TRAPMASTER

Intelligent Trap Alerts

Overview

Button for programming & resetting

SIM card holder

Sensor holder

Sensor

Screws

Magnet

4 slide switches for setting the messaging options

GSM Status LEDs

Holes for mounting

Optional: External antenna

Commissioning

1. **Insert SIM card (disable PIN beforehand)**
2. **Connect the battery**
3. **Program trap alert by phone call or SMS**
4. **Configure status messages (via slide switches)**
5. **Attach sensor & magnet to your trap**
6. **Ready. Set your trap**

Inserting the SIM card

You require a prepaid SIM card. When purchasing the card, select the network operator which from past experience offers you the best reception in the area.

> **The PIN request must be disabled before you can use the SIM card in the TRAPMASTER!**

If you have purchased a prepared SIM card from us, the step described above is not required. Otherwise, you can disable the PIN with an old mobile phone, into which standard SIM cards fit. Many modern smartphones only accept the smaller micro- or nano-SIMs. Select the menu option "Disable PIN" - this can be found e.g. in old Nokia models in the section "Settings → Security → PIN Code → Request Off".

USB adapters (search for "Sim Card Reader") for the PC are an alternative, which enable you to read and edit the SIM card via your computer.
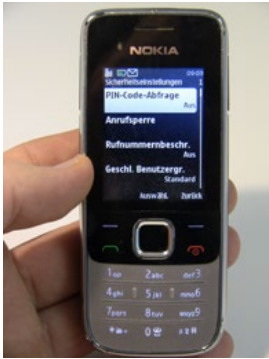
Disabling the PIN with an old mobile phone

Alternative: USB SIM card reader

If a problem occurs during the commissioning (e.g. PIN not disabled or no reception), the TRAPMASTER will inform you by means of **acoustic and optical error codes** (beeping and blinking). You will find a list of the error codes at the end of this document.
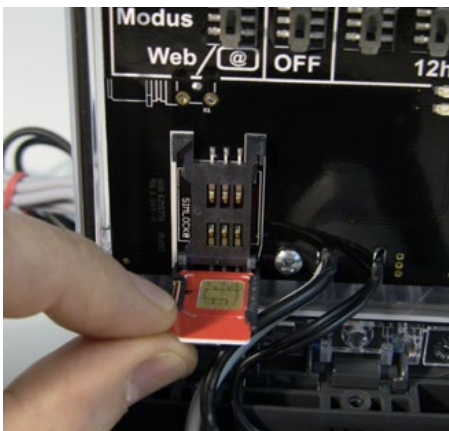
Now store the telephone number of the SIM card in your telephone under the name you want to give to the trap (e.g. "trap at the stream"). The telephone number is usually not shown on the SIM card itself but only on the surrounding plastic, from which the SIM card is removed (cheque card format) or on the associated documents.

Push the SIM card into the guide in the fold-out part of the SIM card holder. It locks by **pressing and pushing** it upwards and holds the SIM card securely in place.

Connecting the battery

The TRAPMASTER is supplied with special batteries. The battery is pre-charged at delivery. However, a full charge before commissioning is recommended.

Connect the plug to the socket on the battery. No telephone number(s) are programmed in the trap alert the first time it is connected and it will beep 9 times. However, if you reactivate the trap alert after a break, it will find the numbers last stored and sends you a welcome SMS.

Programming the device by phone call or SMS

You can program the TRAPMASTER either by phone call or SMS. If only one mobile phone number is to be notified, we recommend programming by call. Multiple recipient numbers can only be stored via SMS.

Programming by phone call (only for 1 number)

- Briefly press the "Set/Reset" button. A short beep will sound.

- The TRAPMASTER logs into the mobile phone network (can be identified by the two small "GSM" LEDs; one blinks, the other LED is permanently lit). This takes a few seconds and is acknowledged by a second beep.

- **Wait for the 2nd beep!**
  A 2-minute period for programming the TRAPMASTER starts.

- **Now call the trap alert** (i.e. the number of the inserted SIM card) **from the mobile phone, to which the TRAPMASTER is to send capture notifications and status messages.**

- The TRAPMASTER receives and rejects your call. Any stored numbers are deleted and your mobile number is stored as the main number.

- You will receive a welcome SMS a short time later for confirmation.

Alternative: Programming via SMS (required for several numbers)

The trap alert can inform up to 4 recipients. To program these numbers you need to send an SMS from your mobile telephone to the TRAPMASTER in the following format:

Main number 1: The trap alert will automatically store the telephone number from which you send the SMS as the main number. It then reacts to the slide switches. If no other numbers are to be entered, the SMS may only contain the text *TM*, so that the TRAPMASTER can identify the SMS.

