

# GSM Programming Toolbox 7 Eng

## Keys and functions

Plug the device in the computer's COM port as instructed. If the COM port is missing on your computer, a USB converter (Com-USB dongle) can be used.

Language can be selected in the Toolbox menu Settings / Program settings.

**NOTE: If the GSM device is not a TR4 then uploaded changes and programming from the PC does not take effect until the GSM device is restarted and scans for SMS. (Yellow LED flashes)**

The Toolbox computer program has two working modes, simulator and programming mode.

**Simulator-mode** can be used when you need to know how the syntax of a SMS message will look like and are formulated for different types of GSM devices, to activate / set functions, open / save different configurations remotely via SMS.

The program goes also in this mode automatically when the settings for a specific GSM unit is loaded from the computer's hard drive without any GSM device connected to the computer's serial port.

**Programming mode** is used when you have a connected GSM device and program the device directly via the COM port.

The frame in the respective forms shows were generally values come from.

"C: \ Temp \ A6m3.txt" in red text, showing values derived from the computer's hard drive.

"A6m3V10.04a" in black text, shows values from a connected GSM device. This in order to not confuse about what is downloaded from where.



## Top menu:



## File / Open values

Opens previously saved settings from your computer HD. Used primarily on the need to save different configurations for GSM devices, to program many units, or just to have as backup.

**NOTE! New values loaded from HD overwrites ALL previous values in the Toolbox program.**

Use The "Open" button at the right console on each formular to open data for that specific formular only.

## File / Save values

Saving ALL actual values / settings from ALL formulars in the Toolbox program to the computer HD as a ordinary textfile. (These files can also be attached to e-mails, etc.).

Use The "Save" button at the right console on each formular to save data for that specific formular only.

### File / Print all

Prints all actual values / settings from GSM devices that currently exists in the program to a textfile.

### File / Exit all

Save and close the program. (Same as “Exit All” button in the “Communication” ‘s form). This button only saves The Toolbox internal settings – not the GSM unit settings.

### Kommunikation/Com1 - Com4

Setting to the COM port to be used between the PC and GSM device..

### Communications / Search com

Computer searches witch Com port the GSM device is plugged in on. This feature scans only Com1 to Com4..

### Communications / Close com

If another program needs access to the Com port, It can be turned off here.

NOTE:Communication with the GSM device must be disconnected first, otherwise linked Com port Is turned on again automatically when the program is “losing” the GSM device and starts looking for it again.

### Communications / Connect

Connects access to the GSM device.

### Communications / Disconnect

Disconnects the access to the GSM device.

### Settings / Preferences

The Toolbox program’s own settings. The language Toolbox will use for buttons and forms. Names of the phone lists, etc.

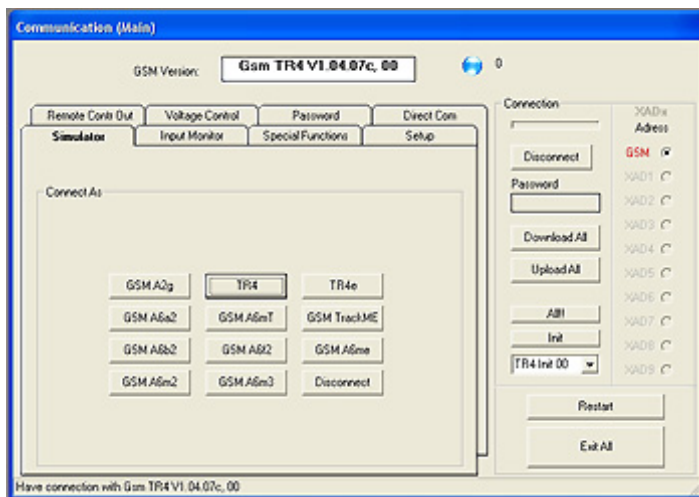


In the menu (the top of the main form) is a series of quick buttons that handles the formular windows. If you have many formulars open at the same time, it’s easy to take control of these here.

### **How should a SMS text message look like to make the GSM device understand what I want?**

In all the formulars there are one or more boxes to show the syntax of SMS (with same syntax as they have in the formular), if you need to send the command / settings to a GSM unit located elsewhere via SMS on a cellphone.

## The form “Communication (Main)”



The top button on the right (Connect / Disconnect down) controls the connection to the connected GSM device. These are in order: Connect / Disconnect (depending on connection status).

The same function as the “connect” and “disconnect” on the shortcut keys at the top.

Below these is a text box where you enter the password to the GSM device.

Next button (Download all) download all data from the GSM device and entering these in the forms. Used most when planning to save a complete GSM configuration to the computer HD.

**NOTE: This function overwrites all previous values in all formulars.**

The button below, (Update All) are mostly used when you download a complete GSM configuration from the computer’s HD and plan to send this to a GSM device.

