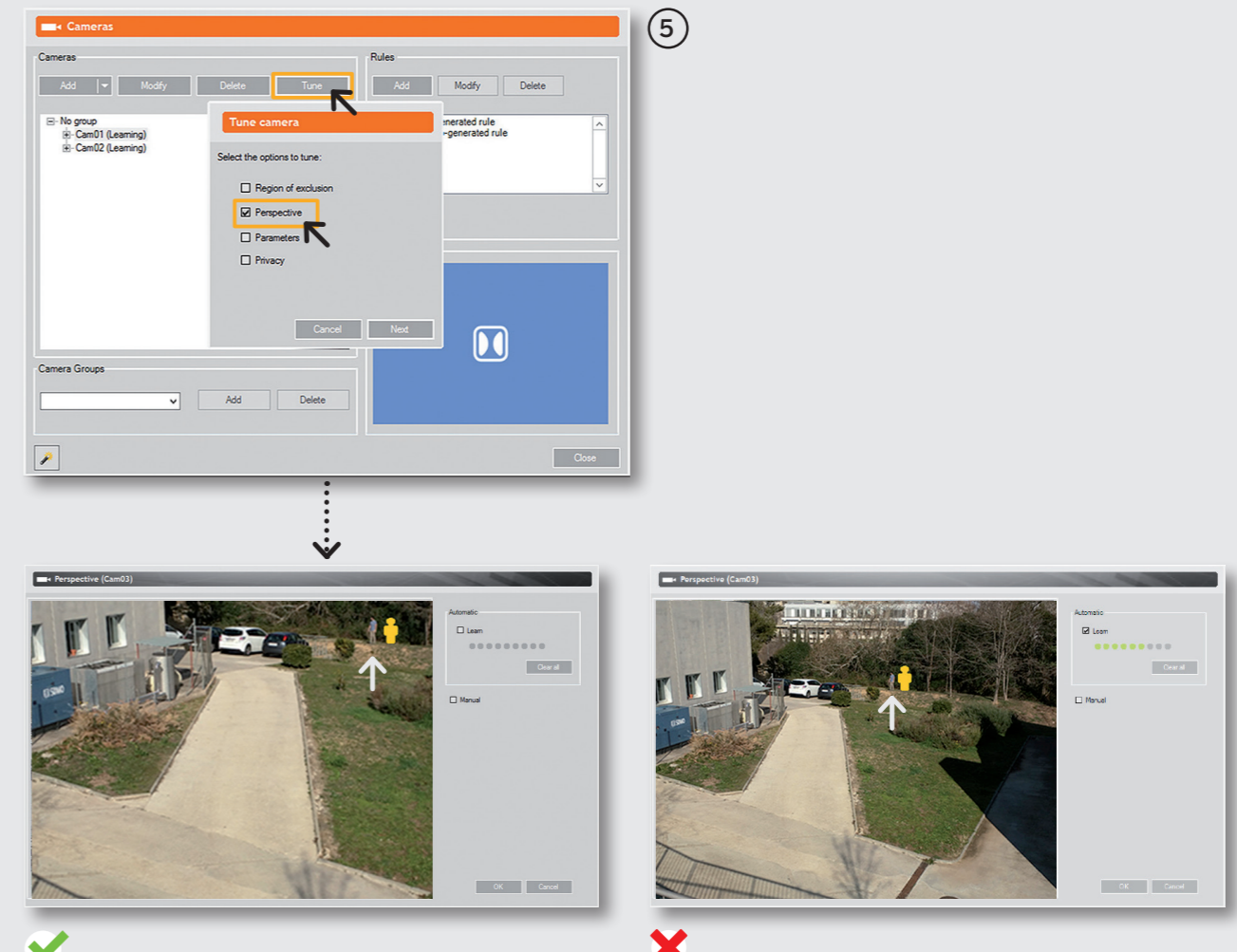
