

Wave Alarm Transmitter Manual

Introduction

Wave Alarm Transmitter is a software that can transmit events from Hanwha Wisenet Wave as standardized SIA messages to an alarm receiver.

Versions exists for Windows, Linux x64 and Linux ARM.

Installation

Windows installation is done by downloading the installer from the [ArrivalNet](#) site in the downloads section. Installation is very straightforward, just follow the messages on screen. Installation from Linux can be done with opening a terminal window and execute this command:

Install command for x64 server:

```
sudo apt install -y curl && curl -s https://www.arrivalnet.se/linux/install_wavealarmtransmitter.sh | sudo bash
```

Install command for ARM64 server:

```
sudo apt install -y curl && curl -s https://www.arrivalnet.se/linux/install_wavealarmtransmitter_arm.sh | sudo bash
```

We recommend using Ubuntu 18.04 or higher but any Debian based distribution should work.

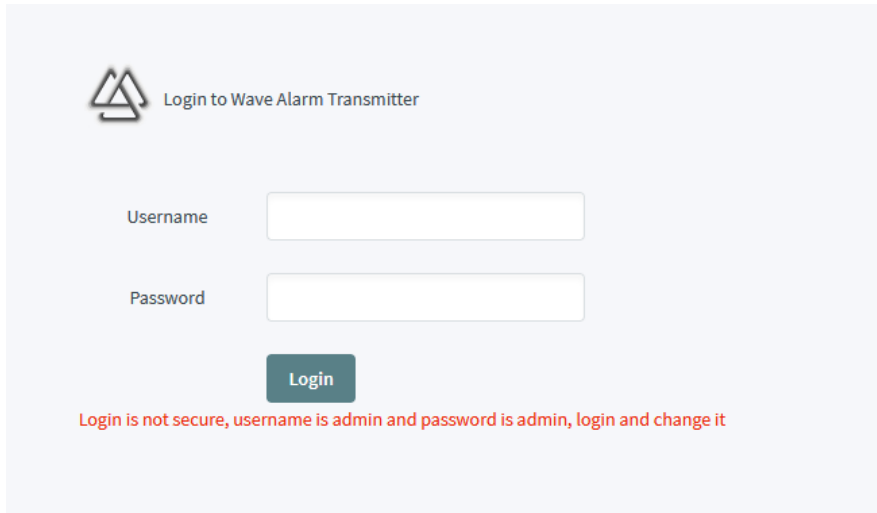
After the installation is done all configuration is done from a web browser on the default port 8003. <http://localhost:8003>

Configuration



The configuration is done with the config web interface. Here is an explanation for the different settings.

At first login the default password is admin and username are also admin, it is highly recommended to change the password after logging in.



The screenshot shows a login page for the Wave Alarm Transmitter. At the top left is a logo consisting of three overlapping triangles. To the right of the logo is the text "Login to Wave Alarm Transmitter". Below this, there are two input fields: "Username" and "Password". A dark green "Login" button is positioned below the password field. At the bottom of the form, a red warning message reads: "Login is not secure, username is admin and password is admin, login and change it".

After logging in you will be taken to the general settings:

Settings

Settings

| | | | |
|--------------|--|---|---|
| Password: | <input type="password" value="....."/> | ? | ↑ Upgrade |
| Web port: | <input type="text" value="8003"/> | ? | |
| Hardware ID: | <input type="text" value="A45AF92A832225697AEC2B04337DA5AEF"/> | ? | Copy |
| License: | <input type="text" value="PVRX-9FSM-N3NN-BKBW"/> | ? | Activate online You are currently using 1 of 10 available |

[Save](#)

Password: This is the password you use to login to the configuration web-interface, please make sure to change it to a secure password.

Web port: This is the port the web-interface is using, and this port is also used when creating rules in Wisenet Wave.

Hardware ID: This is a unique id for your system, the license is based on this id.

License: Easiest way is to activate the license online, just paste the code after ordering and the license will automatically be activated for your system. You will need one license per server you like to send alarms from.

Upgrade: To upgrade to the latest version press the upgrade button.

When the basic settings are done it is time to add a connection to an alarm receiving station.



Click on the SIA settings and then on the Create Edit button.

SIA Settings

Select Account: New account Delete account

Transmission settings

Account name: ?

SIA account number: ?

Primary IP:

Secondary IP:

Encryption key: ?

