


Description MAG8000 GSM/GPRS Toolbox ©T.Milz 2014

Basic Settings:


MAG8000 GSM/GPRS Toolbox V1.20

SMS No.:

BASE

EMAIL

TIMEPROG

ALARMS

OTHER

Predefined Providers:

Germany

Vodafone.de

↓ Apply ↓

Only ticked boxes will be transmitted!

P3

☐

Sms Center:

P2

☐

MCC:*

P10

☐

APN:

P11

☐

APN User:

P12

☐

APN Pass:

P13

☐

DNS Server:*

* Only needed In special cases

P7

☒

Sms Alarm1:

P8

☒

Sms Alarm2:

P9

☒

Sms Recieve Values:

P52

☐

Transmission Mode:

P51

☐

Ident String:

P53

☐

Analog Input:

Do Not set Sms-Masters before anything Is correct!

P4

☐

Sms Master1:

P5

☐

Sms Master2:

P6

☐

Sms Master3:

☐

Tick all

Send To MAG

Many predefined providers of different countries:

SMS No.: +491738909595

BASE EMAIL TIMEPROG ALARMS OTHER

Predefined Providers:

Germany Vodafone.de

Denmark

Egypt

Estonia

Finland

France

Germany

Greece

↓ Apply ↓

Only ticked boxes will be transmitted!

P3 ☐ Sms Center:

P2 ☐ MCC:*

P10 ☐ APN:

P11 ☐ APN User:

P12 ☐ APN Pass:

P13 ☐ DNS Server:*

* Only needed in special cases

Vodafone.de

Payback

smobil

T-Mobile

Congstar

Klarmobil

O2

Changing Settings is quite easy:

SMS No.: +491738909595

BASE EMAIL TIMEPROG ALARMS OTHER

P8 ☒ Sms Alarm2: 1234567890

P9 ☒ Sms Recieve Values: 1234567890

P52 ☐ Transmission Mode: Email & SMS

P51 ☐ Ident String: Email & SMS

P53 ☐ Analog Input: SMS only

Do Not set Sms-Masters be

P4 ☐ Sms Master1: 1234567890

P5 ☐ Sms Master2: 1234567890

P6 ☐ Sms Master3: 1234567890

☐ Tick all






APP IDENT





Serial Num


APP IDENT

APP_LOCATION

Email Settings:



21:05

 **MAG8000 GSM/GPRS Toolbox V1.20**

SMS No.:

BASE

EMAIL

TIMEPROG

ALARMS

OTHER

Only ticked boxes will be transmitted!

P14

☐

SMTP-Server:

P15

☐

SMTP User:

P16

☐

SMTP Pass:

P17

☐

MAG Email:

P18

☐

Receiver 1:

P19

☐

Receiver 2:

P20

☐


Receiver 3:


☐

Tick all

Send To MAG

TimeProg:




MAG8000 GSM/GPRS Toolbox V1.20

SMS No.:

+491738909595

BASE

EMAIL

TIMEPROG

ALARMS

OTHER

Only ticked boxes will be transmitted!

P55

☒

Sample Rate:

1

min

P56

☒

Transmission Interval:

24

h

P61

☐

Sync Time:

00

:

00

Send To MAG

The image displays two side-by-side screenshots of the MAG8000 GSM/GPRS Toolbox V1.20 application interface. Both screenshots show the 'SMS No.: +491738909595' at the top. The interface is divided into five tabs: BASE, EMAIL, TIMEPROG, ALARMS, and OTHER. The 'TIMEPROG' tab is selected in both.

Left Screenshot:

- Only ticked boxes will be transmitted!**
- P55** ☒ **Sample Rate:** 1 min
- P56** ☒ **Transmission Intvall:** 24 min
- P61** ☐ **Sync Time:** 00 h
- Send To MAG** button

Right Screenshot:

- Only ticked boxes will be transmitted!**
- P55** ☒ **Sample Rate:** 1 min
- P56** ☒ **Transmission Intvall:** 24 h
- P61** ☐ **Sync Time:** 00 h
- Send To MAG** button

A dropdown menu is open for the 'Transmission Intvall' field in the right screenshot, showing the following options: h, d, and M.

