MINKPOLICE

User manual

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MinkPolice is developed and manufactured by:
ALERT HOUSE
www.alerthouse.dk

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Introduction to MinkPolice

MinkPolice is a GSM based remote monitoring system for animal traps. Mount the MinkPolice module on your trap, and it will immediately notify you by SMS or email if your trap is activated.

The MinkPolice module is in a waterproof box, and a magnet which is connected to the trap door can activate a magnetic switch inside the box. When the trap shuts, the magnet is removed, and an alarm message is immediately sent to the user.

By logging into our free web interface www.minkpolice.dk, you can easily configure when your modules should report to you, and to which telephone numbers and/or email addresses they should report. The module communicates with this web server (your user profile), so you can always see the status of all your traps online. The webserver keeps track of expected "I'm alive" reports from each trap, and if one of your traps does not report as expected, you will immediately be notified by email.

 From your user profile you can easily manage all traps and configure at which times the module should send an "I'm alive" report with the trap status. If you have several modules, the status reports are all collected into one single message that is sent at your prescheduled time.

The module has the following special properties:

- **Centrally controlled:** Modules are controlled and configured through a website (www.minkpolice.dk). We continuously add new functionality to the server system for the benefit of our users. The majority of the product intelligence is on the server and not in the module itself, and updates are easily carried out without involvement of the user.
- **Email and SMS:** On your user profile, you can switch email and SMS reports on/off. You can also check trap status by logging into your profile at any time.
- **Automatic monitoring:** Our server keeps track of your module reports and collects status reports from all messages into one single message (email and/or SMS). You may also choose to let our server monitor all messages. You will then only receive a message if something is not as expected.
- **Power saving:** A module is expected to run at for at least one year on 4 AA batteries (with two daily status reports).

- **Weather- and waterproof**: The electronics is in a waterproof box (IP67), and the system has been tested down to -23 °C.
- **History and catch registry:** At any time you can see a history of the reports from each trap. When a trap is shut, you can register the catch on your profile. With your permission, others can also see your catches.

Before use

Read this user manual thoroughly before using your module. You can also find guidance for setting up your module on www.minkpolice.dk. If you experience problems with the module, read the section about troubleshooting at the end of this manual.

Setting up the module

1. **REGISTER THE MODULE ONLINE**
   1.1. Register as a user on www.minkpolice.dk in the following two steps:
   - Click on *Register* and fill out the information.
   - You will now receive an email with an activation link which you must click on.

   1.2. Log into your profile on minkpolice.dk and register your new module (click on *Register new device*). The 5-digit module serial number is located in the bottom of the module.

   In the future when you log into your profile, you will see a list of your modules along with their status and time of next expected report from the module (wake up time). Read more about configuration of modules in the online user interface later in this manual.

2. **INSERT BATTERIES AND SIM CARD INTO THE MODULE**
   - There must be a SIM card in each module. See minkpolice.dk for advice on choosing a SIM card. Remove the pin lock from the SIM card or make sure that the SIM pin code matches the module serial number.
   - Remove the lit from the box (screws must each be loosened a little at a time).
   - Push the yellow button while pulling up the SIM card holder.

- Insert your SIM card into the SIM card holder, then insert the card holder into the module.

- Insert 4 AA batteries into the battery holder and insert the connector as shown in the picture on the right. Place the battery holder in the box and make sure not to squeeze the wires when placing the lit back onto the module. You may fold down the wire by pushing it down carefully. We recommend using Energizer L91 Ultimate Lithium batteries.

- Screw the lit tightly onto the box by tightening the each screw a little at a time.
- If your module has an external antenna, the antenna must be screwed on.

2.2. Activate the magnetic switch inside the box:
Place the magnet holder on the red dots on the box. The module will then give off a beep.

The module will now automatically connect to the MinkPolice server, and after about 30 seconds it will give off two long beeps. The module is now registered, and it will appear in your Trap Overview on minkpolice.dk. If you register several modules, they will all appear in the Trap Overview with their individual status. Read more about the user online interface later in this manual.
If the module gives off three short beeps instead of two long beeps, it is because the module did not connect to the server. See possible causes and solutions in the section *Troubleshooting* in the end of this manual.

3. **SET YOUR PREFERENCES**
On your user profile on www.minkpolice.dk you can configure time of daily reports, and to whom email and/or SMS reports should be sent. Read more about this in the section *Online user interface on minkpolice.dk*.

Mounting the module on a trap

It is recommended to mount the module onto the trap and then adjust the length of the string that connects the magnet holder to the trap door.