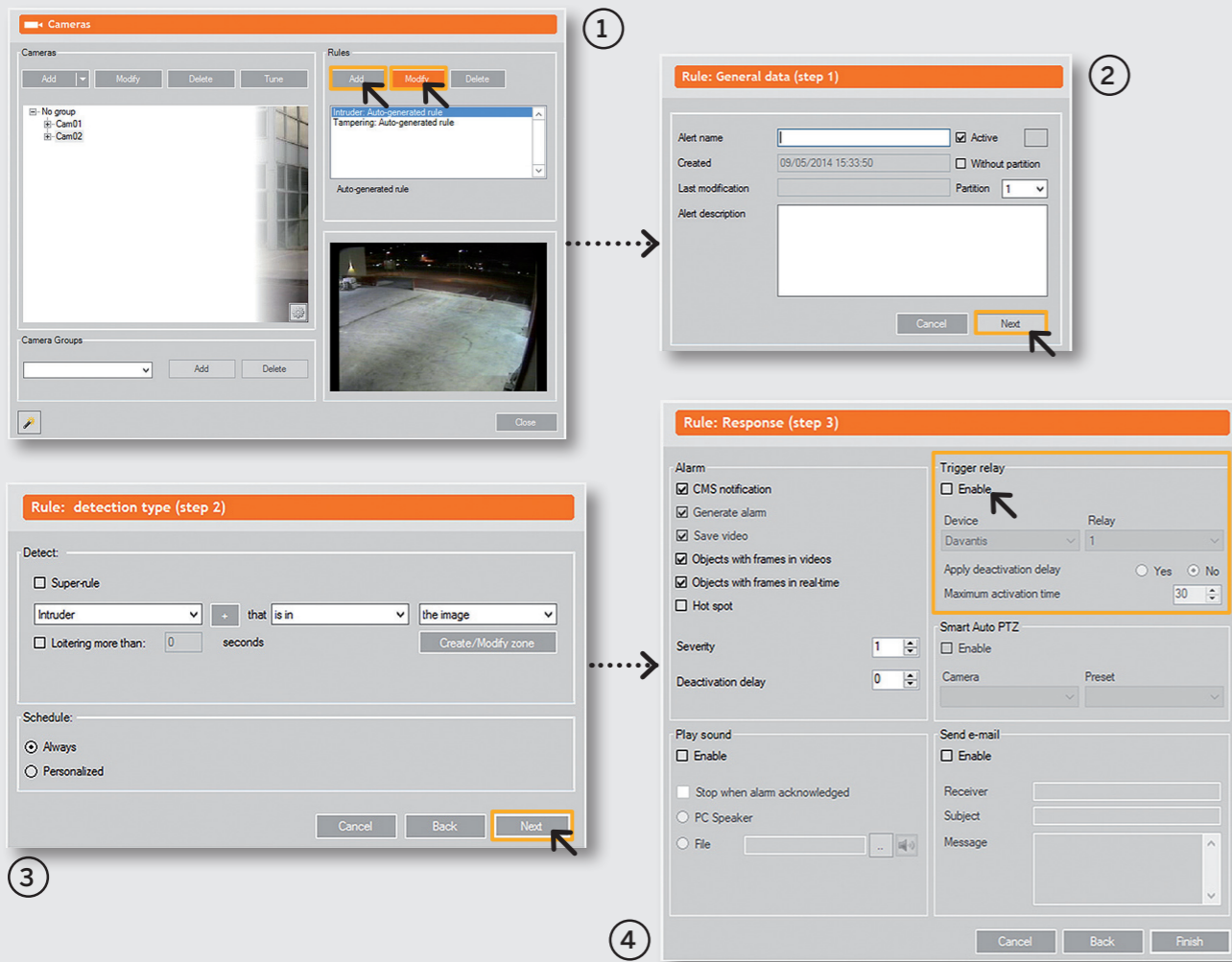
04.1. Adding a camera