App will check, if Sample Rate and Transmission Interval is within allowed limits.
If not, the send button will be disabled and the settings will be shown red colored:

21:06

MAG8000 GSM/GPRS Toolbox V1.20

SMS No.: +491738909595

BASE EMAIL **TIMEPROG** ALARMS OTHER

Only ticked boxes will be transmitted!

P55 ☒ Sample Rate: 1 min

P56 ☒ Transmission Intervall: 72 h

P61 ☐ Sync Time: 00 : 00


1 2 3 4 5 6 7 8 9 0

! @ # \$ % & * ? /

- " ' () - + ; ←

1/2 : , _ . ABC →

Alarms.
App makes Alarm Settings „readable“:



MAG8000 GSM/GPRS Toolbox V1.20

SMS No.:+491738909595

BASE

EMAIL

TIMEPROG

ALARMS

OTHER

Tick all of the alarms, you want the module to handle:

☐ GSM signal strength

Threshold Value for Alarm: no alarm

☐ GPRS availability problem

☐ Memory allocation error

☐ Internal SW error

☐ Problem with configuration

☐ Problem with outgoing SMS transf.

☐ Problem with outgoing email transf.

☐ Unauthorized access

☐ Remaining battery lifetime less than 10%

☐ Wrong configuration

☐ Internal communication error

☐ Power-up failure

☐ Firmware error

☐ Hardware error

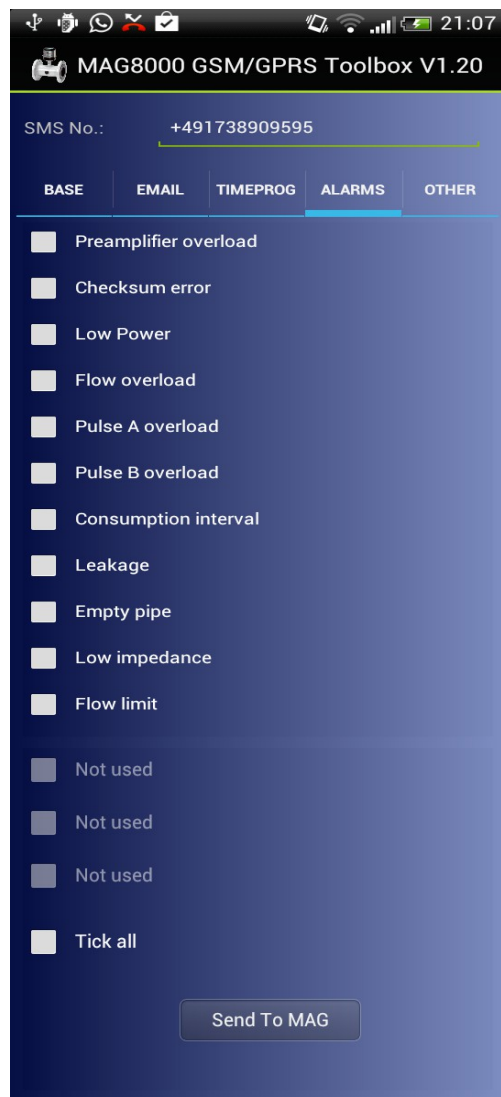
☐ Not used

☐ Not used

☐ Insulation error

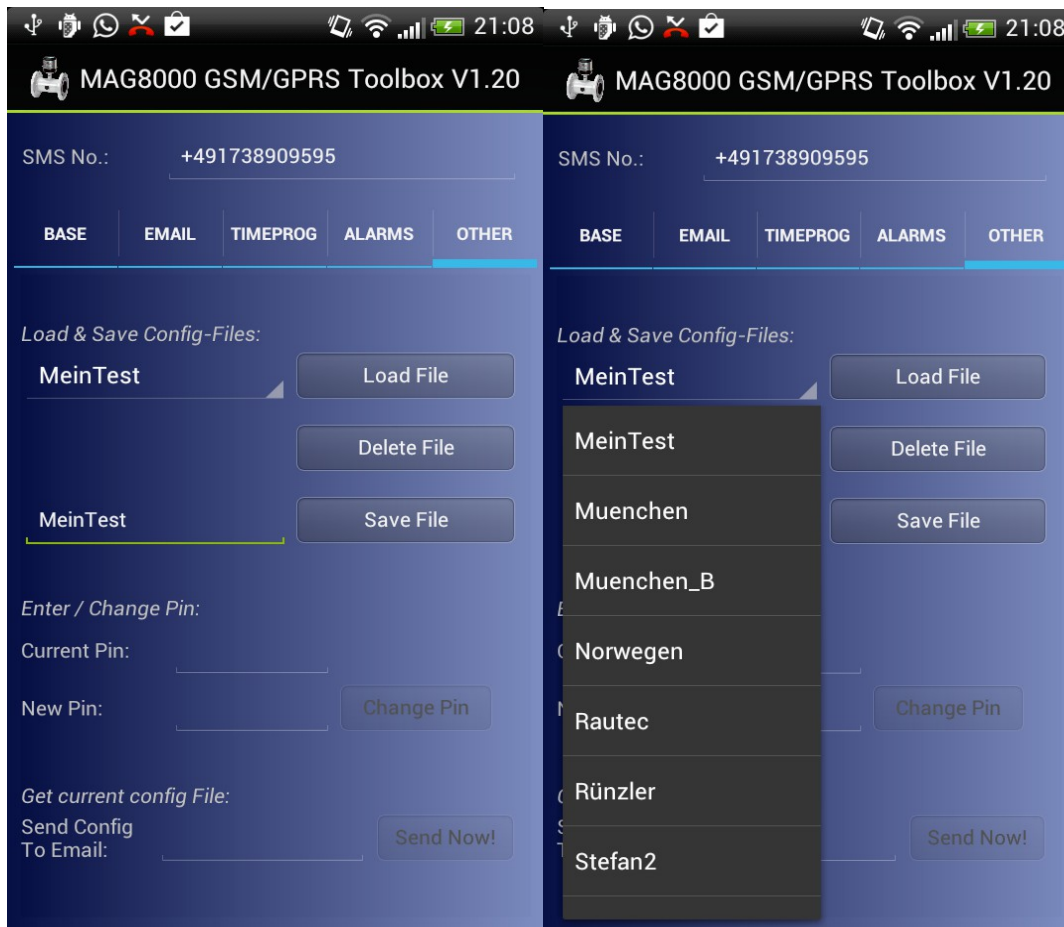
☐ Coil current error

☐ Preamplifier overload



Extras:

Load and Save Configurations:



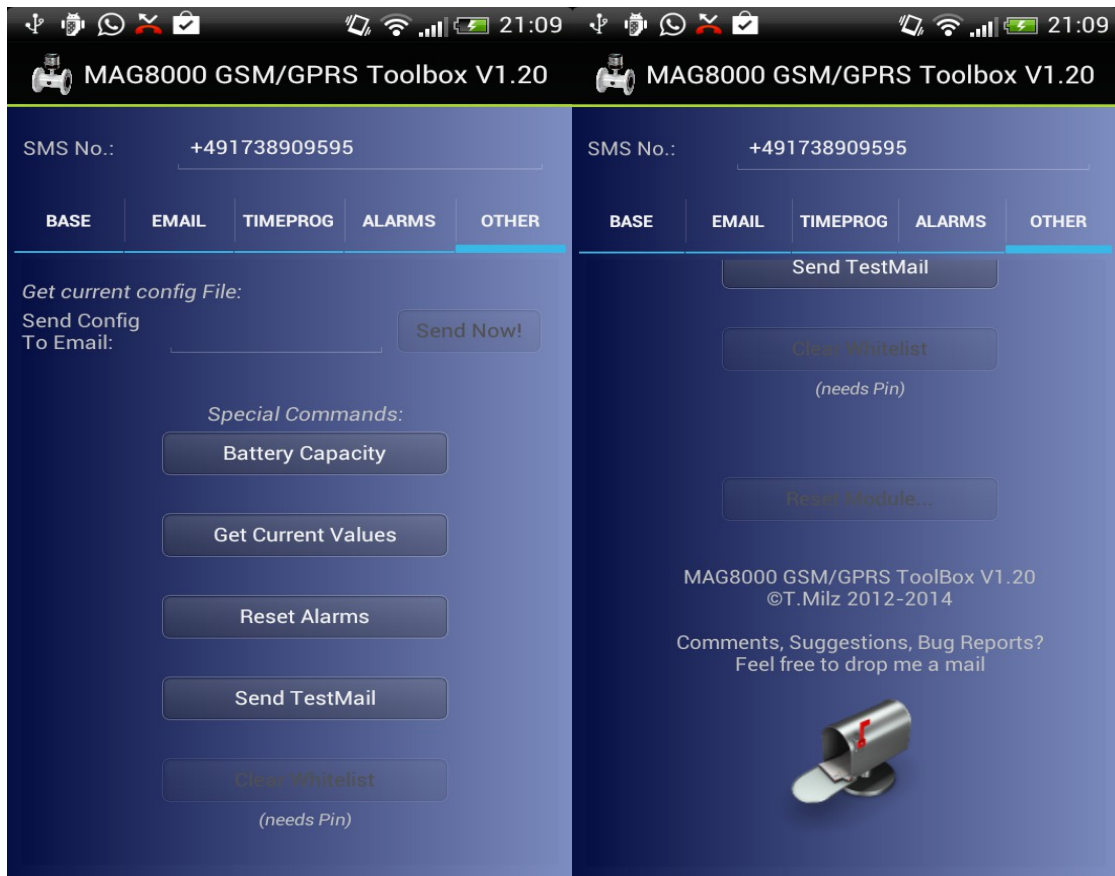
You could also use the configuration files, which gets send by the module.
The structure is the same. You just have to copy it to the MAG8000 folder on the SD-Card.

