

Manual ProLTE

ProRead Version 2021.08

Firmware Version 9.3



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1. Version check

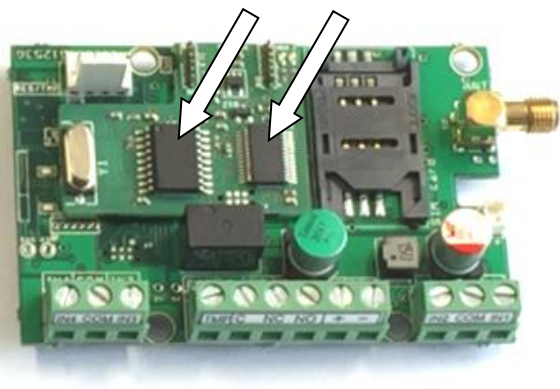
As of April 2018 the ProGSM/UMTS/LTE comes with the firmware 9. To configure the module use the PC software ProRead, version 2018.

Always use the latest software and firmware provided on USB drive.

2. Distinguish between GSM, UMTS and LTE Module



ProGSM blue PCB



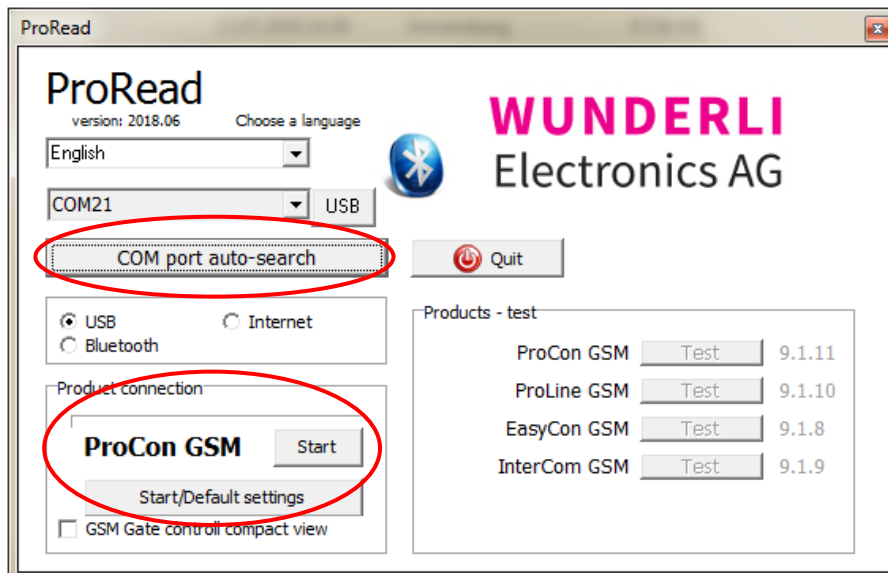
ProUMTS green PCB



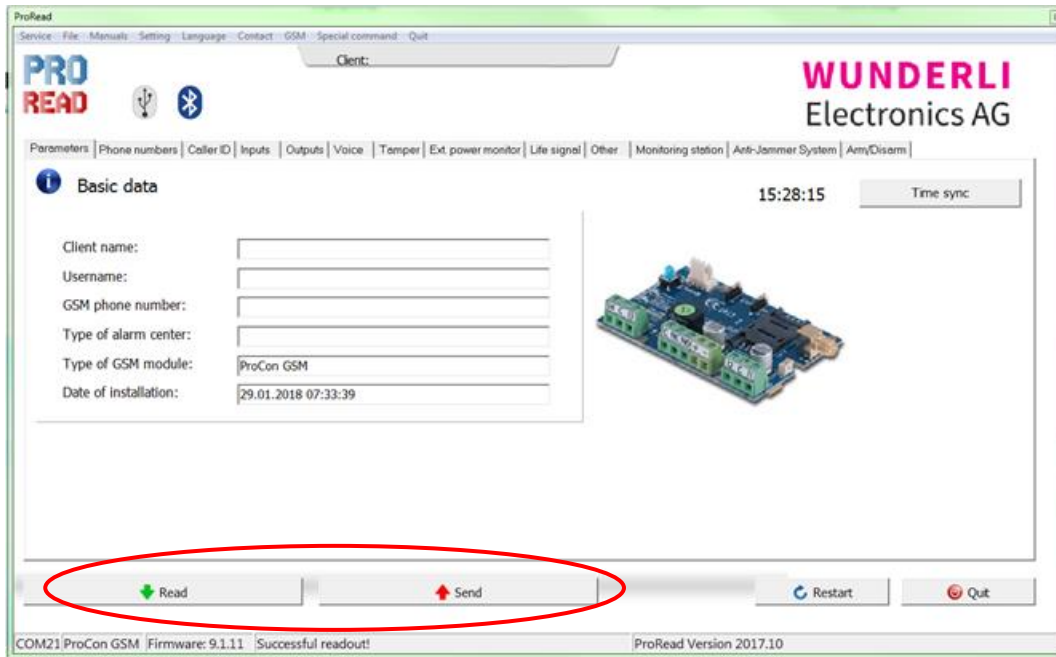
ProLTE 4G black / green PCB

3. Steps of installation

- Power off and unplug Battery.
- Insert SIM-Card (**make sure SIM-PIN is turned off**).
- Uncoil antenna, do not kink or damage the coax wire.
Do not place the antenna on the casing of the ProGSM/UMTS/LTE. Min. keep antenna at least 50cm away from module. Mount the antenna with the included magnet base or double-sided tape.
- Connect power supply.
- The red LED will continuously lit. (Boot und registration takes 40 sec).
In normal working condition the green LED is blinking. The number of blinking represents the network signal strength: (1 weak.... 5 good) aim for 3 blinks.
Read more under section: LED status.
- Connect the ProGSM/UMTS/LTE to a PC using the USB-Interface and USB extension cable.
Read more under: Install USB driver.
- Start the ProRead software.
If it shows ProGSM/UMTS/LTE, continue with „Start“.
- To start a new configuration, open the program by pressing «Start/Default setting»
Recorded voice messages won't be affected, but the configuration will be deleted.
- If the ProGSM/UMTS/LTE won't be recognized automatically, check the COM port settings in the device manager.
Read more under: Install USB driver.