**NOTE: This function overwrites all previous values in the GSM device.**

“Init” sends init command to the GSM device. Ex. “A6m3!” Or “A2g!” Depending on the type of GSM device that is plugged in.

“All” sends the reset-command “ALL!” To the GSM device.

“Restart” sends the command to the GSM device to reboot. Communication disconnects so you have to link up again when the GSM device boot sequence is done.

“End All” Saving changes in the program items. command lists and quit the program. These lists are not saved when the program ends with the cross in the right upper corner.

In the form Communications are a number of tabs. Tab “**Simulator**” is used to be able to see the syntax of SMS when you f.ex. need to program A remote GSM device, without having the device connected to your computer, The program must know what type of GSM-device it “working” with.

If the GSM unit is not connected to the computer at the moment. “**Simulator**” switches on automatically when you open a saved file for A specific GSM unit

It is possible to “jump” between the Simulator and a connected GSM device. Just click the GSM device “connect” button or the Simulator “connect button” to switch between the modes. Is useful if you have different units with similar configurations and need to download a different configuration from a file or need to make a configuration in advance, before a customer visit.

Tab “**Direct communication**” is used when you need to communicate with the GSM device with other command than is preassembled in the program. The syntax is the same as in ordinary SMS. At the bottom of the tab is also a list where you can save the command that is often used. There are also

buttons for editing this list.

Small buttons: D = Delete in text form (next button), C = Copy content in text form. "Send data" button to send the contents of the text form to the GSM device.

The text box "Answer" displays the reply from the GSM device.

In the text box, "Com" form is shown communication in ASCII format (Plain Text).

Tab "**Voltage Control**" is used to see the current voltage to the GSM device and set the minimum level and the time before the GSM device will send an alarm via SMS when the driving voltage alt. the battery voltage is too low.

"Download" - button retrieves set values from the GSM device.

"Update" button sends the new values to the GSM device which is filled in text form.

Under the "**Special Funktionen**" tab are modes of siretime (Data95) and inpasstime (Data15). There are also settings for the Tr4e special function: Output follows input (Data89).

The "**Remote outputs**" can control the outputs on the GSM device. (In the need of testing these.)

"Download" button retrieves current positions on the outputs (at present), on the GSM device.

With the "**Password**" is your password into the GSM device. NOTE. Save this in a safe place.

The tab "**Setup**" is used only to A2g/Trackme/Tr4/Tr4e. Here are the settings for restarting intervals, charging, energy saving and GPS power.

Console buttons at the right.

"**Connect**" Connects and establish a connection to a connected GSM device. Once the contact established the key shift function to "**Disconnect**".

"**Download all**" Retrieving all the settings from the GSM-enabled device.

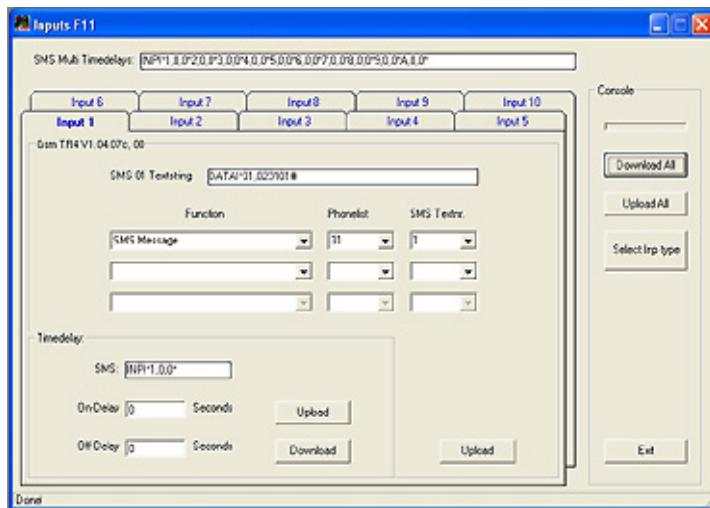
"**Update All**" sends all the settings made in the Toolbox program to the connected GSM unit.

**NOTE: This function overwrites all previous values in the GSM device.**

"**All!!**" Button sends the command "ALL!" Regardless of the type of GSM device that is connected to the computer. **NOTE: This command deletes all previous programming in the GSM device.**

"**Restart**" button restarts the GSM device. -Must be done (if the GSM device is not a Tr4) in order to receive SMS again.

"**End All**" Saves Toolbox program settings (not GSM data) and close the program.



Form **Inputs F3**, is a form used by GSM A6 models only, in the GSM family. This form handles inputs, input types and time delays.

Note that the settings for input types (Data 97) here, reappears in the "communications" form on the tab "Monitor input".