Use as filename:

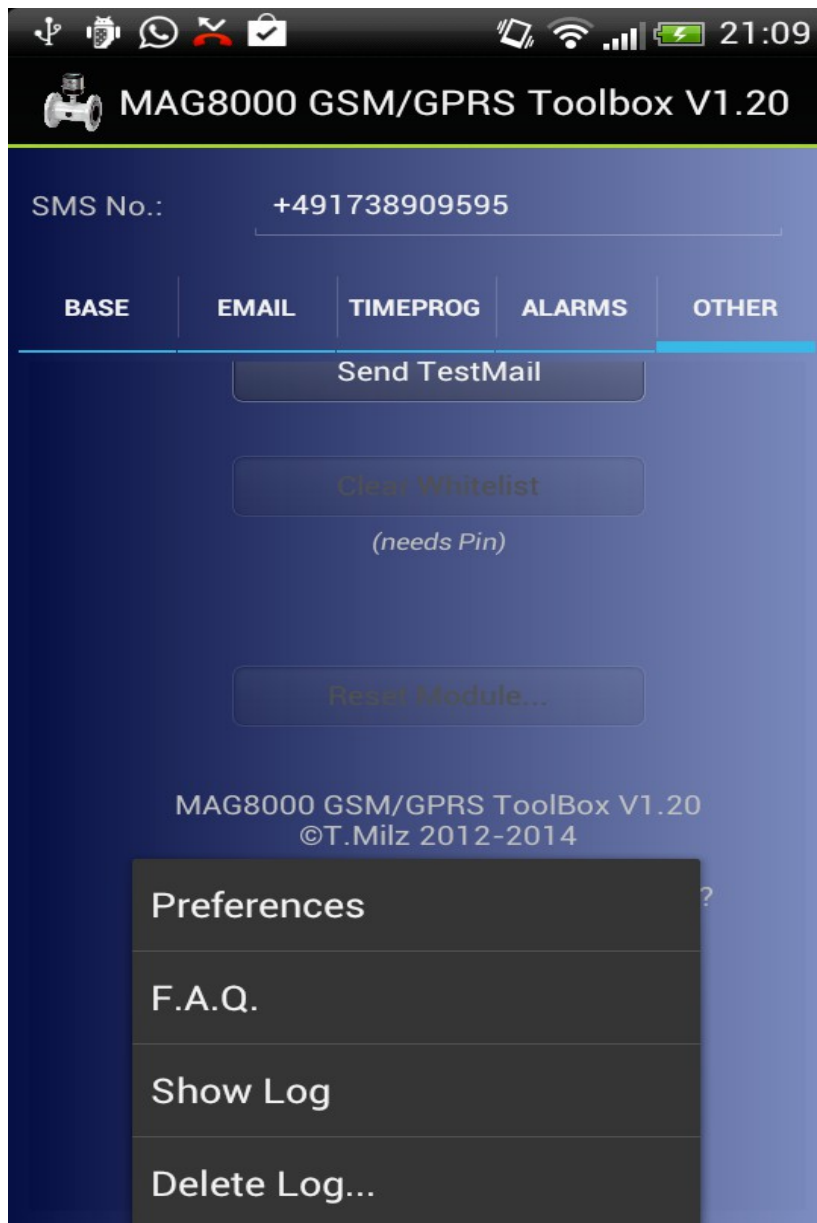
name_01234567.txt

name = the name, which gets shown in the list of the app
01234567 = the mobile number of the module to send SMS to.