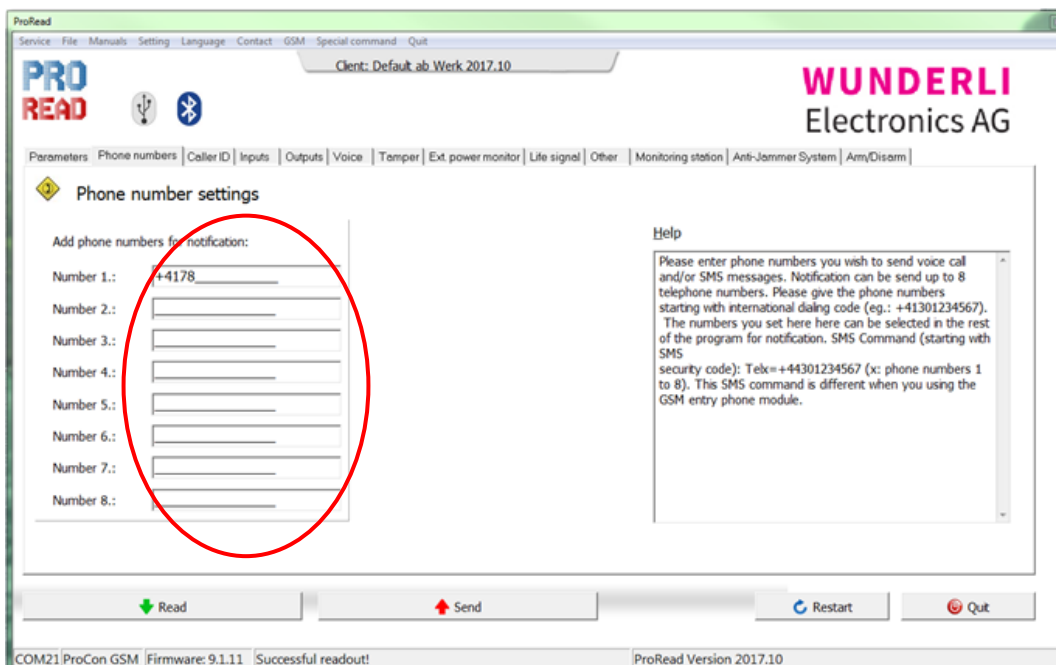


4. Read / Send configuration



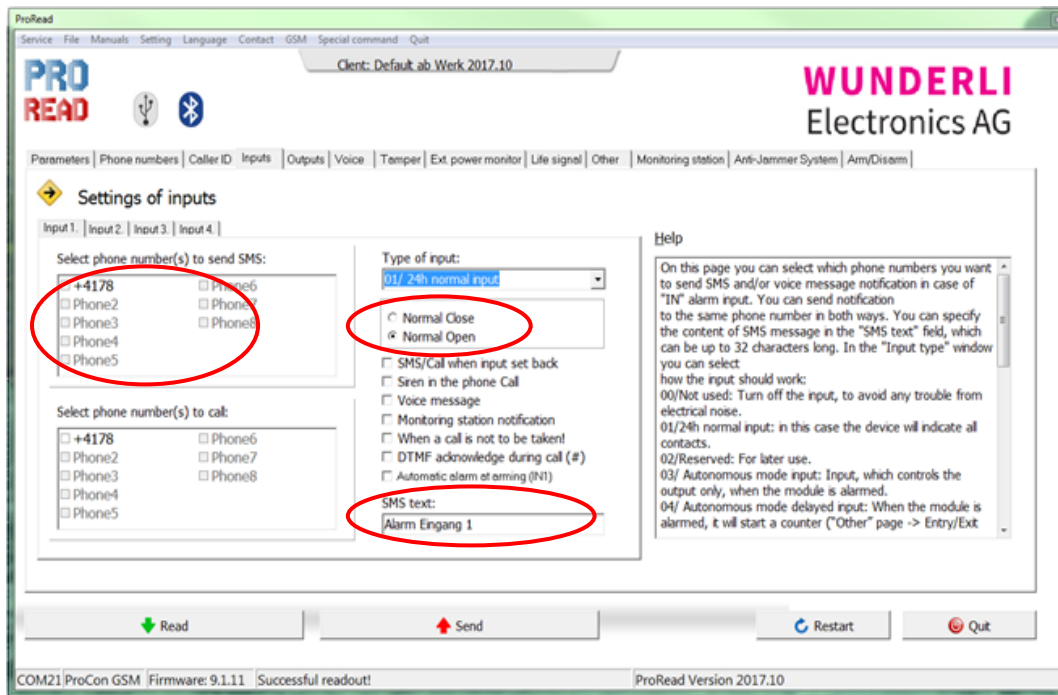
- The existing configuration will be read automatically on start-up alternatively it can be read manually by pushing the "Read" button.
- Changes are only active after they have been "Send" to the module.

5. Set target phone numbers



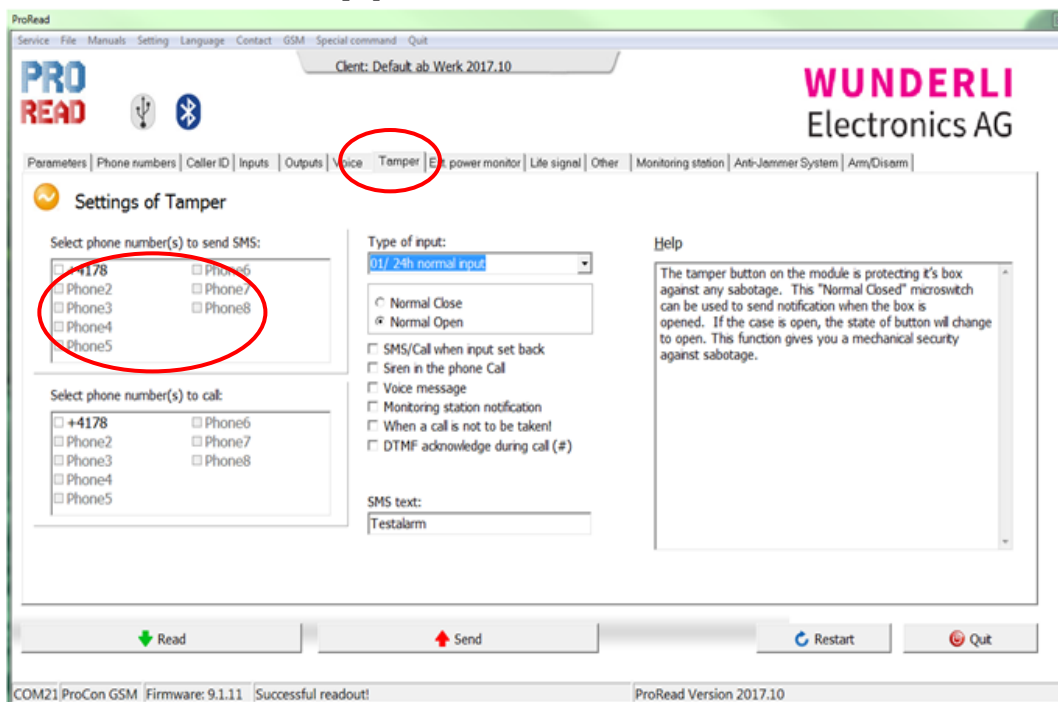
- Set up to 8 target phone numbers to be called or texted by SMS.
IMPORTANT! Don't send SMS to Landline numbers