Mounting on cage traps

- Insert the two plastic strips into the holes in the corners of the module.
- Mount the module onto the trap. It is recommended to place the module on the side of the trap. If the module is mounted on top of the trap, birds can release the magnet from the module while sitting on the trap, and thereby cause a false alarm.
- Load the trap and fasten the carabiner hook (with string) to the trap door. Fasten the other end of the string to the magnet holder on the module. Shorten the string to a length where the magnet holder will be pulled off the module when the trap shuts.
- Test the system several times – when the trap shuts, you should hear two long beeps ("OK") and subsequently receive an SMS or email within 60 seconds. Alternatively, you can log into your profile to see the status of the trap. Wait for an alarm message before placing the magnet holder back onto the module.
- If your module has an external antenna, the antenna should point upwards for optimal signal reception.

Mounting on wooden traps

- Remove the module lit to get access to the screw holes underneath the lit screws. Remember to loosen each screw a little at a time.
- Shorten the string to a length where the magnet holder will be pulled off the module when the trap shuts.
- Test the system several times – when the trap shuts, you should hear two long beeps ("OK") and subsequently receive an SMS or email within 60 seconds. Alternatively, you can log into your profile to see the status of the trap. Wait for an alarm message before placing the magnet holder back onto the module.
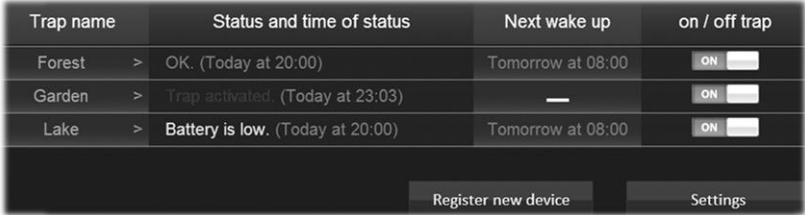
When the trap shuts

After inspecting a released trap, simply load the trap and place the magnet holder onto the red dots on the box. The module will then report an "OK" status to your profile on minkpolice.dk. In the following section you can read how to register a catch on your online user profile.

Online user interface on minkpolice.dk

Trap Overview

When logging into your user profile on www.minkpolice.dk you will see an overview of all registered modules. The module constantly monitors the trap door, and you will receive a message as soon as the trap door shuts. The module can also be configured to report an "I'm alive" status one or two times per day.

History

By clicking on a trap in the Trap Overview

Trap name	Status and time of status	Next wake up	on / off trap
Forest >	OK. (Today at 20:00)	Tomorrow at 08:00	ON
Garden >	Trap activated. (Today at 23:03)	—	ON
Lake >	Battery is low. (Today at 20:00)	Tomorrow at 08:00	ON
		Register new device	Settings

you can get a historical overview of all reports a module has ever sent. Next to each report you can see the battery level and signal strength of the module at the given time.

In cases where the trap has been released you can register the catch by clicking on *Register catch* next to the report. The catch is stored in our database and can be drawn out for statistics if you have given permission to this.

Register catches from other traps on your profile

On your profile you can register traps which do not have a MinkPolice module on them, and you can register what you have caught in these traps. To register such a trap, click on the button *Register new device*. During registration, tick the box next to *This is not a MinkPolice module*.
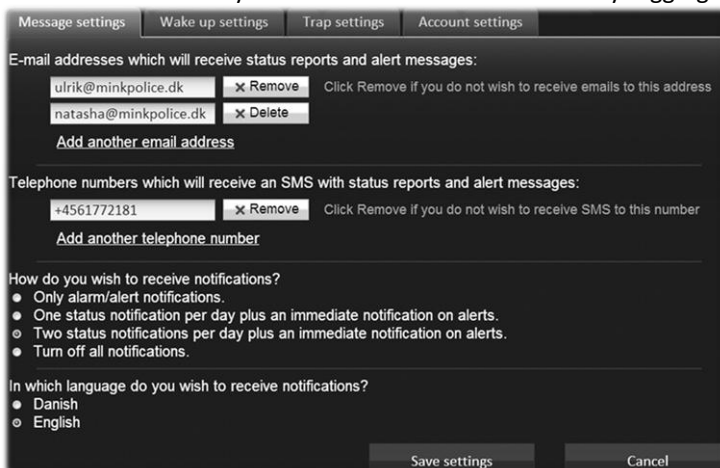
Setting preferences for reporting

Click the button "Settings". A number of tabs now show up. Below is a short introduction to each tab.