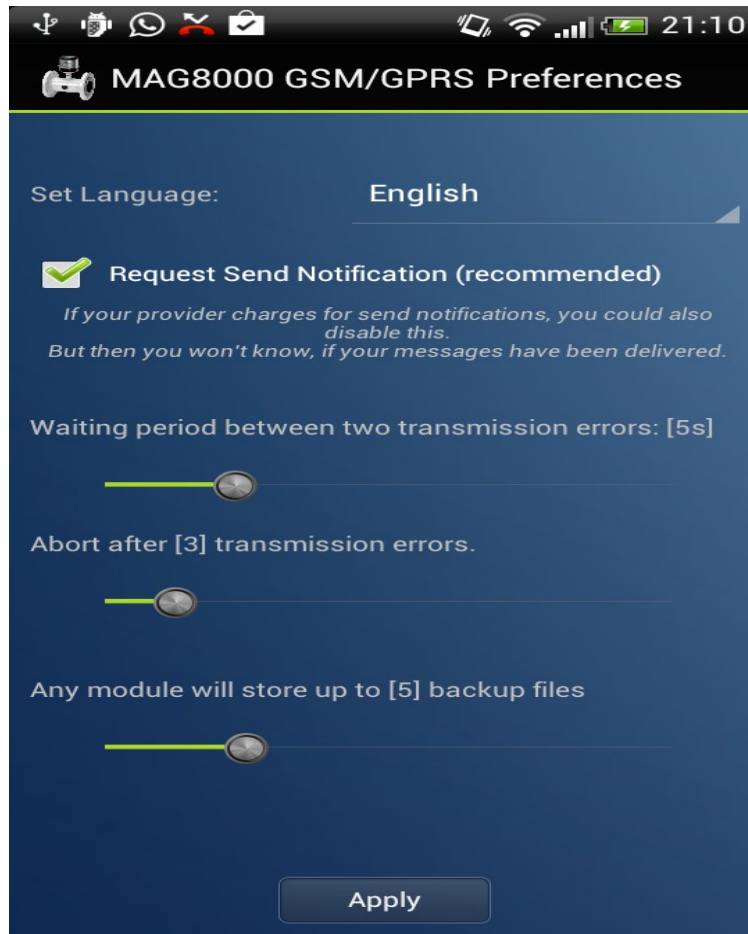
Other Commands:



Preferences:

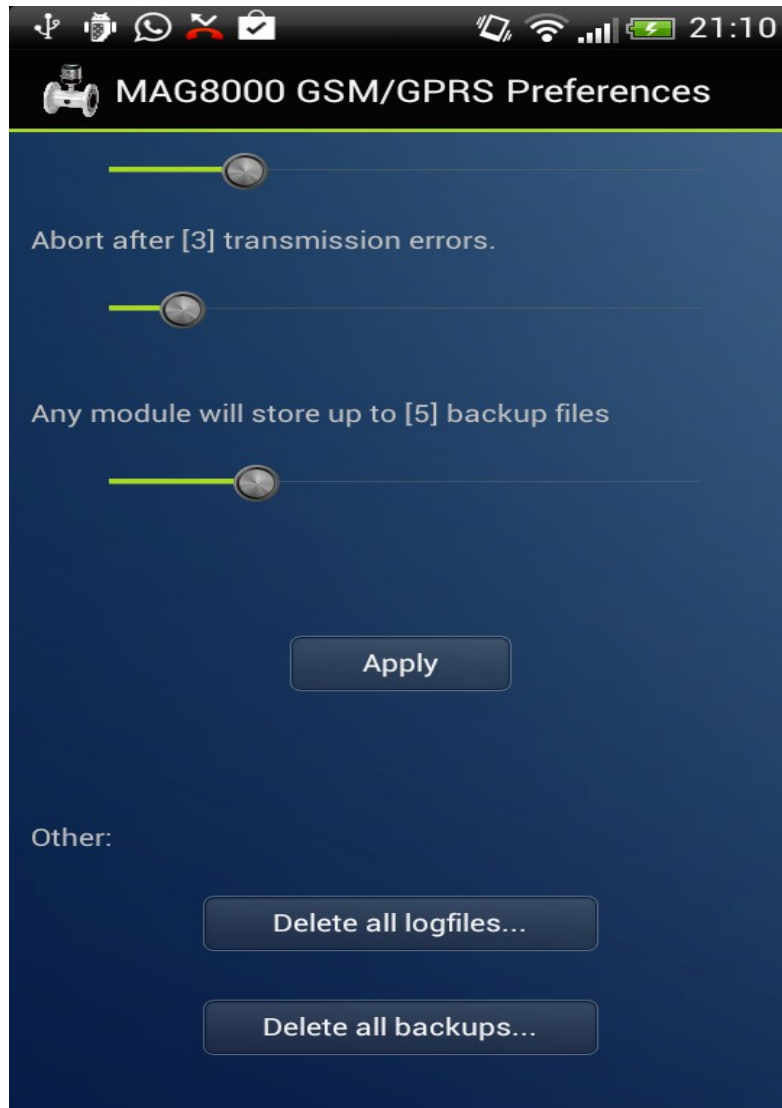


Preferences



- [Set App Language](#) here (English / German)
- [Request Send Notification](#)
If ticked, the app will wait for a response from the mobile provider.
This is not the response of the module!!
It's just to make sure the SMS has been delivered to the provider.
- The [waiting period](#) is to make sure the app won't send too many SMS too fast.
(Remember:
The app automatically splits configuration SMS which would get longer than 160 characters)
- [Abort after \[x\] transmission errors](#)
If the connection to the provider is very poor, the app will give up after that many transmission trials
- [Any module will store up to \[x\] backup files](#)
Backup-Files are a kind of Undo Feature.
Whenever you save a configuration file, the app will look into it, and if there are some changes it will automatically create a backup file of the former settings.
Then you can easily undo your changes, if you e.g. by accident edited the wrong preference file. See also [F.A.Q.](#)

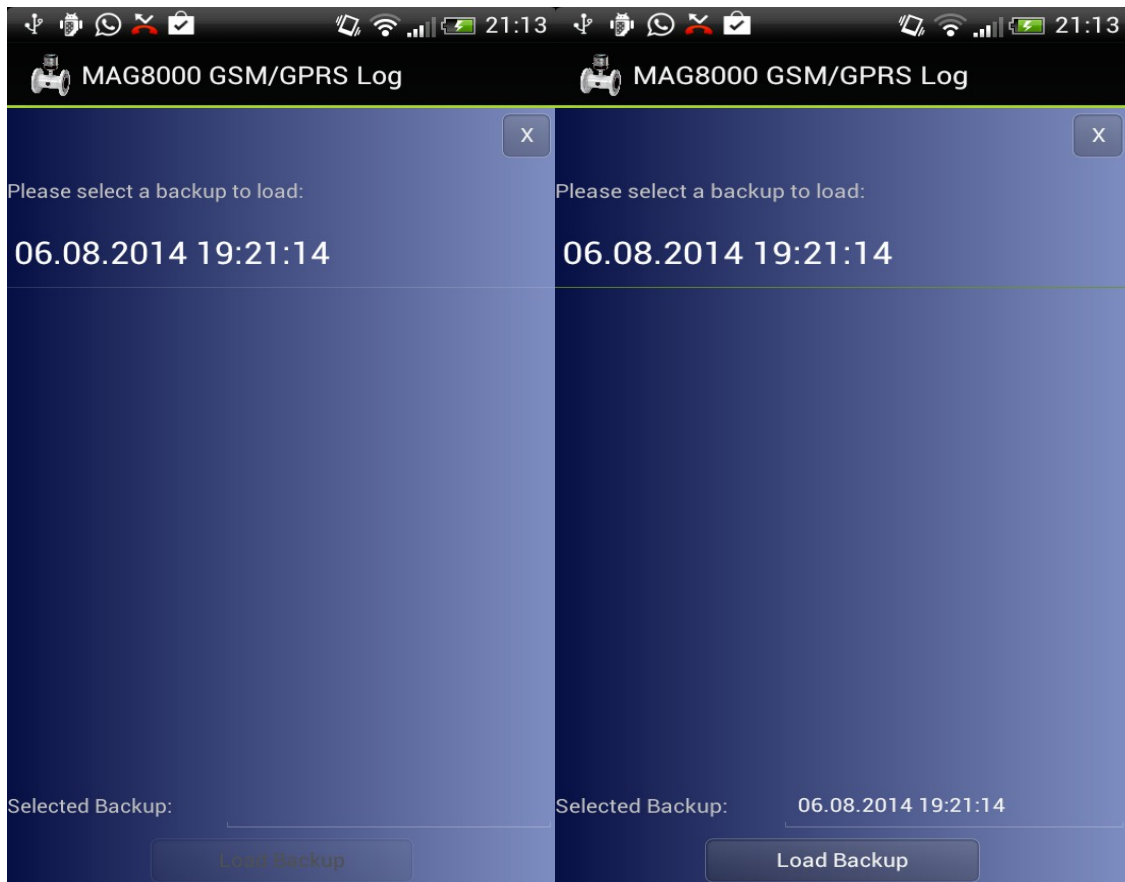
Preferences:



Here you can also delete log files and/or backup files.

Loading Backups:

Just press longer on the name of a saved configuration and the backup loading screen will open:



Log Files:

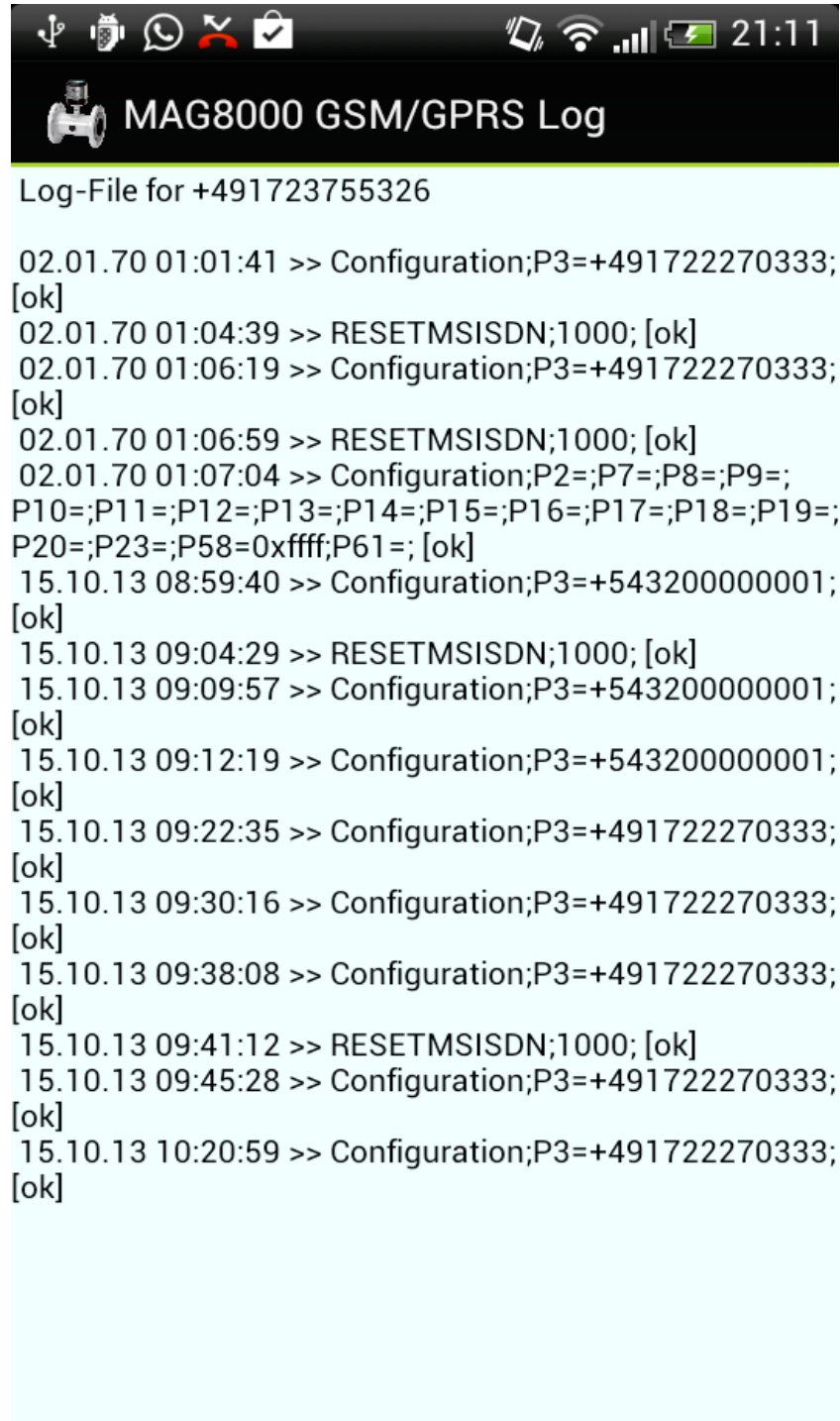
The App will also create log files.