6. Set alarm input 1-4



- Write the SMS-alarmtext for the input.
 - Set input to normaly open (NO) or normaly close (NC).
 - Select the phonbe numbers to receive the alarm.
- IMPORTANT! Don't send SMS to Landline numbers**

7. Test alarm send by push on front button



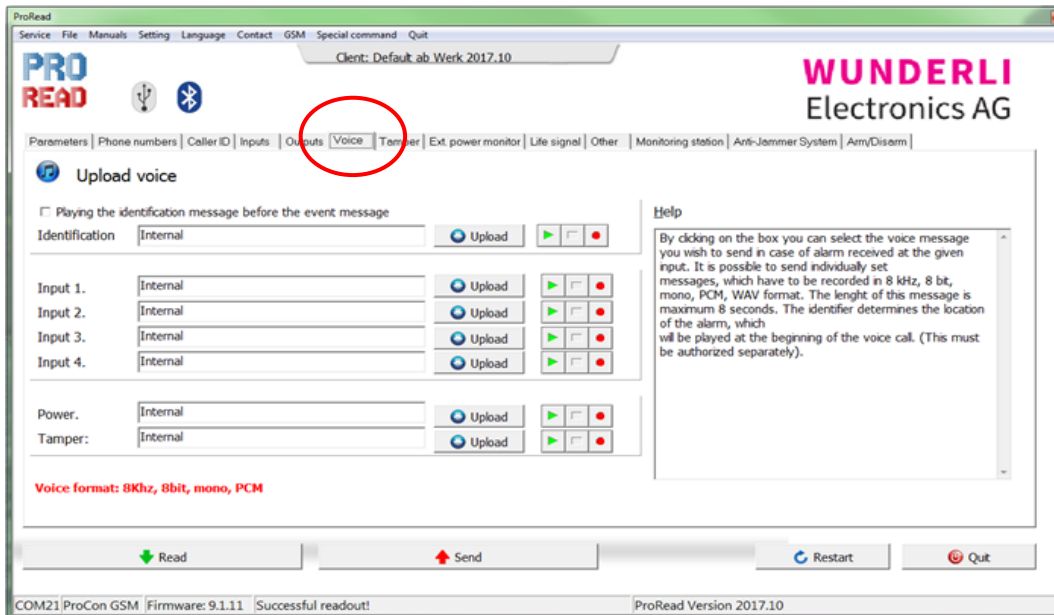
- On the 230V Version, the Tamper input is connected to the case front button to send a test alarm.
 - Select the phonbe numbers to receive this test alarm (like SMS).
- IMPORTANT! Don't send SMS to Landline numbers**

8. Voice call with acknowledgment

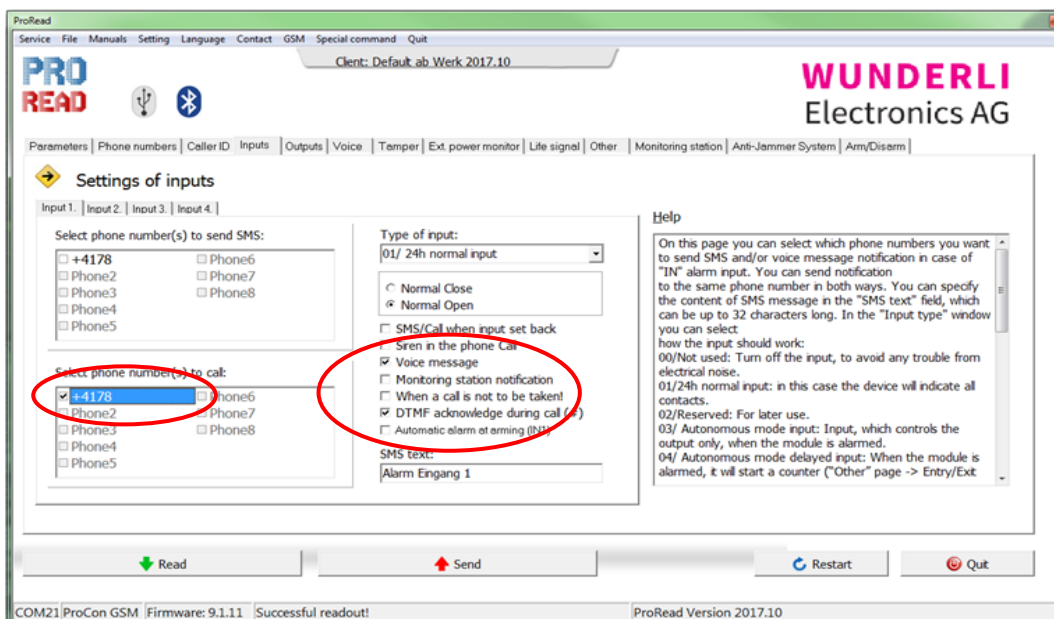
In addition to SMS, it is also possible to alert with a voice alarm. The called party can acknowledge reception of the alarm on his/her phone with the [#] key and stop further processing of the alarm. The module will confirm with voice prompt.



If the announcement is not audible or cannot be confirmed with the [#] key, check for the latest firmware 9 and perform a firmware update.

