

GT64 GSM/GPRS modem

Application manual



► Features:

- RS232 interface
- GSM data transfer
- GPRS data transfer
- BELL 103/v.21 communication

► Applications:

- Remote programming of T.E.L.L. products
- Remote programming of (Paradox, DSC, Crow etc.) alarm control panels adapted to GSM network with GSM Adapter *Mini* or GSM Line Pro5 communicator

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1 Basic functions of the GT64 modem

- Remote management of GSM Pager 2, GSM Pager 3, GSM Gate Control devices as well as GSM Ultimate alarm control panel manufactured by T.E.L.L. Ltd., using GSM data call.
- Remote management of Paradox, DSC, Crow etc. alarm control panels connected to GSM Adapter *Mini* or GSM Line Pro5 communicator using BELL 103/v.21 communication on data call.

2 Software applied during the use of the modem

- Remoter programs applicable for devices manufactured by T.E.L.L.
- Virtualmodem.exe (on CD enclosed)
- Programming software recommended for Paradox, DSC, etc. Alarm control panels (Espload, WinLoad, DLS, etc.)

3 Putting the modem into operation

- For the establishment of the GSM data communication it is necessary both in the modem and in the device wished to program the use of SIM cards on which the GSM data call service is enabled.
- Disable PIN code request on the SIM card, then place it into the modem
The SIM card case becomes visible after replacing the cover of the slot found on the modem. The card case upper part can be bent up after pulling it towards the LED display, then the card can be slid into this part.
- Power up the modem using the supplied 12V DC adapter.
- Connect the modem to PC using a normal RS232 serial port cable.
(Communication failures may occur when using USB – RS232 adapters).
- The antenna supplied with the modem provides good transmission under normal reception circumstances. In case of weak reception circumstances the use of a different GSM antenna with a higher gain level may be necessary. The modem is provided with standard FME-M antenna connector.
- The LED display on the modem turns to continuous green after powering up. As soon as the modem connects successfully to the GSM network, the green light starts blinking.

4 BELL 103 remote programming using GSM data transfer

4.1 Necessary devices, programs

- GSM Line Pro 5 , (with v1.10 or higher firmware version), or GSM Adapter *Mini*
- GSM modem (T.E.L.L. GT64 recommended)
- Pro5 programming software (v1.03 BELL), or GSM Adapter *Mini* programming software
- VirtualModem.exe program (version v1.10 or higher)
- The programming software of the alarm control panel, e.g. Espload, WinLoad (using most recent versions is recommended)
- The SIM cards used for the modem and the device should both support GSM data call either ways (initiate and receive).

4.2 Settings necessary for the Pro5 module

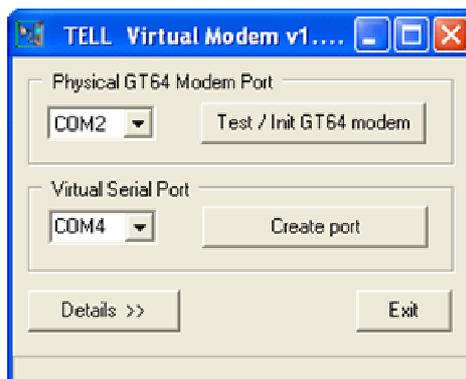
- In the v1.03 BELL version of the Pro5 programming software, in the "Set module parameters / Edit parameters" window a "Bell 103" tab can be found. On this site can be enabled to accept all incoming data calls for programming or only the ones coming from the specified phone numbers.
- If call back option is set in the alarm control panel, then here should be specified the phone number to be called back and "Enable BELL103 callback" option should be also selected.
- Upload these new settings to the module

4.3 Settings necessary for the GSM Adapter *Mini* module

- In the Adapter *Mini's* programming software, in the "Set module parameters / Edit parameters" window a "Bell 103" tab can be found. On this site can be enabled to accept all incoming data calls for programming or only the ones coming from the specified phone numbers.
- If call back option is set in the alarm control panel, then here should be specified the phone number to be called back and "Enable BELL103 callback" option should be also selected.
- Upload these new settings to the module

4.4 Putting into operation

- Insert the SIM card into the GT64 modem.
- Connect the modem to the serial port of the PC.
- Power up the modem (5-24V DC).
- Copy the **VirtualModem.exe** program to the PC, then open it.