Form **Inputs F11**, (above) is a form used by GSM A2g, Trackme Tr4 and Tr4e models only. This form handles inputs, input types and time delays.

As the Data 97 - (Main Types)-handling is a bit special in these models, then these got their own form to be accessed from a button "**Select inputtype**" in the console at the far right on the entry form.

If you often work with these two forms simultaneously, it is a good idea to switch between these with the help of this button and the corresponding button on the other entry form. (Note that if the settings are made for f.ex. Input 4 on the "**inputs**" and you switches forms on this button, so is the focus automatically set on input 4 also in the other form.

(Note that the settings that are done here for the input types (Data 97 ) also reappears in the "communications" under the tab "Monitor input").

Console buttons at the right end of the forms "inputs".

**"Download all"** Retrieving all the input settings from the GSM device. Input 1 to input n, depending on witch GSM model that are connected.

**"Update All"** sending all the input settings made in the inputform to the GSM device. Input 1 to input n.

**'Exit'** Close the form "**Inputs**"

**Each tab** in this form represents a single input and settings for this input.

In each **tab** is a button "**Update**". This update only input settings for the single input that the tab is handle.

The text boxes at the bottom handles on / off delay for the input.

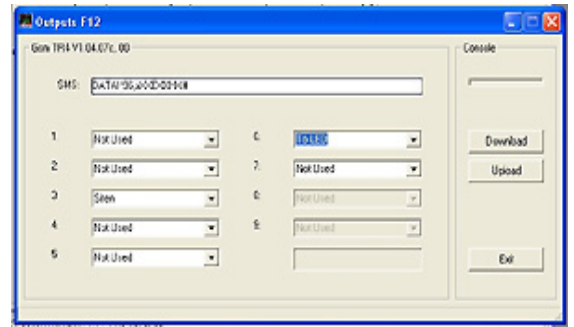
**Ingångstyp:** If the sensor (eg magnetic switch) used, is normally open so that the entrance to the NO. (Normally open)

**Function:** The alarm will do if it triggers. Ex. send SMS.

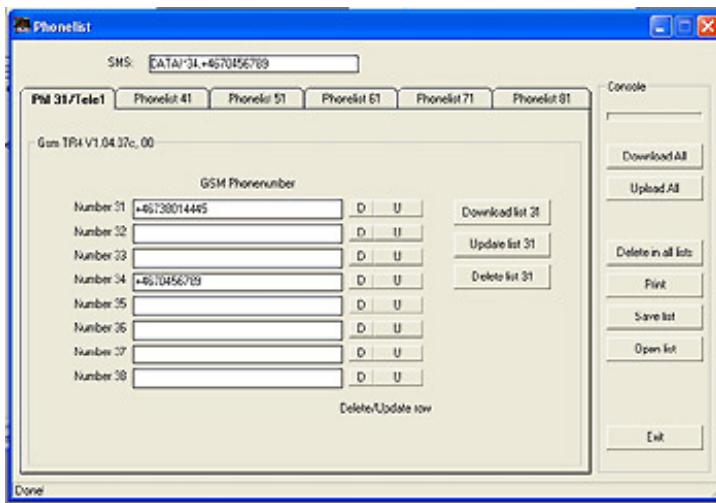
**Phone List:** Telephone number (s number) to which items. SMS will be sent to the emergency.

**Sms textnr.:** What SMS texts to be sent to alerting. Alarm texts will be added in the form SMS messages (Quick Button "Text").

The form “**Outputs**” Used by A2g/Trackme and A6a2 A6b2 and Tr4 models only. (Data 96). Here are the settings for the outputs made.



Console functions to the far right has the same functions in all forms (except communication form). Buttons to download and update all the tabs in the single form only, is always located here, Exit form, print form etc..



The form ”**Phone Lists**” (accessible via quick button ”Tele”), is also, like the ”Inputs” a form which appearance is depending on witch type of GSM device that is plugged in.

Here is the GSM phone numbers programmed where the GSM device shall send SMS.

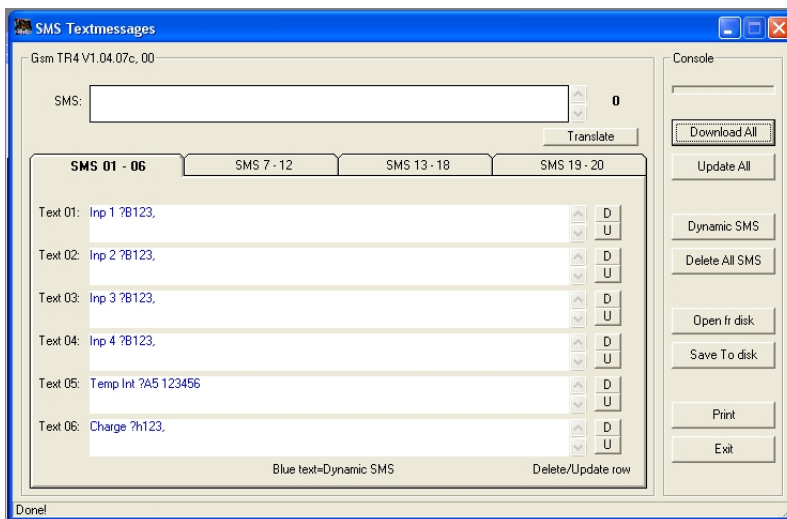
The same applies here for buttons, etc. Keys, which are placed on the tabs, control only functions of each tab while the buttons in the console to the right, control functions for all tabs.