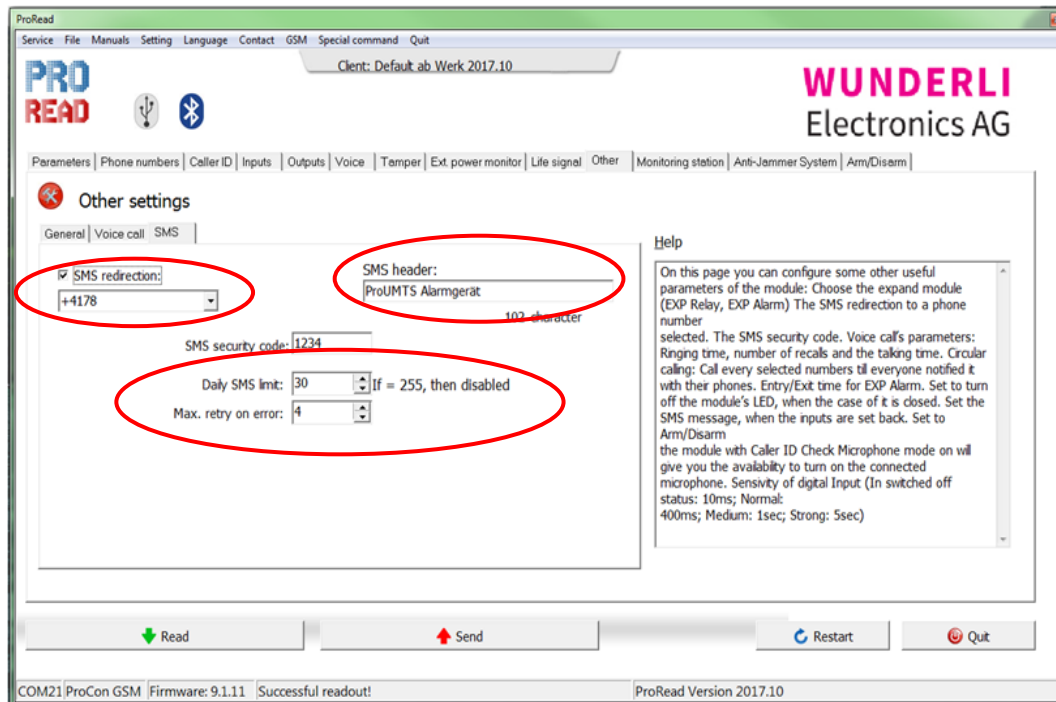


- Under "Voice" the alarm messages are recorded per input.
(with internal microphone on the computer or with an external USB microphone)
- External *.wav files can be recorded via Audacity (8kHz, 8Bit, mono, PCM).
- Upload recordings or *.wav files individually to the module via upload.



- Select the target numbers for voice calls at the respective input.
- Select "Voice message" and "DTMF acknowledge during call (#)".
- Voice prompt can now be acknowledged by pressing [#] on called telephone. Accordingly, the alarm sequence is interrupted.

9. Additional parameters SMS credit alert



- SMS redirection allows you to specify a target number to which incoming text messages are forwarded (eg: Credit warnings from the provider).
- The SMS header, for example, serves as a location message and is preceding to each SMS.



The "Daily SMS limit" defines how many SMS are sent per day at max.

Attention: with 0 no SMS will be sent at all

Factory setting: 30 SMS / day



- At provider side, de-activate the SMS credit information after each activity, as this will empty your prepaid card if SMS redirection is activated. Do this by either inserting the SIM into a mobile phone and perform call according to table below or contact your SIM card owners mobile provider support center.

Swisscom:

Deactivate credit info: *106*10# Call

Check balances: *130# Call

Sunrise:

Credit information: unsupported

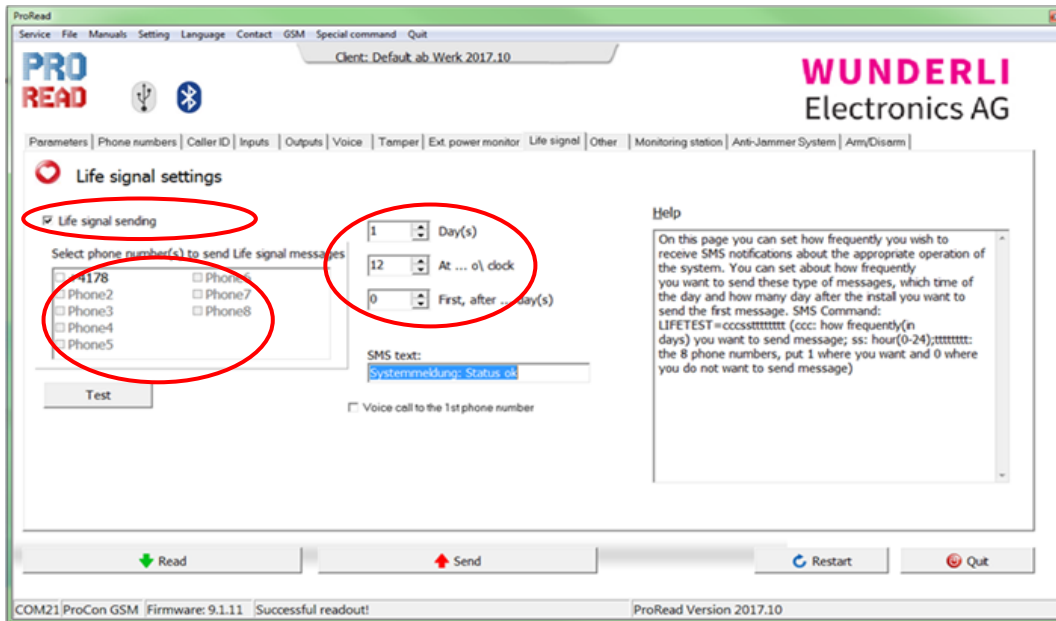
Check balances: *121# Call

Salt (Orange):