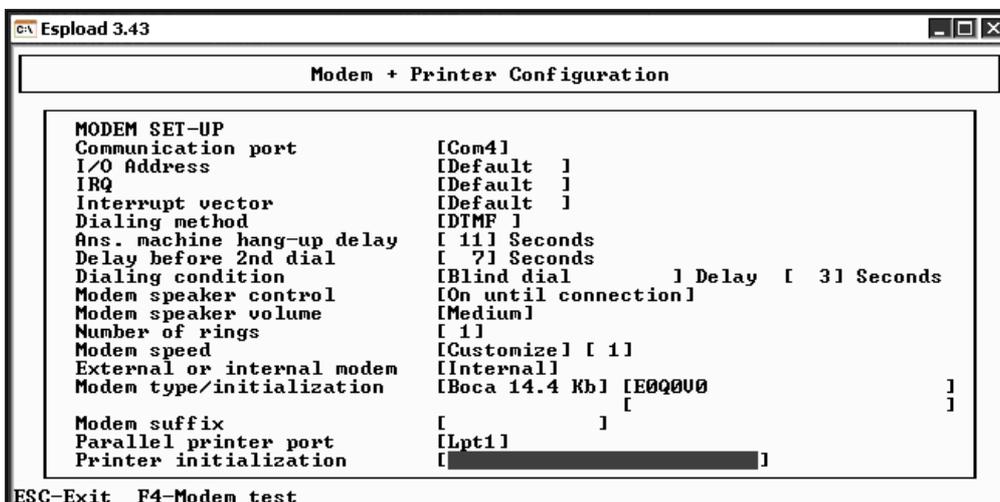
- The program installs the necessary virtual serial port at the first start.
- Select the serial port to which the GT64 modem is connected (physical serial port).
- Check the connection between the PC and the modem by pressing the "Test / Init GT64 modem".
- Select a previously unused COM port ordinal number for the virtual port to be created.
- When using DOS based remote programming software (e.g. Espload), select COM4 or below.
- Press the "Create port" button
- Start the programming software of the alarm control panel (e.g. Espload)
- Select the virtual serial port's number for modem serial port in the alarm control panel's programming software.
- For modem type any of the modems can be selected as experienced so far. (In case of still detecting fault, select another modem type. E.g. set the Espload or WinLoad programs as shown on the figures below.)
- Thereafter you can proceed with the programming using the remote programming software the same way as using a hardwired BELL 103 modem.
- The VirtualModem program is essential to run all along the remote programming procedure, close it only after closing the programming software of the alarm control panel.

4.5 Troubleshooting

- In case the remote programming does not start for some reason, then in the VirtualModem program the GT64 modem can be reinitialized by pressing the "Test / Init GT64 modem" button.
- Using the "Details >>" window the physical and the virtual port's operation may be checked.
- Make sure the SIM card placed in the GSM Line Pro5 or GSM Adapter Mini module supports GSM data call reception (ask the GSM service provider).
- If you wish to use a virtual port application from a different manufacturer on the PC and fault is detected during its operation, then the virtual port installed by "VirtualModem.exe" may be removed using "VSRemove.exe" program.
- If errors occur frequently during data communication, then set the modem answer timeout to a higher value in the alarm control panel's programming software.