Whenever you send a configuration SMS to a module, the commands will be stored in a log file. It also will from time to time check your inbound SMS messages for answers of the module and will copy them also into the log file.

I don't like Apps which are all the time running in the background, therefore I went this way.

Outgoing messages are marked with a >>, incoming messages are marked with a <<

An [ok] shows, that there wasn't any transmission errors.



Commissioning MAG8000 GSM-Module

What is MCC and when is it needed?

DNS-Server, do I really need it?

It can happen in the log file, that a SMS-answer gets shown before the request has been sent, why?

Backup files? What is it good for?

Commissioning MAG8000 GSM-Module

1. Connect the GSM-Module (inclusive the rechargeable battery) to the MAG8000 **at least 5** hours before you do any GSM-Module-Action.
The rechargeable battery needs first some power to provide enough energy for the module to send SMS.
2. In the meantime (and there is plenty of time...) prepare your SIM-Card:
Change its Pin to 1000 or totally disable the pin-check.
3. Enter all data you already know (mobile provider info, email info, sms-numbers...) into your app and save the configuration with a useful name.
4. After ~ 5 hours, put the SIM-Card into the module.
5. Press the small button on the GSM-Module for about 5 seconds.
(LED will flash [try not to twinkle])
6. Now, first tick only the SMS-Center (P3) and send it to the module.
7. Wait...
You should get an answer from the module and from then on, your module is up and ready waiting for your orders...

What is MCC and when is it needed?

MCC = Mobile Country Code (http://en.wikipedia.org/wiki/Mobile_country_code)

It could be needed if your GSM-Module is near the frontier and you want to prevent it to connect to the wrong provider.

DNS-Server, do I really need it?

No, in most cases the module will get it automatically from the mobile provider.

It can happen in the log file, that a SMS-answer gets shown before the request has been sent, why?

Problem is:

When sending SMS the App will use the timestamp of the smartphone.

When a SMS arrive, it will use the timestamp of the mobile provider.

If the internal clock of your mobile phone is quite wrong, it could lead to strange effects in the log file.

Problem is, that the answers of a module doesn't get received „live“.

In fact the app will look into your stored SMS and touch only those, which mobile numbers the App knows and saves them into the log-file.

I didn't want to create an app, which is all the time doing something in the background, that's why i decided to go this way.

!!NONE OF YOUR PRIVATE SMS WILL EVER BE TOUCHED OR USED!!

Backup files? What is it good for?

Whenever you save a configuration file, the app will check, if there have been any changes, and if yes, it will store a backup file.

Then you are able to reload older versions (this is a kind of „undo“ function, you can also reanimate versions, if you did something wrong by mistake).

In the preferences you can select how many of those backup files should get created per module.

You can select between 0 and 20. Selecting 0 will deactivate the backup functionality.

For loading backups, do a long click on the ***Load File*** Button.

Then you will enter the backups selection screen (if there are any for the current module).

If you don't save a loaded backup, the parameters won't get touched.

This means, you can load a backup just to examine it without changing anything.