Credit information: unsupported

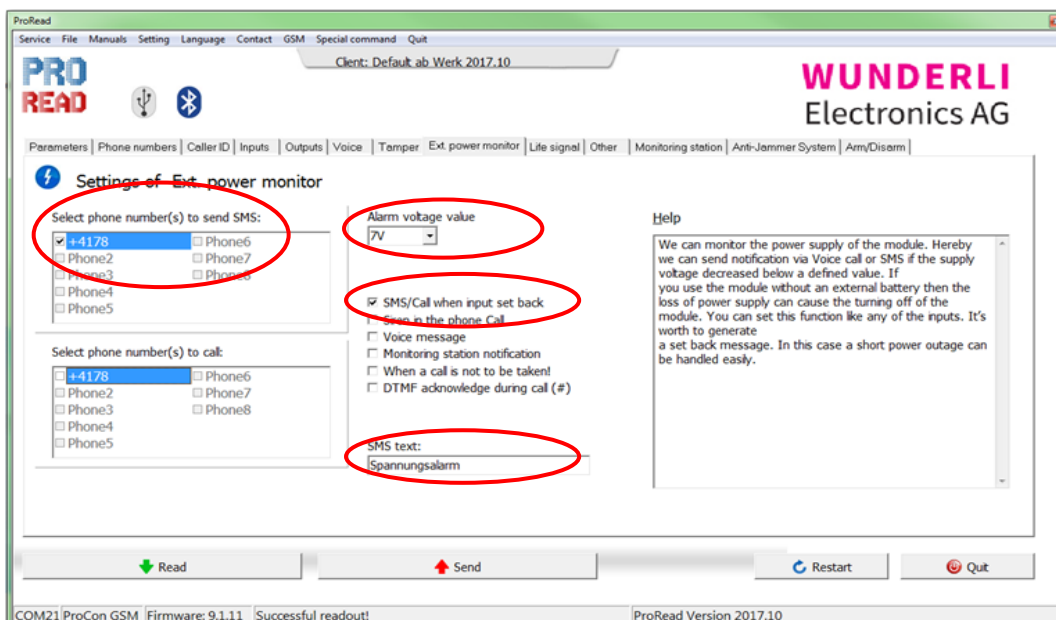
Check balances: #121# Call

10. Periodic status message (Life signal)



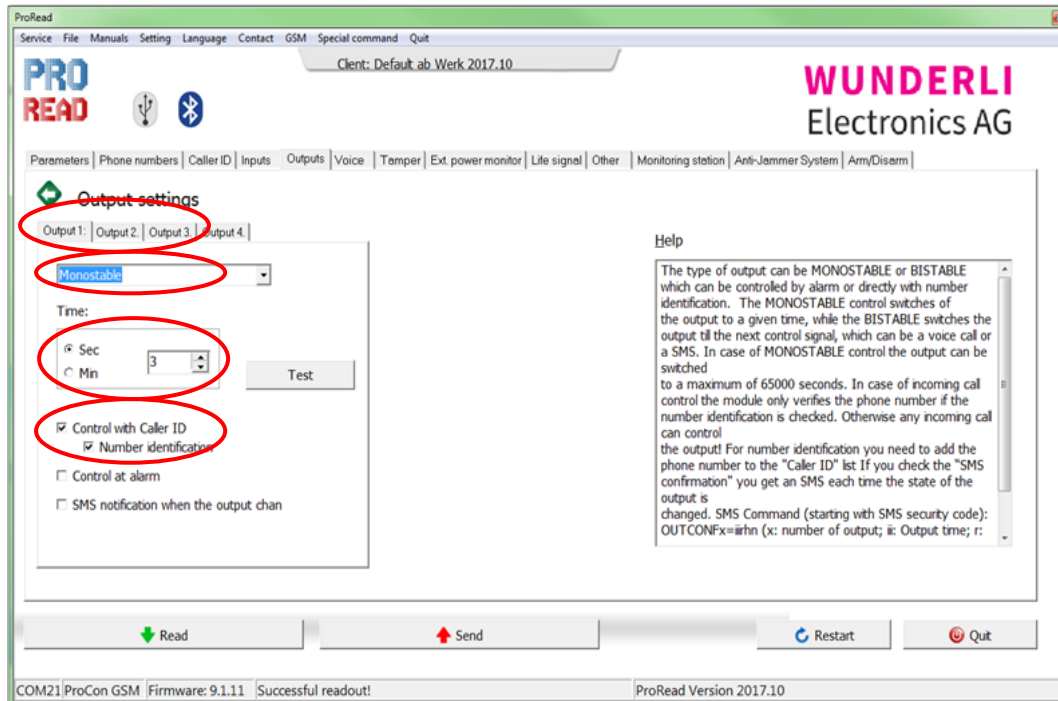
- The ProGSM / UMTS/LTE is configured from factory to provide a periodic status message to a predefined number.
This also prevents de-activation of prepaid SIM cards when not used too often.
- You can deactivate this update message or select the target numbers.
- Define the interval, the time and start from today.

11. Powersupply monitoring



- This monitors the power supply. (230V / 12V)
- Define the target numbers that will be alerted in the event of a power failure.
- "Set back" If the operating voltage recovers within the battery life (~ 6-8h), an SMS with the addition "Reset" will be sent to the same receivers.

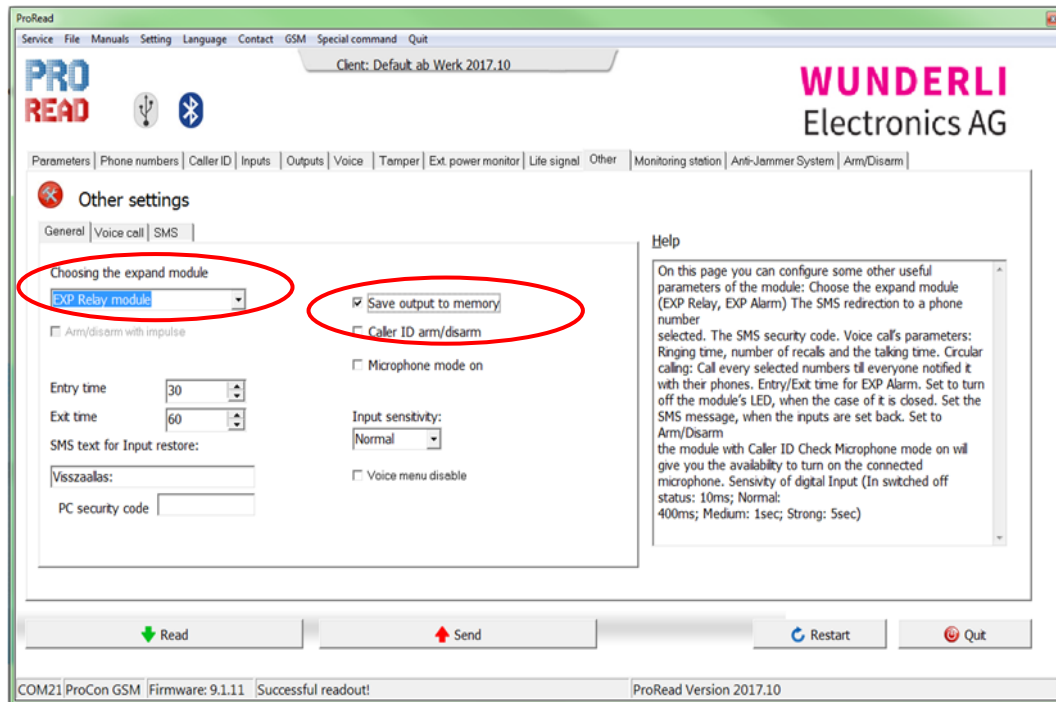
12. Define outputs (relays)