Click **Add**, and fill in the fields in the ⑤ **Camera Information** window.

Once a camera has been added, tampering and intruder rules are created automatically without exclusion area.

IMPORTANT: To optimize network bandwidth, we recommend using secondary video streaming, for example, VGA at 15 fps.

If you are using HD analogue cameras, the system can be set up so that image streaming is captured from an external DVR via IP.



04.2. Detection rules

To add or modify a detection rule, go to the ① **Camera Menu** and add a rule or select the Intruder rule to modify it. Then, do the following:

- ② General Data (step 1). Give a name and a partition to the rule and click on **Next**.
- ③ Detection Type (step 2). Click on Create/Modify zone to define an exclusion zone (ROE), as well as a possible schedule. Once set, click on **Next**.
- ④ Response (step 3). Select the options you need.

IMPORTANT: When setting the ROE, remember that to determine when an intruder crosses the masked zone, the detection area starts with the intruder's feet. The option of deactivation delay allows the user to create an entry time for an specific rule /camera.

04.3. Relays (Optional)

You can activate or disable a relay from the window in step 3, **Trigger relay section** ④. From there you can enable or disable a relay as required.

05. Camera configuration

05.1. Camera lens

Certain aspects must be taken into account when setting up the cameras.

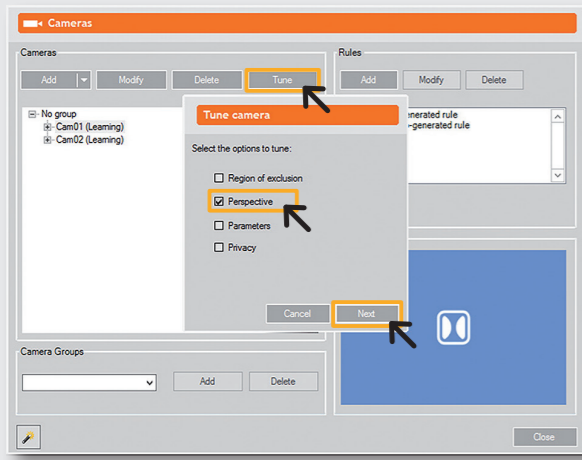
To calibrate the camera zoom, you can use our zoom calibration tool. Go to **Cameras**, select a camera, click on **Adjust**, then ⑤ **Perspective** and press **Next**. The system shows a person outline indicating the minimum size. If objects appear too small in relation to the minimum size, adjust the camera lens.

Cameras must be focused with night light. If this is not possible, ensure the cameras are properly focused in daylight.

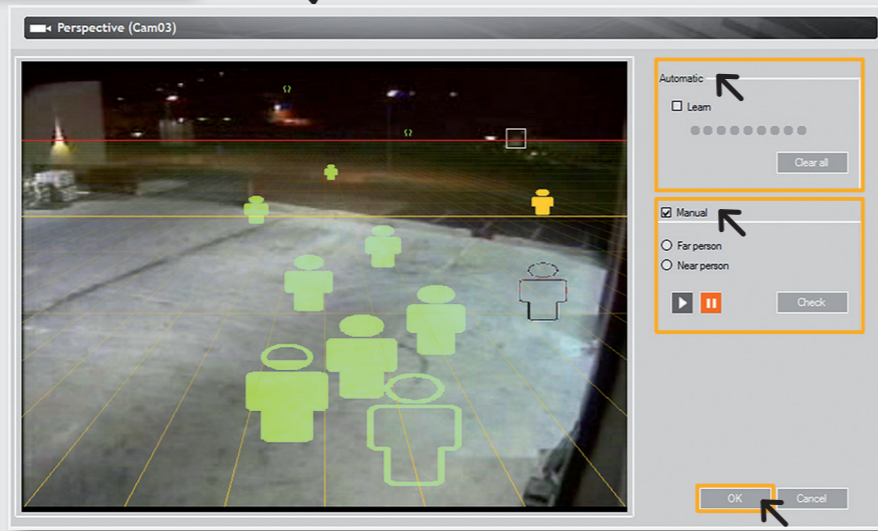
05.2. Positioning the cameras

IR emitters should not be integrated cameras. They must be placed one metre below the camera. We recommend cameras have a good wide dynamic range.

Cameras must be positioned at least three metres above the ground. If installed on a base or some other kind of support is used, then this must be solid enough to prevent vibration.