Additional numbers 2 - 4: TM2: and optionally TM3: and TM4: must be entered before the respective number. The numbers must start with the country code, e.g. in UK: +44123456789.

> **By default, the additional numbers only receive the capture SMS and capture reminders. Only the main number additionally receives the daily status messages and important warning messages (e.g. "Credit low" or "Battery nearly empty").**

The numbers in the programming SMS may be separated by a comma, space, the enter key or a semicolon. You do not have to worry about upper or lower case spelling. The telephone numbers must not contain any spaces.

However, if you would like one (or all) additional number(s) to receive the same capture, status and warning messages as the main number, enter an "S" directly behind the respective number.

Example: In addition to the main number, two further numbers are to be entered, of which the first one should receive exactly the same status information (dependent on the switch positions) as the main number.
The programming SMS looks like this: ***TM2:+44123456789S, TM3:+44987654321***

- Briefly press the "Set/Reset" button. A short beep will sound.

- The TRAPMASTER logs into the mobile phone network (can be identified by the two small "GSM" LEDs, one blinks, the other LED is permanently lit). This takes a few seconds and is confirmed by a second beep.

Wait for the 2nd beep! A 2-minute period for programming the trap alert now starts.

- **Send the prepared SMS to the TRAPMASTER during this period.**

- The trap alert acknowledges the receipt with a beep and sends a welcome SMS to all the entered numbers a short time later.

Setting a preferred time for the status messages

Without further configuration, you will receive status messages as desired (dependent on the switch position) at 24 / 12 hour intervals **from the time of commissioning. Alternatively, you can specify a preferred time instead:**

- After programming the destination numbers, simply open another programming time window by pressing the "Set / Reset" button briefly once again. Wait for the 2nd beep! (see above)

- **Now send an SMS with the following text to your trap alert:**
  TMU: Number of your trap alert, SUHR: HH:MM
  e.g. *TMU: +4987654321, SUHR: 08:30*

- Enter the time in the 24-hour format.

- To delete the preferred time, the TRAPMASTER must be reset and reprogrammed.

Setting the message options
Slide switch mode: "Call/SMS" or "Web/Email"

On the first slide switch you select the operating mode of the trap alert, i.e. whether the TRAPMASTER informs you directly through your **mobile phone via SMS and phone call**, or whether you would rather administer your traps via **Internet and email.**

Use the next 3 slide switches to the right to configure the settings for the **"Call/SMS"** mode. The "Web/Email" mode is especially suitable if you monitor a very large number of traps. In this case, messages via "SMS/Call" can become confusing, and online administration provides greater clarity and saves time.

> **For Web/Email mode, an integration into the online trap administration of "Wild & Hund Revierwelt" (currently available in German only) is pre-configured. (www.Revierwelt.de).**

Slide switch Status Info "ON/OFF"
Daily status messages ON or OFF

You can select whether you wish to receive a daily status message or not. Given the requirement that live traps should be checked at least once a day, we recommend the "ON" setting. In this way, you can be sure (and also document it) that your trap is being reliably monitored.

Capture notifications and critical warning messages (e.g. "Battery empty" or "Credit low") are **always sent via SMS (cannot be turned off)** because of the higher reliability. **You will still receive them if you disable the daily status message.**

Slide switch "SMS/Call"
Daily status message as a call or SMS

If you have enabled the daily status message, you can now select whether this should be provided as a missed call or an SMS.

If you have selected "Call" as the notification option, you will see a missed call on your telephone. The TRAPMASTER ends the call after a few rings, normally before your mailbox accepts the call. A call is not made after a capture, giving you further indication of the capture (in addition to the capture SMS).

If SMS is selected for the status message, you will regularly receive additional information about the current battery status, signal strength and credit on the SIM card.

Of course, the SMS will give you more detailed information but the missed call does not cost anything.

Slide switch "24h/12h"
## Status message every 24 or 12 hours

Setting as to whether the status message (call or SMS) should be sent once or twice daily.

Attaching the sensor and magnet to the trap and testing

The TRAPMASTER has a dual-use sensor which can be used both as a non-contact proximity switch (especially suitable e.g. for wooden box traps) as well as a pull-off magnet (suitable for many concrete pipe traps).

The sensor unit consists of an aluminium cylinder (proximity switch) and a magnet. The proximity switch can be used in the front half.
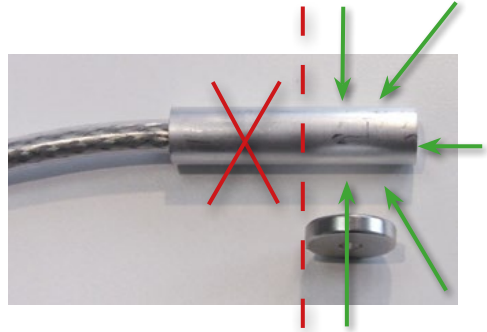
Correct	Correct	Incorrect	Incorrect	Incorrect

If the magnet is located close enough to the proximity switch, the switch closes. If the magnet moves away from the proximity switch when the trap doors close, the trap alert triggers an alarm.