- Monostable means that the relay is activated for a certain time period
- Bistable means, ON and OFF controlled with commands
- Activation by SMS or via call
- We recommend usage of SMS to control the output. But it's also possible to control output with Caller ID. It can be defined if any caller will trigger or caller must be listed.

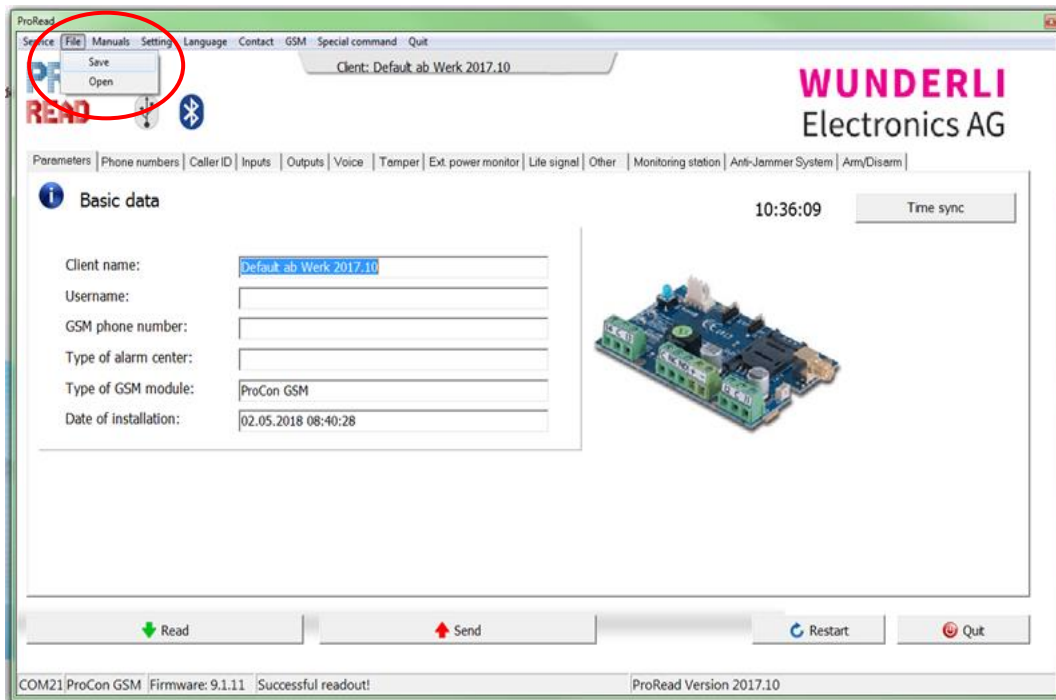
13. Important relay parameters

ProGSM/UMTS/LTE with optional two relays (2R), the following settings are important:



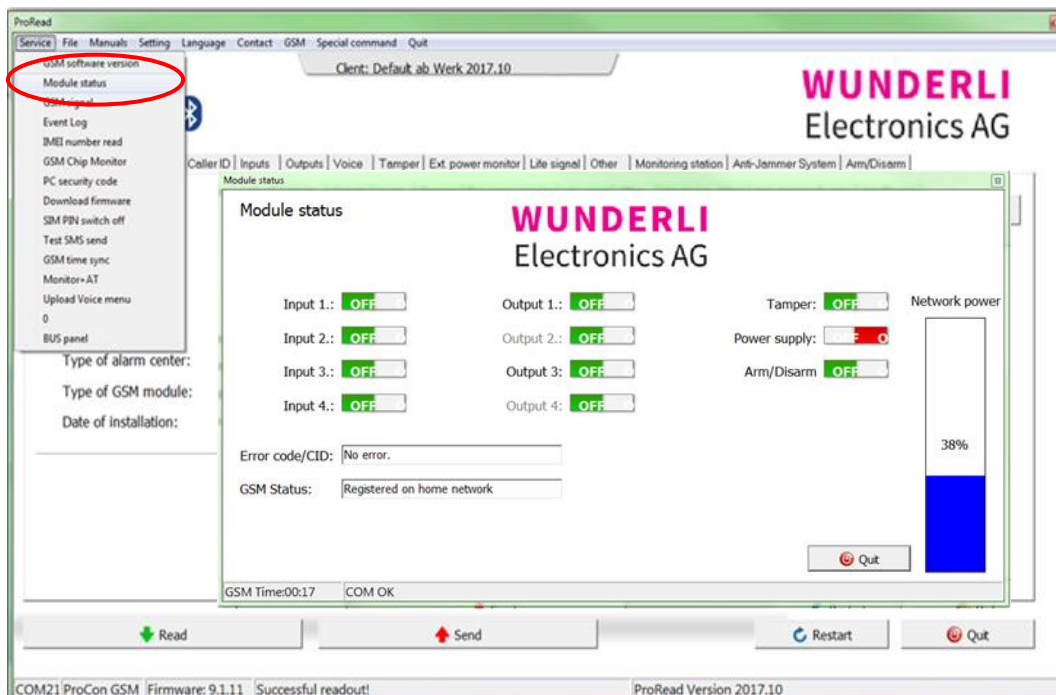
- Relay 2 is controlled by the add-on module.
It sits on a socket next to the SIM slot on the Modem Print.
- Accordingly, the appropriate panel must be selected:
Panel with 3 terminals and small relays EXP Relay Modul
- With save output status, original state will be restored after a power failure.