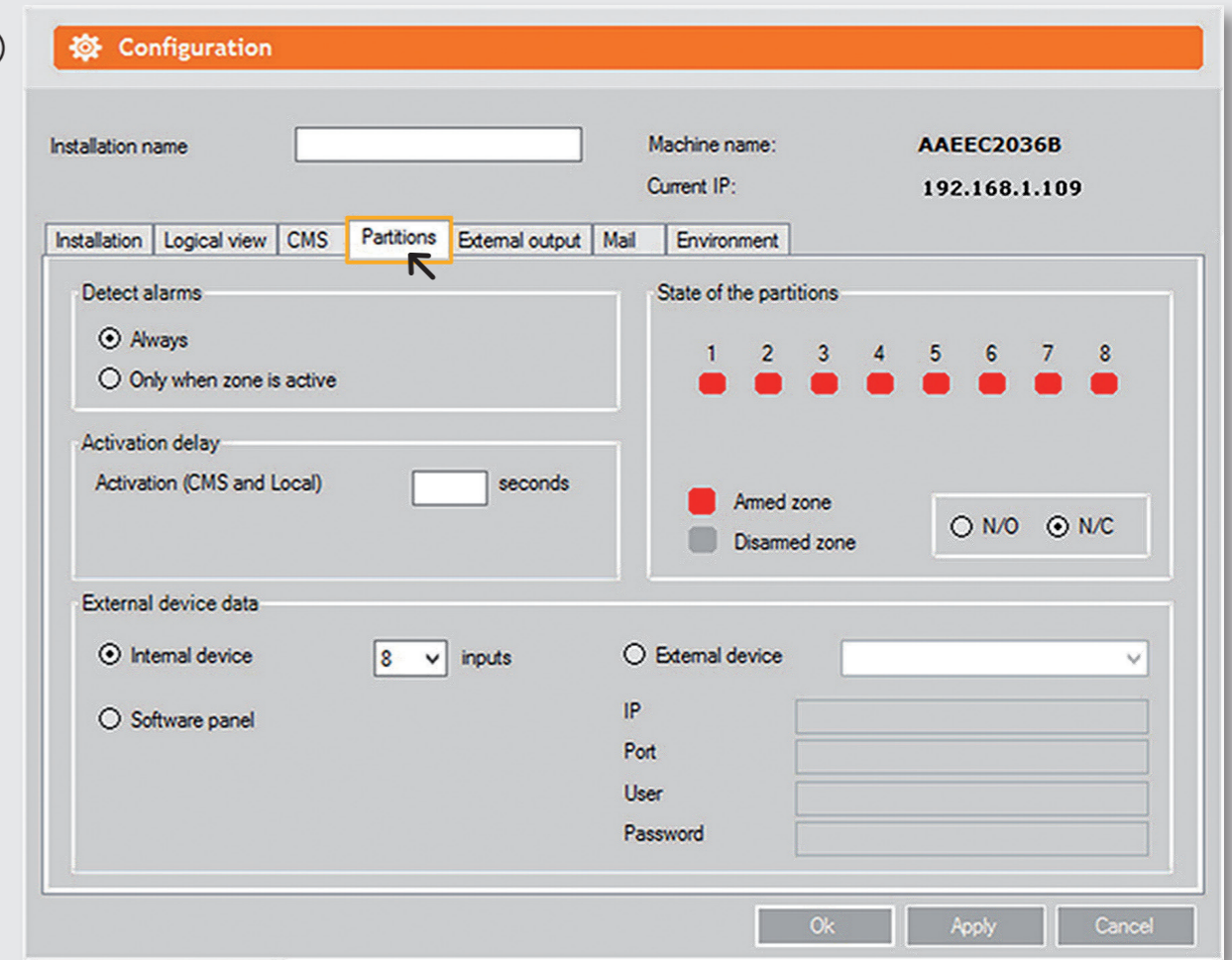


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06. Perspective

On the ① **Camera Menu**, choose a camera and click on **Tune**. Next, select the **Perspective** option and click on **Next**.