SIA port:

Link type:

Short link:

User group: ?

Polling time: ?

Link expiration time: ?

The settings for Account number, IP, Port and polling time are all values you will get from your alarm receiving station after you have ordered an account. Encryption key is not used for the moment.

This is the settings you will get from your alarm receiving service provider:

Account number = Your account number that you get from the alarm station

Primary IP = Alarm station primary IP

Secondary IP = Alarm station secondary IP

Encryption key = Reserved for future use

Port = Alarm station port

Link type

- Temporary user** – From version 6 of the VMS a new type of user is available. Using this option is by far the best option. This will create a user that will be able to get direct access to the server over Wave sync. This option also gives the operator access not only to the camera triggering the alarm but also other cameras in the system defined in the user group.
- Local camera** – Alarm receiver will get a link directly to the camera, meaning they must have LAN access to it over for example a VPN connection
- Remote camera** – Alarm receiver will get a link to the camera over the internet using the built in cloud connection.



Short link – Some alarm receivers have a limited length of the link attached to the SIA message, use this if the alarm receiver has issues to follow the link.

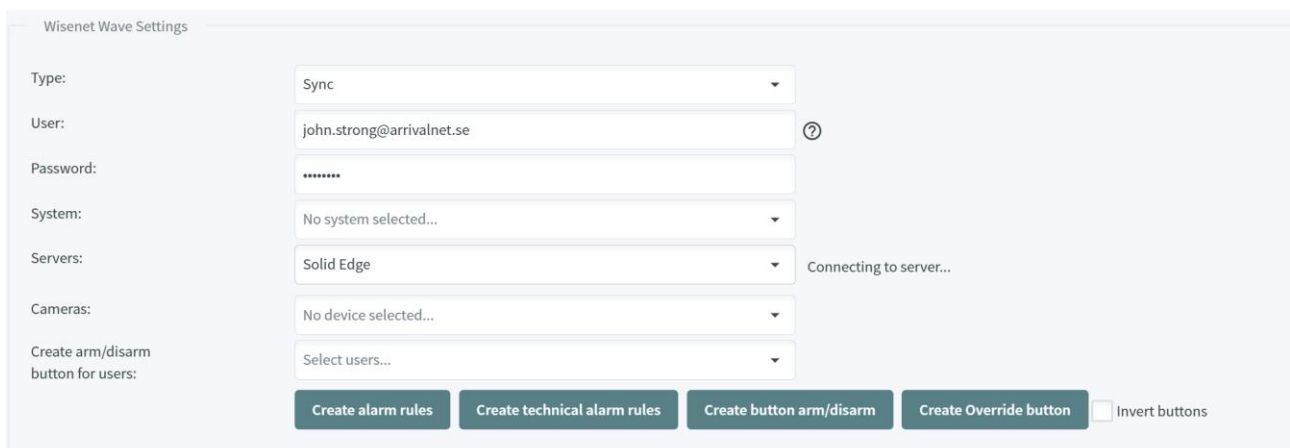
User group: When using temporary user this user group is the one the temporary user will get when it is created. This is useful if the operator should only see a limited number of cameras.

Polling time = Alarm receiver will get an empty heartbeat message to tell them the system is alive, setting is in minutes. To disable polling messages set this to 0.

Link expiration time – This is how long time you want to operator to have access to the system after an alarm has been sent. Time is in hours.

Cameras, here you select the cameras you like to send to this receiver. If you like to have more than one receiver, then add a new connection.

Wisenet Wave settings



Wisenet Wave Settings

Type: Sync

User: john.strong@arrivalnet.se

Password: *****

System: No system selected...

Servers: Solid Edge

Cameras: No device selected...

Create arm/disarm button for users: Select users...

Connecting to server...

Create alarm rules Create technical alarm rules Create button arm/disarm Create Override button Invert buttons

Type = Select if you like to connect to the system locally or with Wave sync. If you have this software running in the same server as Wisenet Wave it is recommended to use a local login as it will be a bit faster.

User & Password = This is a user in Wisenet Wave. To use temporary user creation make sure you select a user with the rights to do that.

System = This is your system, a Wave system can consist of several servers.

Servers = Select the server with the cameras you like to use in your alarm transmission.

Cameras = Select the cameras you want to be able to transfer.



Create arm/disarm button for users = The users selected here will get a button for arming/disarming the alarm rules in Wave created with the button "Create button arm/disarm" in next steps.