14. Save config file on PC



- Under File / Save the config file can be saved local on PC.

15. Function control



- Under Service / Module Status you can monitor status, inputs and outputs as well as mobile network reception strength in real time.
- On mobile activity, the red LED on the module lights up.

16. Troubleshooting USB driver

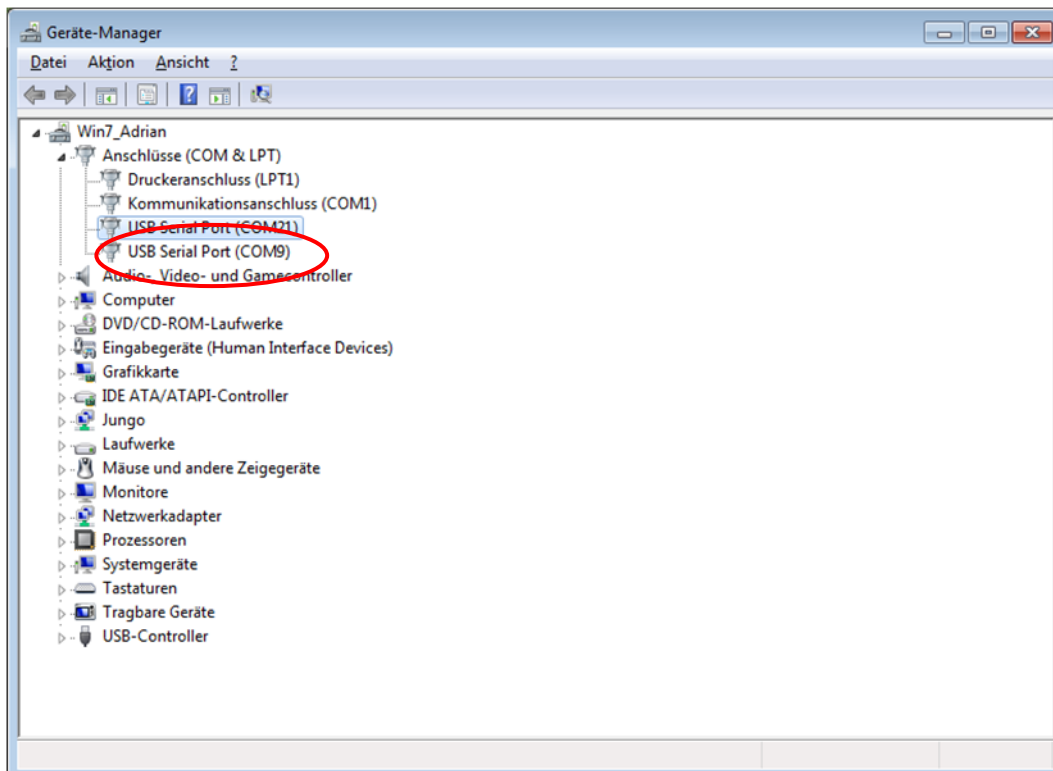
If no connection to the ProGSM/UMTS/LTE module is possible, it is often caused due to the USB driver issues, which was not installed correctly by Windows. To perform a manual installation, admin rights are required.

Check the installation under Windows:

Connect only via USB Interface to PC, no ProGSM/UMTS/LTE module.

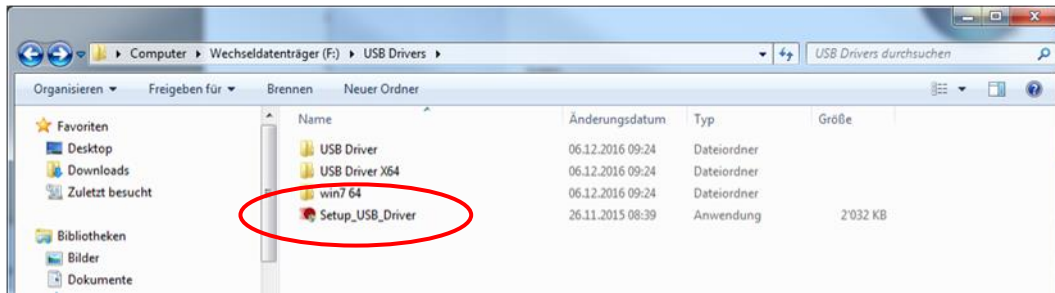


Plug the USB interface directly or via the provided USB cable into your PC. Check Windows Device Manager (Device Manager), the USB adapter with its COM port should be visible under USB Serial Port (COMxy). Check by unplug, wait and insert again USB Interface its USB port should disappear and appear again in Device Manager.



Installation of USB Driver File

If the driver has an exclamation mark or does not respond as expected, unplug the Interface and install the supplied Driver Setup_USB_Driver.exe on USB Stick. Restart the PC and then plug in the adapter again. Check via Device Manager as before.



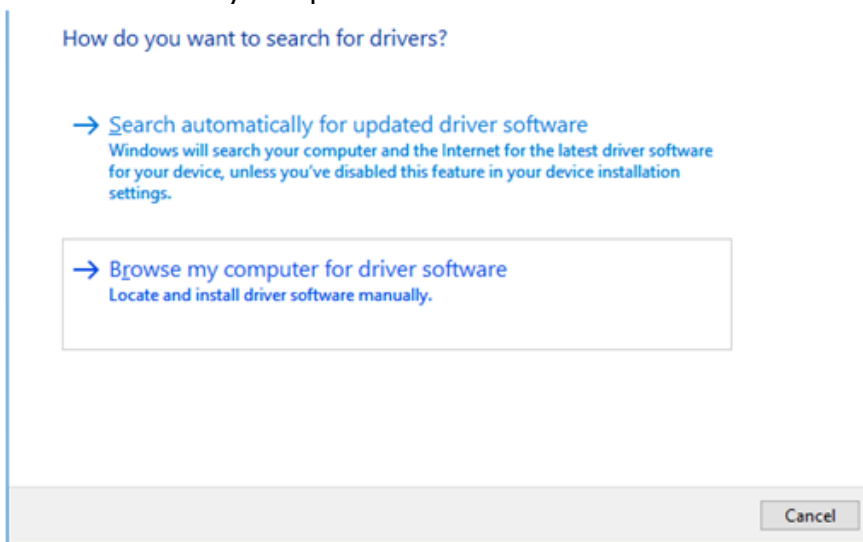
Manual installation of the driver:

Alternatively, the drivers can also be installed manually via the Device Manager.