The camera can be configured in two modes:
② **Automatic** and **Manual**.

06.1. Automatic perspective

Walk in a zig-zag from the closest point that the camera can detect to the outermost limit of the detection zone.

Person outlines of different sizes will appear in the scene. Check the limit lines (red and yellow)

- **Red:** This indicates the theoretical detection area. The line must be above the area you wish to monitor.
- **Yellow:** This indicates the ideal detection area. If the perspective is correct, stop the learning mode and click on **OK**.

07. Partitions and outputs (OPTIONAL)

06.2. Manual perspective

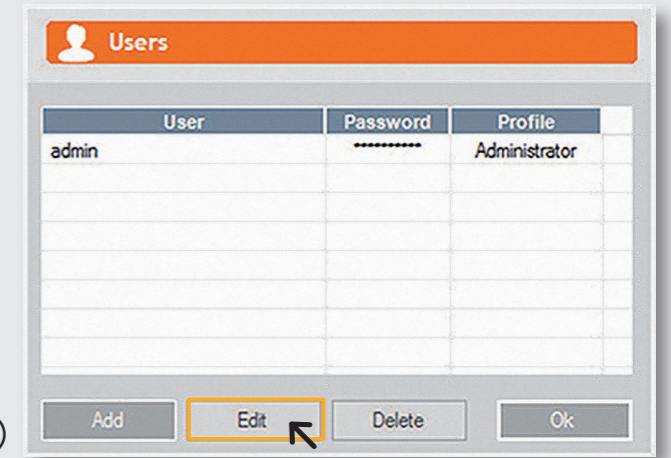
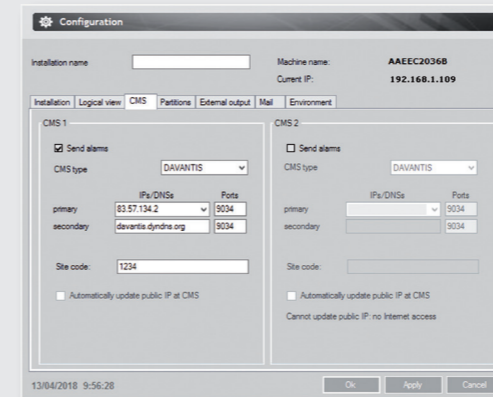
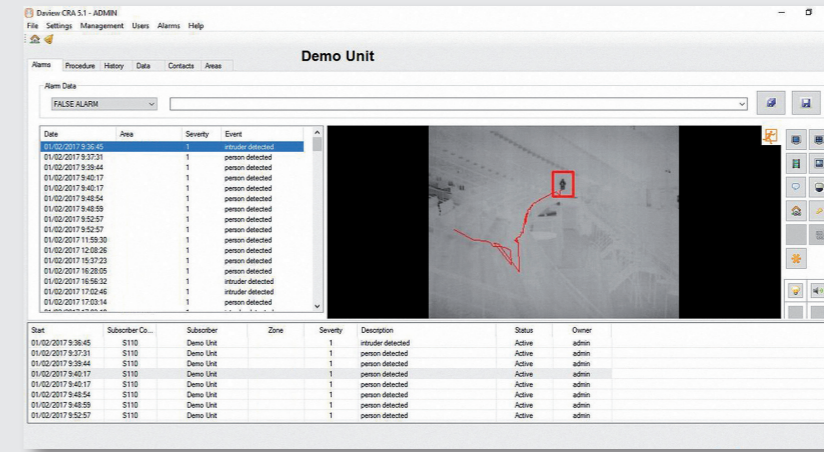
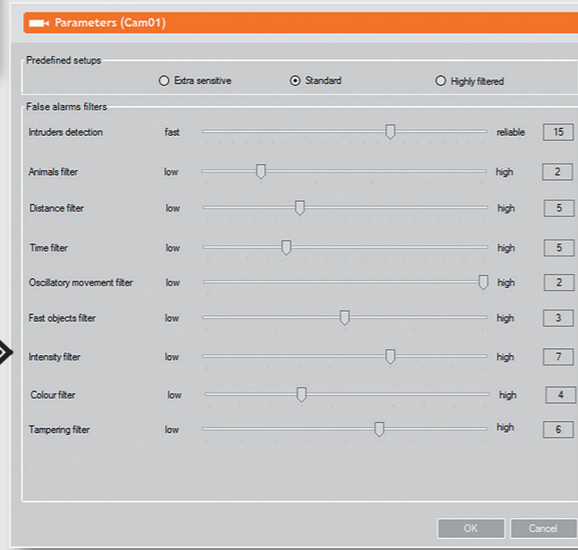
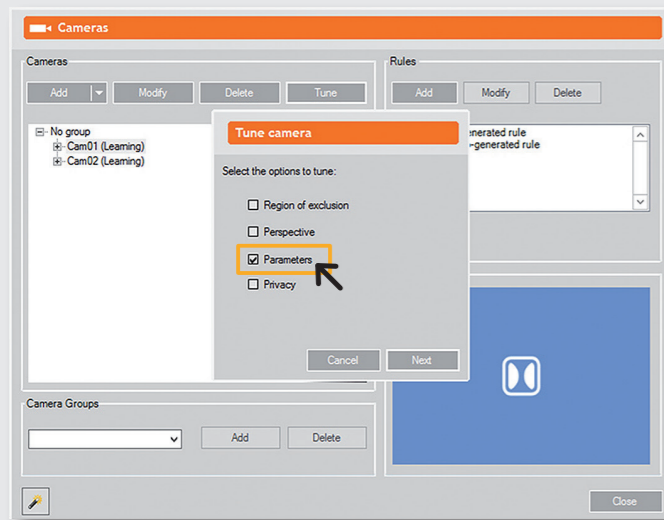
Click on **Manual** and select **Far person**. Someone must stand close to the camera while you draw a box around the person.