The sensor can be used in 2 ways:

As a non-contact proximity switch	As a pull-off magnet
Attach the proximity switch and the magnet to your trap in such a way that they almost touch each other (less than 1 cm apart) in the set condition and move (and stay) apart clearly (> 5cm) when the trap shuts.	If you prefer triggering via a pull-off magnet, you can also attach the magnet with a thread or metal string (recommended against rodent bite damage) e.g. to the guillotine trap doors or other moving elements within the trap. The magnet is then attached to the aluminum tube.

Trap set:

Trap closed:

Monitoring is automatically activated in this type of mounting when you reset the trap.

As a pull-off magnet (continued):

You can attach the aluminum cylinder to a suitable location, e.g. the crossbar above the trap doors.

Example for pull-off magnet installation (when trap is set):

Bear in mind that in this case you always have to reattach the magnet manually when you set the trap!

Check the sensor function

The TRAPMASTER has an acoustic / optical test mode that allows you to check if the sensor was installed correctly. No SMS are sent during this test (and no charges incurred).

1. Press the **"Set/Reset"** button. Wait a few seconds until the 2nd beep sounds (as in the programming).

2. Now close the trap doors and open them again. A beep sounds as soon as the proximity switch and magnet are close enough together.
   You should hear a continuous tone when the trap is in "set" status.

3. Close the trap. The acoustic signal should stop.

You have now ensured that the sensor (and magnet) have been installed correctly. The test mode automatically ends after 2 minutes. You can also end it manually at any time earlier by pressing the "Set / Reset" button again. You will then receive an SMS with the current settings.

Attaching and securing the TRAPMASTER

You will find 4 holes in the bottom of the TRAPMASTER enclosure (when opened) for attaching the trap alert to the trap (suitable screws in the accessories bag). If possible, please attach it in such a way that the screwed cable gland points **downwards.**
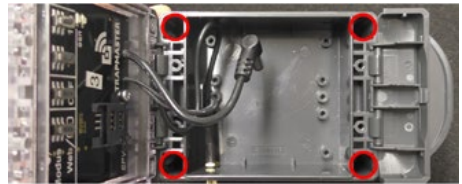
The cover can be secured with 2 screws (3 x 20 mm), in order to make it difficult for unauthorized persons to open the trap alert.

Short wastewater pipes with suitable end pieces (from a DIY store) also help to protect the trap alert. They conceal the trap alert without attracting attention and are impact-resistant. The sensor cable can be led through a small hole towards the outside. A warning sticker (e.g. "Danger: High Voltage", "Danger: Poison!") on the pipe improves the protective function.

Setting the trap

Trap monitoring is automatically activated when the proximity switch and magnet are close enough together or when the magnet is attached to the aluminum tube. The TRAP-MASTER acknowledges this with a short beep and a single blink of the LED.

Wherever possible, we recommend to use the non-contact proximity solution due to its reliability and because it requires no user interaction when setting the trap.

Any damage to the sensor cable e.g. from gnawing, tearing off or from vandalism triggers a desired (false) alarm. You thereby find out that the trap has a problem and can address it.

Ready. Your trap is now being monitored!

Basic knowledge & extended functions

Personal responsibility

A trap alert does not absolve you from your duty of care in hunting with live traps. External factors, e.g. wilful damage or the theft of a trap alert or insufficient credit or empty batteries, mean that your live traps can continue to trap without trap alert monitoring. However, if you have enabled the daily status message (which we unconditionally recommend), you will notice this through the absence of the status message or the status call and have to react.

Manually changing the credit balance check code (USSD code)

The TRAPMASTER carries out an automatic credit balance check in many mobile phone networks *(see overview of the supported providers in the menu option "Customer service" on the TRAPMASTER website).*

Unfortunately, we are unable to guarantee 100% coverage, because the credit balance check codes vary from provider to provider.

If the credit balance check does not function immediately with your provider, ask your provider about the "USSD code" for credit checking (our customer service can also help you, info@trapmaster.eu). Once you know this code, send it to your TRAPMASTER by SMS.

Example: The USSD code for your provider is: *121#

- Briefly press the "Set/Reset" button. A short beep will sound.