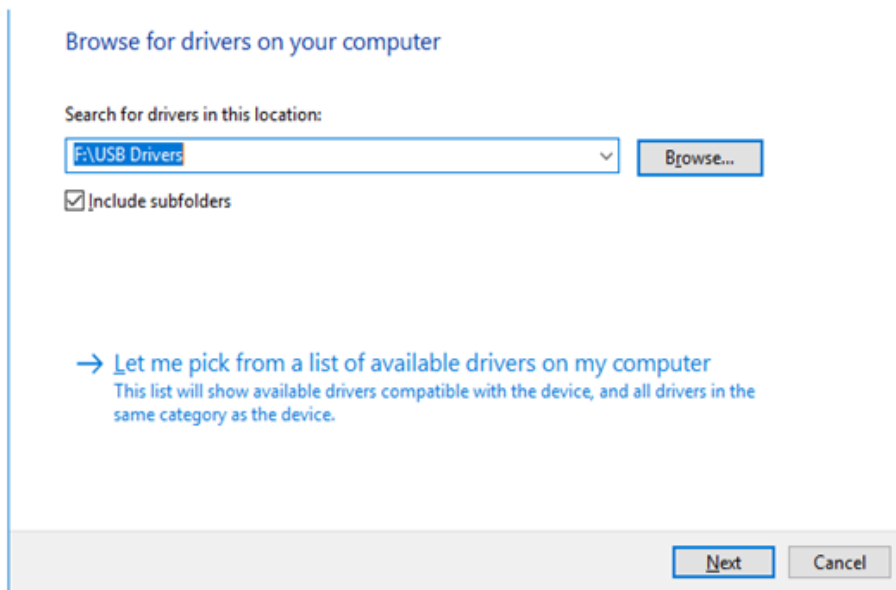
Right-click on the device with an exclamation point, this can be listed as "FT323 USB UART" or "USB Serial Port"



- Update driver software
- Browse my Computer for driver software



From the supplied USB stick select the folder "USB Driver".
Include subfolders.



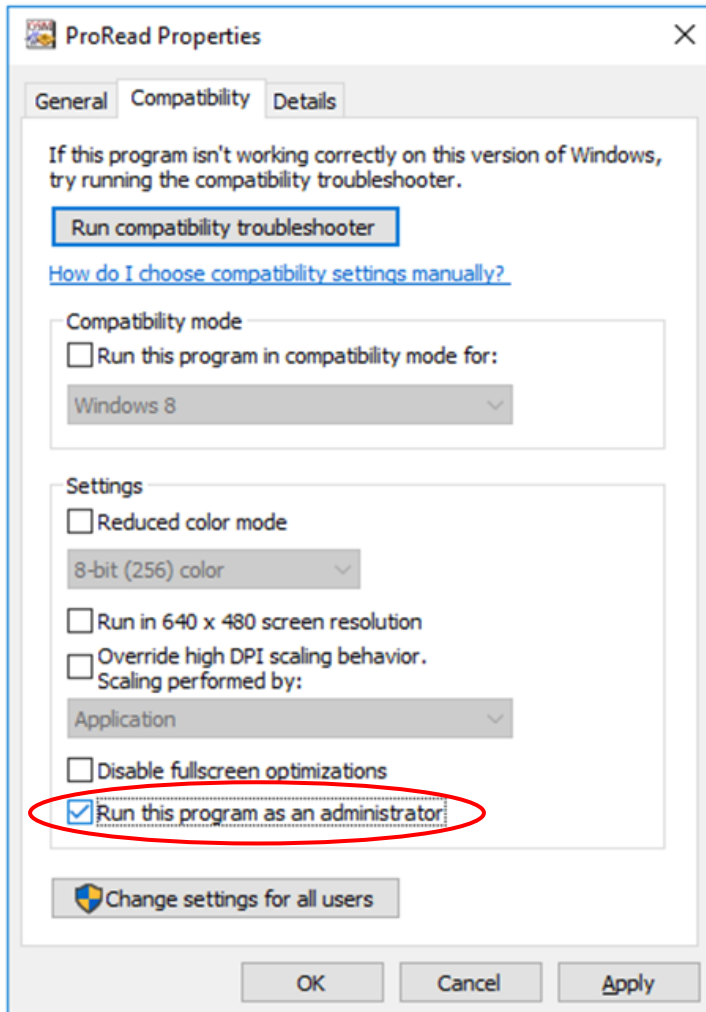
Select and install the suggested driver according to the operating system.



17. Troubleshooting ProRead

The ProRead needs read and write permission on the drive from which it is running.
Some Antivirus prevent operation from USB Drives.
Move a copy from the USB stick content on the PC folder like C: / ProRead /.
Also running directly from a zip file does not work reliably.

If errors occur during execution, it helps to run Pro Read as administrator.
Right-click on ProRead.exe and select Properties.



[illegible]

18. SMS commands

1234t	Request status
1234k1	Activates output 1 (monostable)
1234k1on	Activates output 1 (bistable)
1234k1of	Disables output 1 (bistable)
1234CODE=5632	Change code from 1234 to 5632

19. LED status

Red led lights up after turning on for approx. 30-50 seconds.

Green led shows signal strength during operation (1-2 weak, 3 okay, 4-5 good)

Blinking red and green led together:

- 1x Modem is configured
- 2x Module does not work reliably
- 3x no SIM card installed
- 4x SIM card is locked with PIN
- 10x Device in modem mode, restart via ON / OFF required

20. Technical data

Supply: 12V provided by 230V power supply
 Range 9..16VDC, 1.2A max. on empty battery

Inputs: 4 NC or NO

Outputs: relay 30V / 1A

Frequency: B1/B3/B5/B7/B8/B20/B38/B40/B41, 900MHz/1800MHz

21. Disclaimer

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