Select **Near person** and repeat the Far person procedure.

Click on **Check** to verify the limit lines and the different outlines.

To ensure that the alarm keyboard is working correctly, go to the master server and, from the main screen, click on **Configuration**.

Then click on the **Partitions** ③ tab to check that the armed and disarmed zones match the alarm keyboard.



08. Video analytics

Ensure that the system is detecting everything correctly, such as walking/running people, vehicles, etc, for example. If there are too few detections or too many false alarms, adjust the camera settings.

Go to ① **Camera Menu**, select a camera, click on **Tune**, and choose the ② **Parameters** option to correct the settings.

09. CMS

To register a subscriber in the CMS ③ (Central monitoring station), you must fill in the following fields: **subscriber name, subscriber public IP address and subscriber number.**

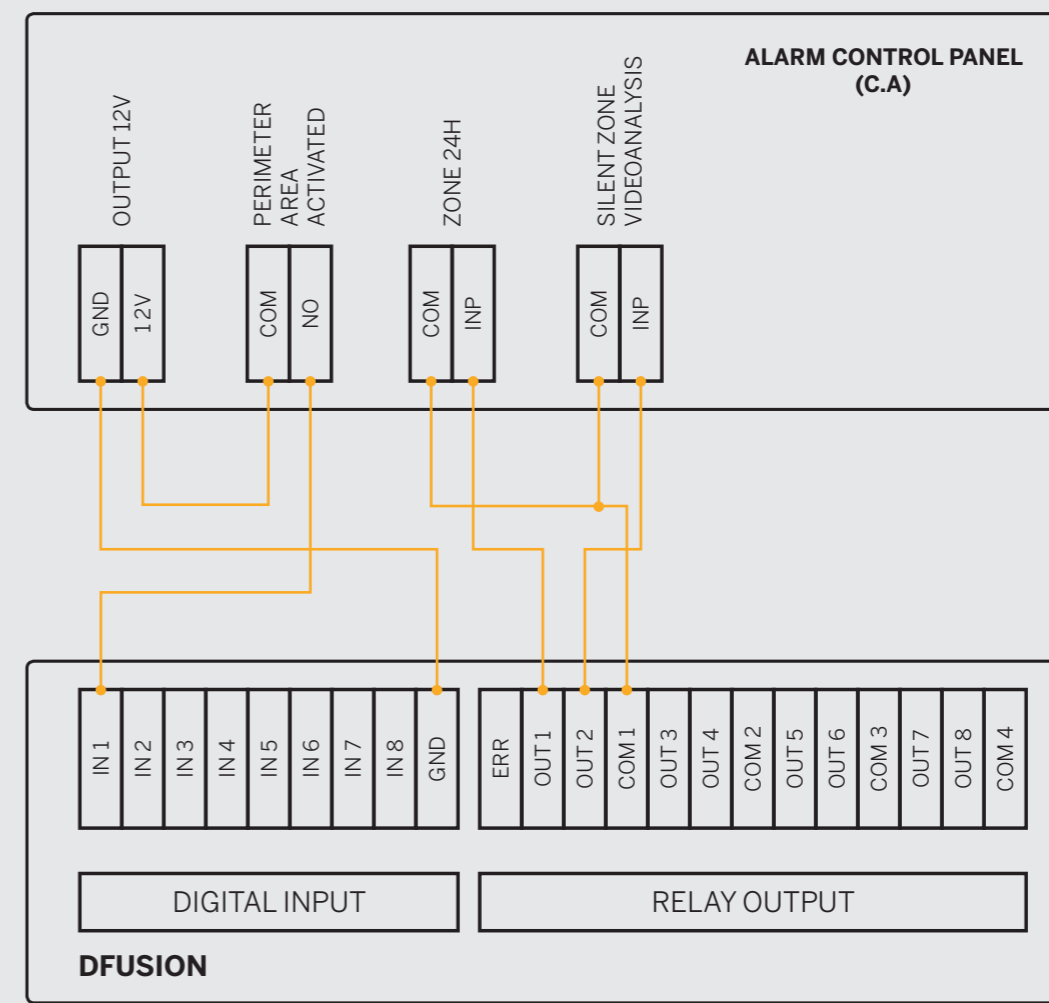
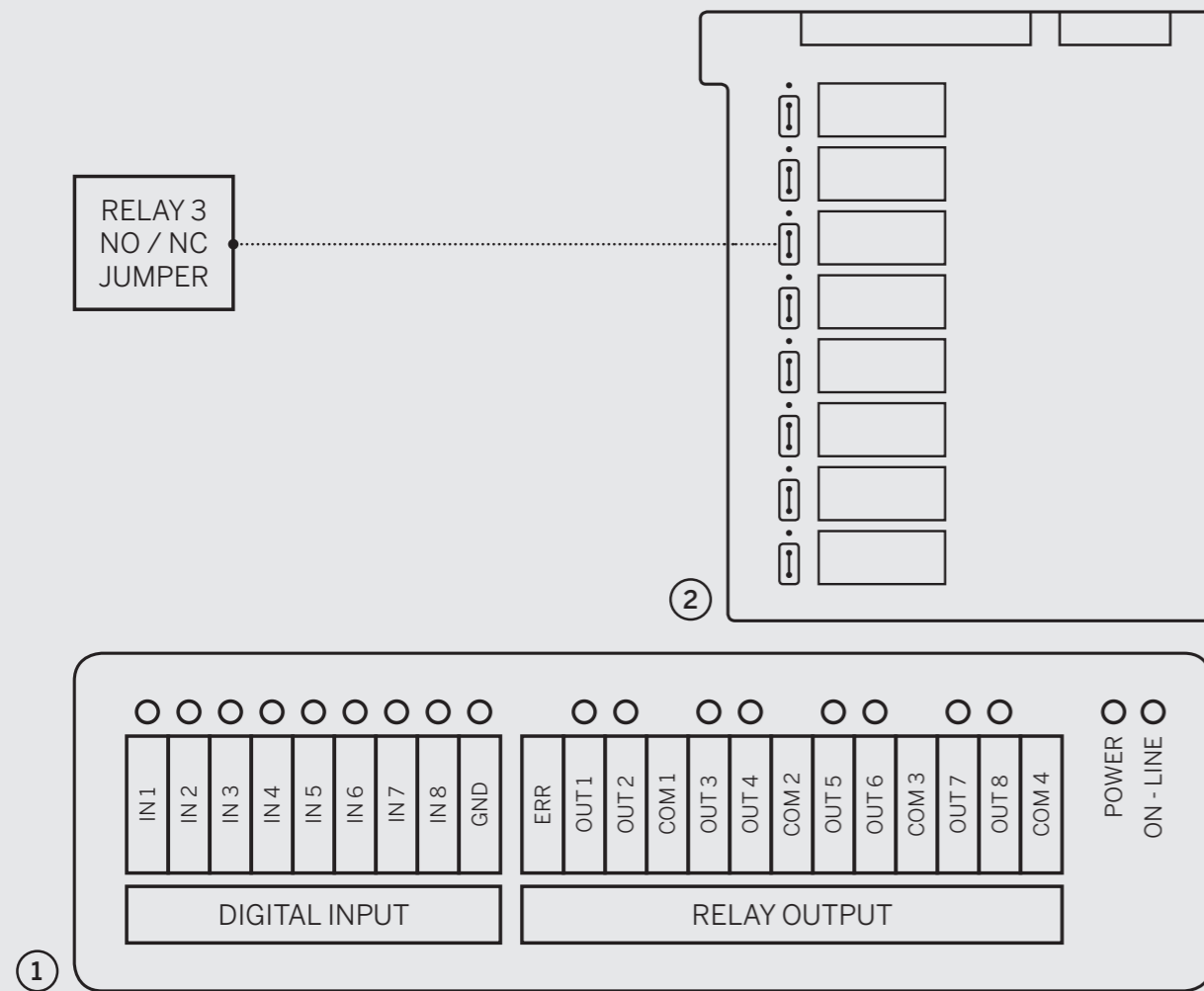
From the CRA tab ④, enter primary and secondary IP of the CMS, together with the subscriber name which will be provided by the operator at the CMS.