- **The TRAPMASTER now logs into the mobile network. Wait for the 2nd beep.**

- Send an SMS to your trap alert with the following content: ***TMC: *121#***

In most cases, the credit balance check should work now. Unfortunately, there are also some providers who do not support USSD code queries. A credit balance check is not possible in these cases.

Reset

You can reset the trap alert and delete all programmed numbers and settings:

- Hold down the "Set / Reset" button until 3 beeps sound. This will only function if the small "GSM" LEDs are not lit (i.e. the trap alert is not currently transmitting).

Capture notifications

The capture notifications are provided by SMS, because the delivery of text messages is considerably more reliable than calls.

Calls can fail if there is a problem with either the sending or the receiving party, and they are also not repeated. An SMS is more reliable because it is stored in the network for a fairly long time and may be delivered after a certain delay.

You will receive these messages:

- **Capture SMS:** within a few seconds of a capture.

- **Capture reminder (SMS):** if the trap is not checked within the next 8 hours, the trap alert reminds you of the capture. If you have enabled daily status notifications by SMS, the daily status message also includes a reminder of the capture. If you selected the phone call as status option, the call will not be made after a capture until you have checked the trap.

Reception / Antenna

The standard TRAPMASTER features a high-performance internal antenna. However, there are applications, in which the reception with the internal antenna is not good, e.g. if the trap alert is operated inside a closed metal housing.

As an option, the TRAPMASTER is available with an external antenna. In this case, please guide the external antenna to the outside and position it as high as possible. The integrated antenna is non-functional in a TRAPMASTER with an external antenna, in order to prevent malfunctions.
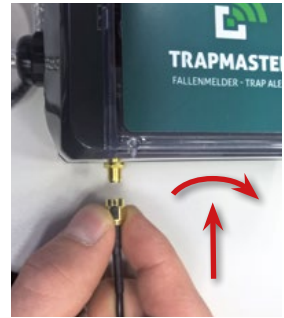
The external antenna must therefore be connected, so that the device functions!

Number of beeps / LED Signals	Meaning
3	Internal error. Disconnect battery and try again.
5	PIN not removed or no SIM card inserted or contacting problems with the SIM card.
7	Error during registration in the network. No reception?!
9	No numbers have been programmed so far.
12	Network quality very bad. SMS dispatch not possible.
15	A sender number could not be detected. Does your telephone suppress your telephone number? If so, please enable visibility of your phone number.
2 beeps without LED	Battery empty. Charging urgently required!

Battery technology & battery care

The TRAPMASTER is supplied with a special battery. This battery is designed for a very wide temperature range (down to -40°C), in order to ensure reliable trap monitoring even at prolonged minus temperatures.

Please fully charge the battery before it is first used (3 days or until the green LED on the charger turns off).

Due to tolerances of the battery and the charger, the green LED may not turn off completely and glow slightly. The battery has nevertheless been charged sufficiently.

Charging: Charge the batteries only with the supplied charger. This was specially optimized for the batteries used.

The battery should never be stored when it is almost empty. It can be stored with a full charge for up to a year. However, to care for the battery, we recommend leaving it on the charger in the off-season. There is no risk of overcharging.

Ageing of the battery: Batteries lose capacity over the course of time. If the green LED on the charger does not turn off after 3 days, the battery may nevertheless continue to be used without concern. However, it should always remain connected to the charger during charging for at least 3 days.

Miscellaneous

The TRAPMASTER trap alert is a product of
EPV Electronics GmbH
Sedanstr. 18
D-58507 Lüdenscheid
Tel. +49 (0)2351 6583001
info@trapmaster.eu
www.trapmaster.eu

Disposal of used batteries

As an end user, you are legally obliged to return all used batteries (Battery Directive); disposing of them in the household waste is prohibited.

Electronic and electrical waste / WEEE / EAR

WEEE Reg. No.: DE 29789826. This product may be not disposed of in the normal household waste at the end of its life, but must be taken to a collection point for recycling electrical and electronic devices. The recyclable materials are reusable in accordance with their labelling.
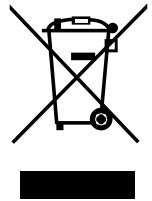
Warranty

We provide a 2-year manufacturer's warranty on the TRAPMASTER trap alert, valid from the date of the purchase by the first customer. Vandalism, damage caused by animals and damage arising from force majeure (lightning, etc.) are excluded. The battery is a wearing part and is excluded from the warranty.

Telecommunication product

This article is a telecommunication product and transmits on the frequencies 850/900/1,800/1,900 MHz with a maximum of 2W.

Notes

To facilitate administration, you can take notes of how your trap alerts are configured here:

Telephone nunber of the trap alert	Name / Location	Notified persons / mobile phone numbers