The buttons are used to help you to create the alarm rules in Wave.

Create alarm rules = To be able to send alarms from Wave you need to set up some rules in the Wave client. This button makes that process much easier. Just press this button and the rules will be automatically created for the cameras you selected. Each rule created may need to be edited so it fits your alarm trigger. Have a look at the Wave rule editor and make sure the created rules are correct.

Here is an example of how a rule looks like in Wave. Make sure that the Event triggering is correct in your setup.

The screenshot displays the Wave rule editor interface, divided into two main sections: 'Event' and 'Action'.

Event Section:

- When:** Analytics Event (dropdown)
- At:** 09 Värmekamera (dropdown)
- Event Type:** Virtual line crossing (dropdown)
- Caption contains:** Keywords separated by space (text input)
- Description contains:** Keywords separated by space (text input)
- Schedule:** A 'Schedule...' button with a calendar icon is located at the bottom left.

Action Section:

- Do:** Do HTTP request (dropdown)
- Interval of action:** No more than once per 1 min (dropdown)
- HTTP URL:** http://192.168.1.81:8003/wave
- HTTP content:** BA001 90379ba0-f065-ac17-5cbc-eabbd4adeac1
- Content type:** Auto (dropdown)
- Login:** admin
- Authentication type:** Auto (dropdown)
- Password:** (masked with dots)
- Request type:** POST (dropdown)

Create technical alarm rules = This button creates rules in Wave to send alarms if a camera has communication failure with the server.

Create button arm/disarm = This creates an arm/disarm soft trigger on the selected cameras in Wave for the selected users. Now the Wave users can activate/deactivate alarm transmission for the selected cameras by pressing this soft trigger in Wave client or mobile client.

Create override button = This creates an additional soft trigger on the selected cameras for the selected users. When pressing this button in Wave client or mobile client the next automatic timed arming will not happen. This is useful if you have a time schedule that arms the system at a specific time but you want to temporarily stop that from happening, now the alarm transmission will not be active until the next automatic arm time schedule or if you arm the system manually with a soft trigger.

Invert button = This will invert the displayed icon for the arm/disarm soft trigger in Wave after you create it.



Wisenet Wave configuration

Normally you don't need to create any rules manually as you can use the 'Create alarm rules' function described earlier.

In cases you need to create a rule manually the continue reading.

In the **HTTP URL** you write `http://<IP address of the PC where you have the Wave Alarm Transmitter plugin installed>:<Web port you set in the configuration>` default is port 8003 and end with `/wave`. For example: **`http://192.168.1.81:8003/wave`**

In the **HTTP Content** you should write the zone you want the alarm receiver to get, usually this starts with **BA001 or VA001** for video analytic alarms and if you have more cameras, you give the next one **BA002 (VA002)** and so on. If you want to send alarms that have the nature of service alert you instead start with **ZA001** and so on, can for example be used for sending an alarm if connection is lost to a camera, direct after the section information you should have a space between the section and id information. The ID after the section information is the camera ID you copied in the previous step.

The content type should be set to text/plain and the rest should be set to Auto.

Then put the Wave username and password to this rule and set authentication to Basic.

When this rule now is triggered the alarm receiver will get an alarm with a link that takes them directly to the camera.

Alarm transmission is quick and will be sent immediately and transferred in a second as long as the PC with the plugin have internet access.

Recordings

The link that is sent is pointing to the recorded video 5 seconds before the video is sent so it means you need to have a recording being done at that time. Here you have three options:

1. Set a pre-recording of the event at least 5 seconds before.
2. Activate continuous recording.
3. Activate Motion + Low res



Logs

You can find logs in C:\ProgramData\WaveAlarmTransmitter or if you are using Linux the logs will be saved at /var/logs/WaveAlarmTransmitter the log will save the last 15000 events. In the log you can find information to help you find a solution if there are some problems to send alarms.

You can also find logs on the logs tab in the configuration web interface.

Licensing

In the configuration tool you can also find the Hardware ID needed to get a license. You can order the license from an authorized reseller found at www.arrivalnet.se

Send the hardware ID with the order to order@arrivalnet.se when it is processed you will get a license code and you need to paste that into the License textbox and press Save.

If the license is valid, you will get a message next to the License textbox under the General settings.

You need one license for every alarm receiver you want to configure.