The “Save telephone list” save separate phone lists on the computer’s HD, which can then be downloaded and added to other GSM devices regardless of type.

**Small buttons** beside text windows:

(R) delete the contents, both in the text window as it is placed in and on the GSM device for the corresponding address.

(U) (update) sends the contents of the text window to the GSM device for the corresponding address.



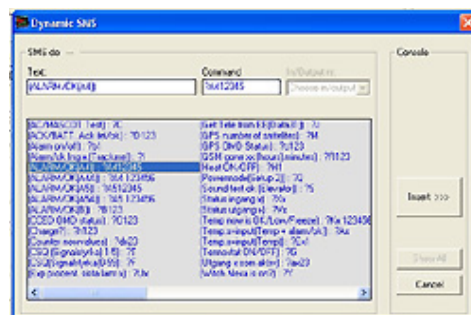
The form, ”**SMS Text messaging**” provides the SMS messages to be sent in the event of an alarm etc. This form also varies shape after which GSM device that is connected.

The other buttons and features are the same as above in the Phone List.

GSM units have a feature called ”dynamic text message” where the SMS sent from the alarm depends on the status of the place where the GSM unit is mounted. The simplest variant is ex. SMS: ”Stock

**LARM/Ok**” where SMS is ”Stock **LARM**” if the alarm is active or ”Stock **OK**” if everything is ok. More information about these features can be found in the manual of the GSM-unit.

In the console of the form ”SMS text message” is key ”Dynamic SMS” where these functions can be programmed. On the form, ”Dynamic SMS” is selected the function that is desired and possible. input as it is linked to. Then click ”Insert” to add the function into the text window, in the SMS list, which is active.



The text of SMS when color change to blue and marks in this way that it is a dynamic SMS.

The various functions can look a little bit cryptic in the SMS text. “? A412345” but there is a small button “Translate” in the SMS form, showing what the selected function performs. In the example above is ALARM or OK added to the text you have typed in the text field, depending on the status of input 4.

“Translate” button, after pressure, have received a new function “Reset.” It resets the text into original. This does not affect what is sent to the GSM device, but simply to facilitate the programming.

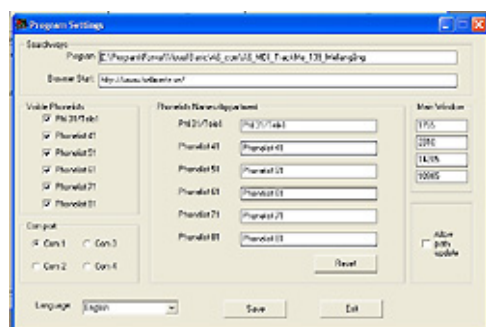


On the form, ”**Temperatures**” handles temperature-alarms and temperature limits. (Current temperature requires a connection of sensors on some GSM models).

The temperature limits can be specified with allowable maximum and minimum temp settings for the GSM device to send alarm via SMS if the temp goes beyond the allowed limits.

NOTE: The Toolbox program assumes that it is plus(+) if no sign is entered. (Ex. +46 in Max and +6 in the Min. Alternatively +26 in Max and -7 in Min)

The values are sent to the GSM device with a click on the “Update” button. Values in the GSM device retrieved to the Toolbox program by clicking on the button “Download”. If the frame then shows “Closed” there is no value added in the GSM device. The whole function is turned off by the button “Disable”.



In the “**Preferences**” which is found in Settings / Application settings can be made for special settings such as phone lists.

If you just want to have three phonestats appearing in the program and you want to name these: “Office”, “Stock” and “Warehouse” so can this be done here.

Support for the program is obtained most easily by email to [stefan@hellmertz.se](mailto:stefan@hellmertz.se).

Since the Toolbox program is currently under development (Beta Version) it’s free to use. Finished connecting cables between the PC and GSM devices can be ordered from Hellmertz AB (Toolkit item number: 9972) .

Updates and bug fixes are added all the time on our website [www.hellmertz.se](http://www.hellmertz.se) under Products /

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