Message settings:

Here you can either add or delete email addresses and telephone numbers that are to receive reports about the status of the modules. You can also choose one of the following models for reporting:

- *Only alarm/alert notifications.* With this setting you will only receive an SMS/email if the trap is shut or if a module does not report as expected (e.g. due to low battery).
- *One status report per day plus an immediate notification on alerts.* With this setting you will receive one report (email and/or SMS) with a collected status of all modules. You will also receive an immediate notification in case of an alarm or if the module does not report as expected.
- *Two status reports per day plus an immediate notification on alerts.* Same as the previous setting, only with two status reports per day.
- *Turn off all status notifications.* With this setting you will never receive emails or SMS from MinkPolice. You may still control the module status by logging into your profile.
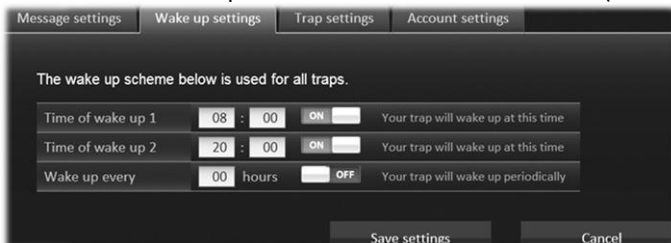

Wake up settings:

Here you can configure at which time your modules should "wake up" and send an "I'm alive" message along with trap status. You can choose between the following settings:

- Set the time of the two daily "I'm alive" reports.
- Turn off one of the two daily "I'm alive" reports.. Click the "ON/OFF" button.
- Let the module send "I'm alive" reports with certain time interval (1-36 hours).

Remember to click "Save Settings" after making changes.

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Here you can change the name of a trap or you can delete it from the overview. If you delete a module, you will no longer receive status reports from this module. After deleting, you may of course re-register the module.

Account settings

Here you can change password and email address that you use for logging into the user profile. You can also delete your profile from minkpolice.dk.

Troubleshooting

There are three basic steps that should be followed if a module does not work as expected.

Step 1:

- Activate the magnetic switch in the box by either taking magnet off or placing it on the red dots. You should now hear a long beep. If you hear no sound, go to Step 2.
- Wait for one of the following signals from the module (please wait up to several minutes):
  - 🔊 **Two long beeps**: The module connected to the server successfully – everything is OK.
  - 🔊 **Three short beeps**: The module did not connect to the server.

  On the next page you can see all possible reasons for unsuccessful attempt to connect to the server.

Step 2:

- Reset the module. This is done by placing the magnet holder on the surface of the box which is opposite the red dots. This is shown in the pictures on the right.
- Hold the magnet holder on the box for three seconds, and the module will give off a long beep. The module is now reset.
- Go to Step 1 and see if the module will connect to the server as expected.

Step 3:

- If the module still gives off three short beeps (i.e. connection attempt failed), you may try to move the module to a location where network reception is

known to be good (e.g. a place where it has previously connected successfully) and try again.

- If the module gives no sound when placing a magnet on the two red dots or when resetting, you should check the batteries:
  1. Are they inserted correctly?
  2. Is the battery connector inserted correctly into the module?
  3. Are the batteries old?

Feel free to contact our technical support on help@minkpolice.dk if the above steps did not help or if you have any further questions.

Possible reasons why the module cannot connect to the server

If you have concluded that the module could not connect successfully to the server (see Step 1 above), the reason can be one of the following:

- *Poor reception.* The problem can be solved by either moving the trap to a place with better reception or by inserting a SIM card from another provider. Remember that trees, buildings etc. can shield off the mobile signal. You can always test the reception on a certain location as described in Step 1 above. Please contact us for advice on choosing a mobile operator or to hear about your options of replacing your module with one that has an external antenna.
- *Temporary network problems*. The module will automatically try to reconnect in case of an unsuccessful attempt. Thus, this problem will solve itself once the network problems are over.
- *Low battery voltage.* If the batteries are not new, this can be the reason. You may try replacing the batteries.
- *Low balance on your mobile credit account.* Note that some mobile operators require a certain minimum balance in order for mobile data to work.
- GPRS data may not be switched on for your SIM card. Ask your mobile operator.

  If a module does not successfully connect to the server, it will automatically retry until it does connect.

More help on www.minkpolice.dk

On the webpage you may click on "Help" and get information about the following and more:

- Charge for using the module.
- Help for choosing a SIM card.
- Help for removal of the pin code on your SIM card.
- The reason why a status message only arrives one hour after expected time.
- How to turn off the module (and why it is usually not necessary).

⚠ Safety precautions

- MinkPolice is only for outdoor use.
- Fasten the lit tightly when batteries are in the module.
- Do not expose the module to water or moisture. Do not unscrew the lit outdoors in rainy weather.
- Immediately remove the battery connector from the module if the module gives off an unusual smell or if it develops heat.
- Only use regular AA-batteries (1.5V). We recommend *Energizer L91 Ultimate Lithium*.
- Never attempt to recharge non-rechargeable batteries!

Technical specifications

Network	GSM Quad-band (850/900/1800/1900 MHz). Will work world wide
Batteries	4xAA (1.5V)
Expected battery life	1 year with two daily reports
Dimensions	65x95x55mm
Weight	230g (incl. 4 AA-batteries)
Protection	IP67 (immersion down to 1m)
Material	Polycarbonate

CE ♲

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