Ensure that the CMS is receiving alarms, snapshots and videos correctly, and accessing the live camera.

10. Passwords

To set the password for the first time, go to Cameras on the Main Screen, click on Menu, ⑤ **Users** and then click on **Manage**.

Select a user and click on **Edit** to change the password.



11. Connection diagram DFUSION

System inputs are optically isolated. A voltage from 4.5 Vcc to 20 Vcc (max. 30 Vcc) is required. When inputs are enabled, red leds are on.

Inputs

- Input 1 (IN 1 and GND)
- Input 2 (IN 2 and GND)
- Input 3 (IN 3 and GND)
- Input 4 (IN 4 and GND)
- Input 5 (IN 5 and GND)
- Input 6 (IN 6 and GND)
- Input 7 (IN 7 and GND)
- Input 8 (IN 8 and GND)

Outputs or Relays ① (RELAY OUTPUT)*

All outputs or relays are voltage-free contacts (dry contact). **Normally closed N/C.**

If required, you can change the relays configuration from N/C to N/O. To do so, use the system internal jumpers.

Relays can support a maximum intensity of DC24V 1A, AC120V 3A, although it is highly recommended to use only low voltage signals. (5-12 Vcc). When relays are enabled, green leds are on.

- Power led (yellow): enabled when I/O board is properly powered.
- On-line led (blue): enabled when I/O board has been detected by the system.

Relays

- Relay 1 (OUT 1 and COM 1)
- Relay 2 (OUT 2 and COM 1)
- Relay 3 (OUT 3 and COM 2)
- Relay 4 (OUT 4 and COM 2)
- Relay 5 (OUT 5 and COM 3)
- Relay 6 (OUT 6 and COM 3)
- Relay 7 (OUT 7 and COM 4)
- Relay 8 (OUT 8 and COM 4)
- Malfunction detection (ERR and COM 1 pins)**

*Availability depending on license.

**Closed means system error or power loss.

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