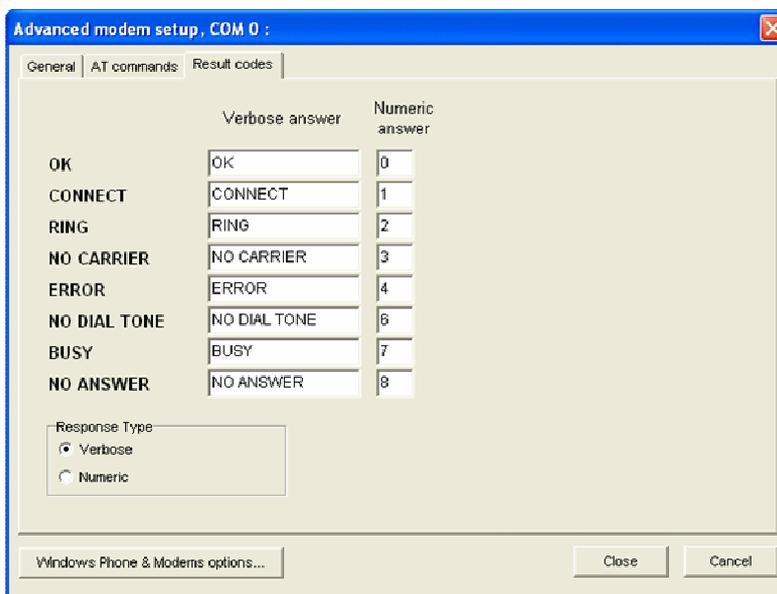
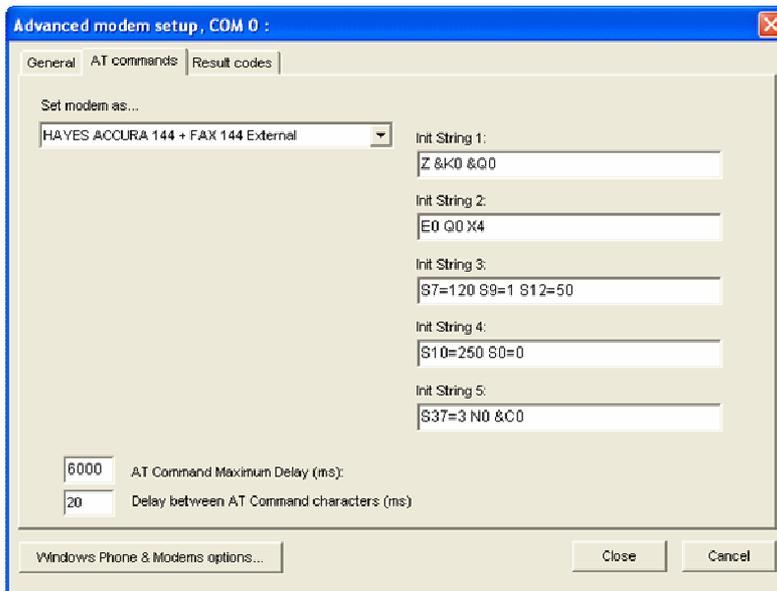
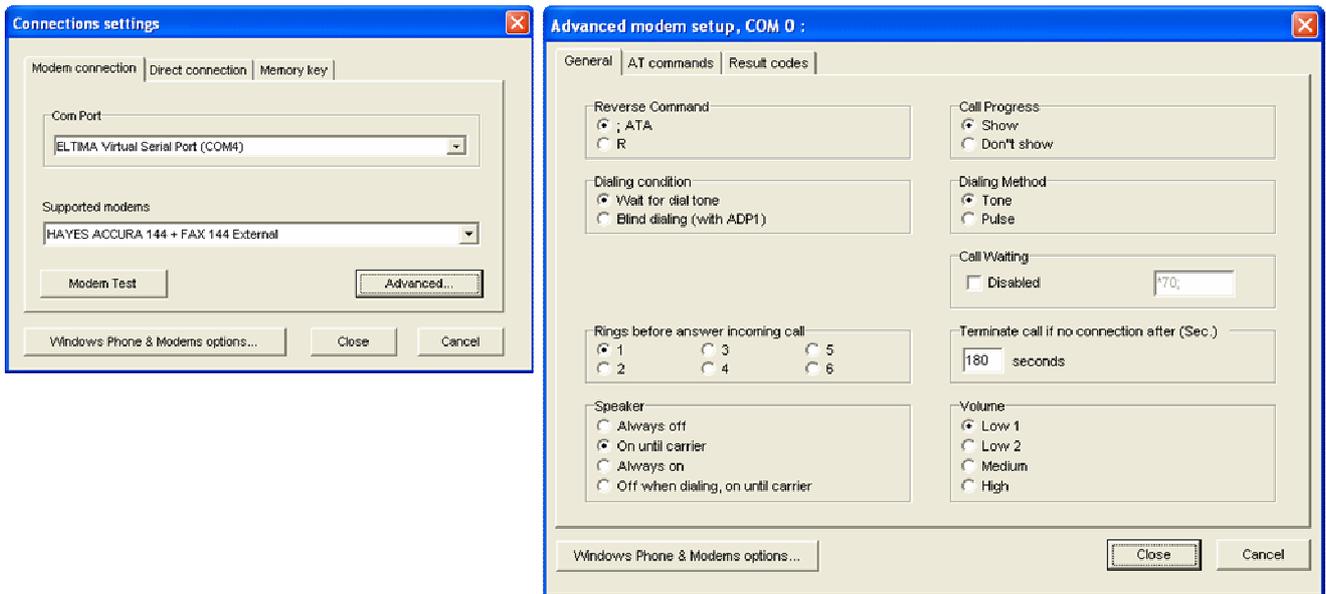
4.5.1 Setting the Espload program

Example of setting the Espload program:



4.5.2 Setting the WinLoad program

Example of setting the WinLoad program:



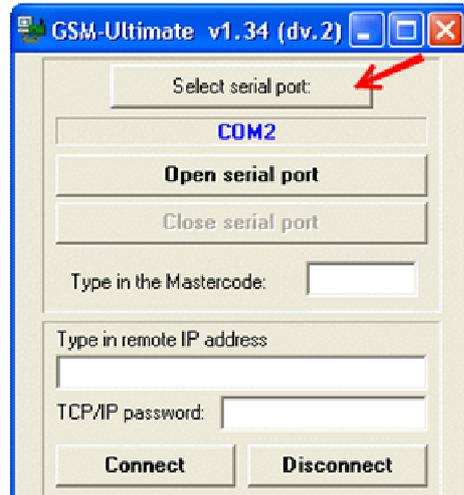
5 Remote programming of T.E.L.L. devices

1. Open the remoter program recommended for the specific device
2. Select the serial port where the GT64 modem is connected

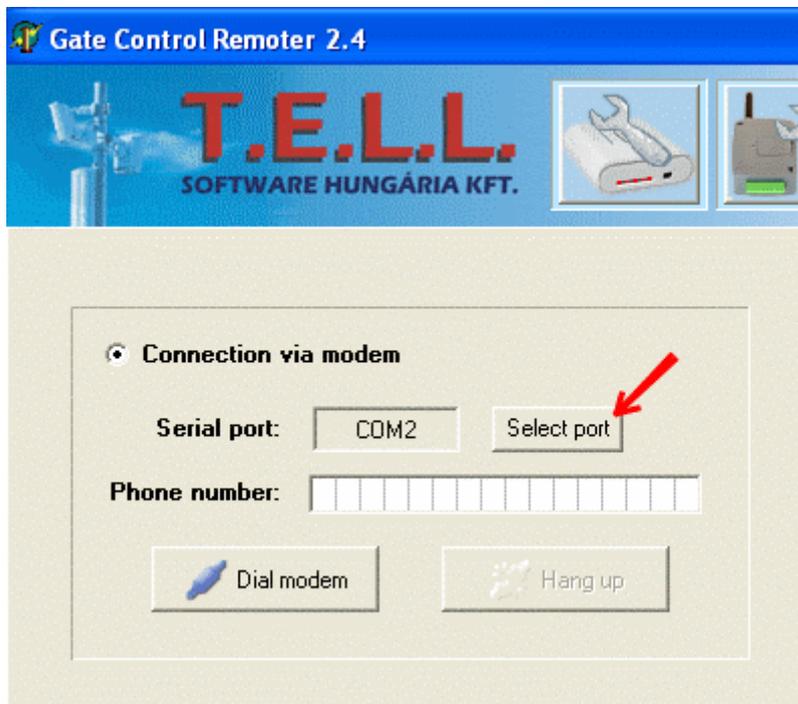
Example: GSM Pager3



In case of GSM Ultimate and GSM Pager2:



In case of GSM Gate Control:

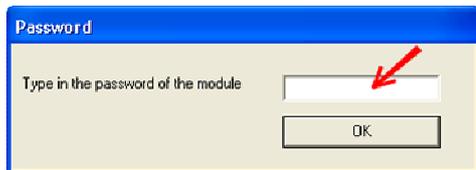
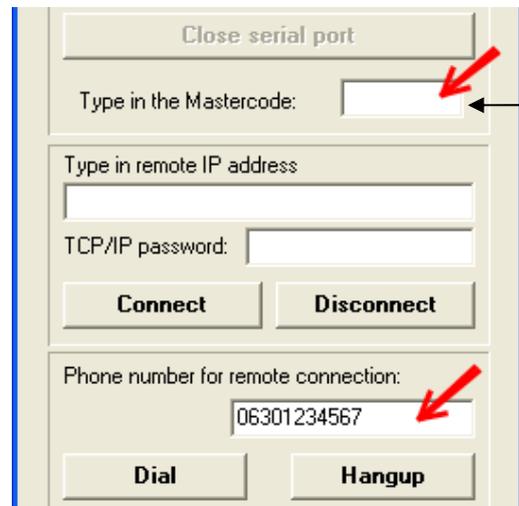


- In the corresponding fields of the software enter the phone number and if necessary, the access code of the device you wish to program

Example: GSM Pager3:



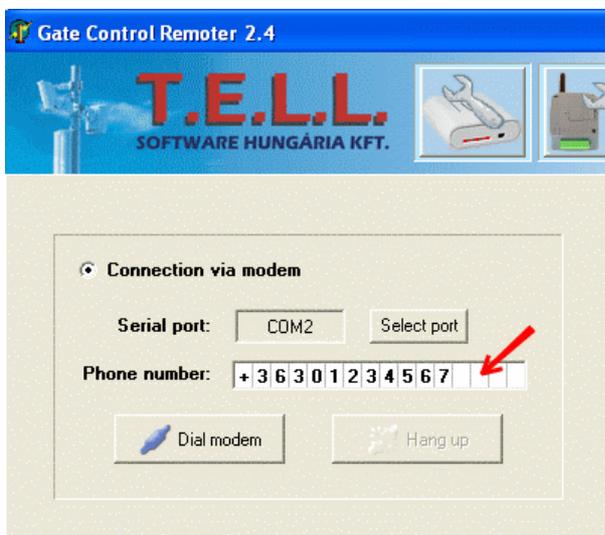
In case of GSM Ultimate and GSM Pager2:



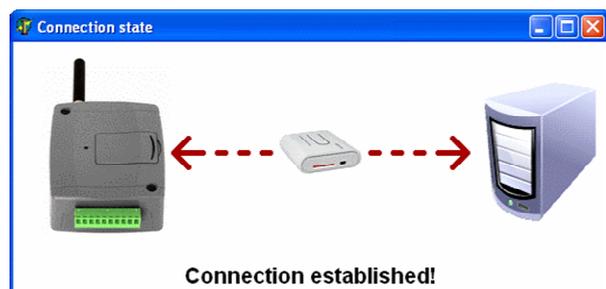
Code must be entered before connecting ←

→ The window appears after connection has established and the code must be entered at that moment

In case of GSM Gate Control:

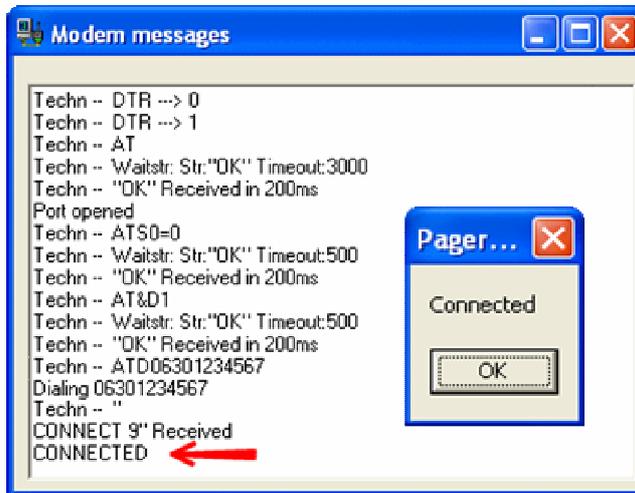


Code must be entered while connecting

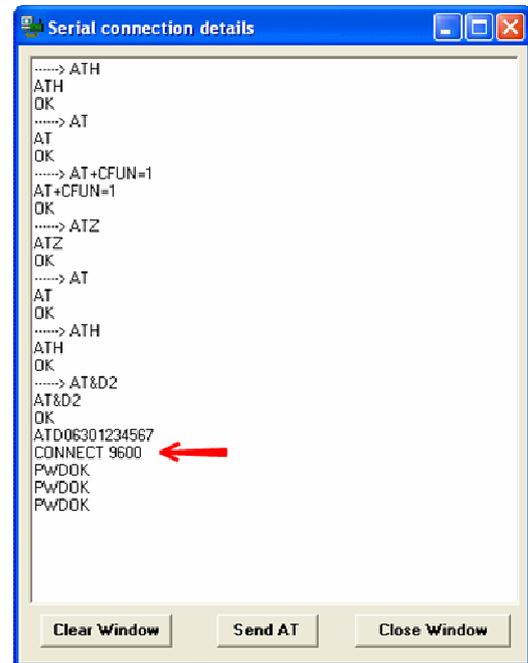


- Click on dialer button or modem connection establisher button. Modem connection process may be displayed in the details window which may be opened by pressing the ">>" button in the main window.

Example: GSM Pager3:



In case of GSM Ultimate:



In case of GSM Gate Control connection process is shown by the program step by step automatically.

- After the connection has established, all the functions of the remoter program can be accessed/used the same way as the distant device would be connected to the PC through physical serial port.
- When you finished programming, the communication may be terminated by closing the connection.

6 Technical details

Power supply:	5-24V DC
Maximum current consumption:	500mA
Operating temperature:	-10°C — +60°C
Transmission frequency:	GSM 900MHz / 1800MHz and GSM 850MHz / 1900MHz
Dimensions:	84x72x32 mm
Net weight:	200g
Gross weight (packed):	300g

7 Package contents

- GT64 modem
- GSM 900MHz /1800MHz antenna
- 230VAC / 12VDC/800mA adapter
- RS232 serial cable
- CD, application manual, warranty card