

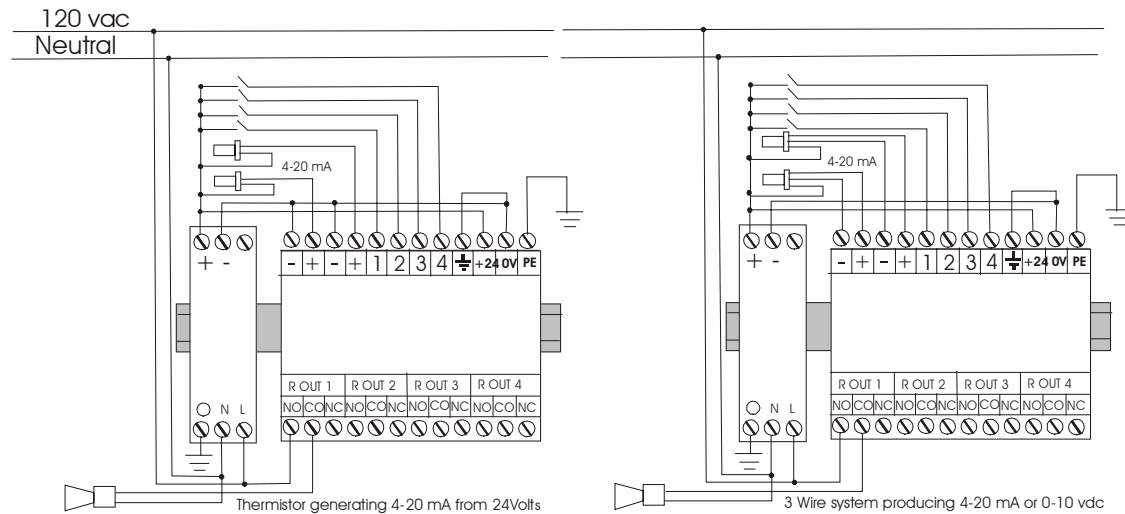
TextMitter, Inc. imports the Tbox from Teltonika in Lithuania. Although the Instructions are well written and the program is easy to implement some areas can be clarified. This supplement to the instructions may be printed so it may be referred to while reading the instructions on the disk.

TWO MEANS OF PROGRAMMING

The Tbox can be programmed using the RS-232 Cable and the software program “Server”. The second means is through a connection with GPRS/GSM and the software program “MServer”. The connection to a computer is faster since it does not go through the GSM Network. Initial Programming should utilize the cable connection.

6.4 WIRING

WIRING



This alternate wiring diagram is the same as that shown in the Teltonika Instructions but utilizes a single power supply. Shown are Thermistors for the Analog inputs (Fig 1) and a 3 Wire System requiring 24 vdc for power (Fig 2).

7.1 SIM CARD

Inserting the SIM Card. The SIM card slides into the slots of the hinged holder. The hinged holder is then closed while containing the SIM card.

7.3 PC CONNECTION

7.3.1 Loading the Program. Load the program “SERVER”. (“MServer” is for GPRS).

7.3.3.1 If you see “*Can’t Bind Socket*”, it means the Server is running. Look for the icon in the Task Bar. Double click on it and fig 5.3.1 will appear.

7.3.3.2 Make sure before clicking on <http://localhost.5000> that power (24 vdc) is applied to the Tbox and the RS-232 cable is connected. Without power, the program will not appear. Once you are ready to program, make sure the RED LED is not blinking. This indicates some error. Wait for the Green LED to blink slowly. Check on Status to determine if a connection is made with the cell phone networks

8.3 Programming

Sequence in Programming. It does not matter the order (Logic, Events or Action), you may find that using a title that indicates SMS for message will make it easier.

Digital Up / Digital High. **Digital Up** is the transition of the signal from low to high when the switch closes. There is only one moment when this happens. **Digital High** is the steady state condition after the switch closes. If you select **Digital High** to send a Text message, the message will be repeated as long as the switch is closed. For a single message, choose **Digital Up** to respond to a switch closure. **Digital Down** and **Digital Low** are for closed switches that change from closed to open.

Apply or Submit. Pressing “Apply” to save information is saving it as a default condition and when Reset is pressed, the value entered by Apply will return. Submit will also save information, but when pressing Reset, the previous data will return.

New Message (Under Events). This is the receipt of a text message to the Tbox.

AND Function. If the AND is made up of two **Digital Up** contact closures, they must occur at the same instant to result in an AND. They only exist the moment of contact closure. They cannot be applied sequentially. However, if the two contact closures of the AND function are both **Digital High**, then the Tbox will produce the AND, but will also continuously send text messages while the contacts remain closed. With most AND applications, the AND function is to Alarm if a contact is closed and some other condition (represented by a contact closure) follows (limit switch is closed). So the condition present can be **Digital High** and the condition that follows producing the AND can be **Digital Up**. This AND will produce only one text message. Alternatively, you may consider bringing one input through the Normally Closed contacts and energize that relay to remove the input in order to get only one text message.

TOGGLE This changes the State of the Relay. If it was open, it becomes closed. The duration of the relay should remain at 0. To turn a relay off, it must be done through the computer (Test), through a text message or by a switch to make it Toggle.

8.6 Users

Examples of Groups can be “Maintenance” where all personnel listed should receive the text message. Production personnel could be another. This is just a tool to include all those intended to receive messages easier to enter.

8.7 Settings

ADC Calibration. This is very easy. Simply select voltage or mA. Then enter the threshold value where you want the action to occur. GAP is Hysteresis

GPRS/GSM: The SIM card does not require a pin number

APN, User Name and Password will be supplied with SIM card.

DATE and TIME Enter Date (Yr., Mo., and Day) and Time (24 Hr., Min., Sec.)

GPRS EMAIL Enter who the e-mail is sent to and who is sending it.

Bridge Network will be used with the MServer

Status

By pressing Status, you will see immediately if the Tbox has established a connection with the Service Provider. This connection can take a short time, as much as a minute. Make sure you wait a minute for the connection. Without the establishment of the connection, you will not be able to text message.

To Save to a file: Down Load and To Load from saved file: Up Load.

Programming through the GPRS/GSM

GPRS (General Packet Radio service) is a packet oriented Mobile Data Service available to users of Global Systems for Mobile Communications (GSM).

The MServer software is loaded along with the Server software and is found by going to Start> Teltonica> Server or MServer. The IP (Internet Protocol) modem must be static and not dynamic. All Firewalls must be closed. This includes MicroSoft, the Modem and any virus protection.

Under Status, you must have an active and registered GPRS connection. This requires a special SIM card. The order sequence is important.

Go to Settings and Bridged Network Connections.

Select the allowed User that will make the connection and press Apply

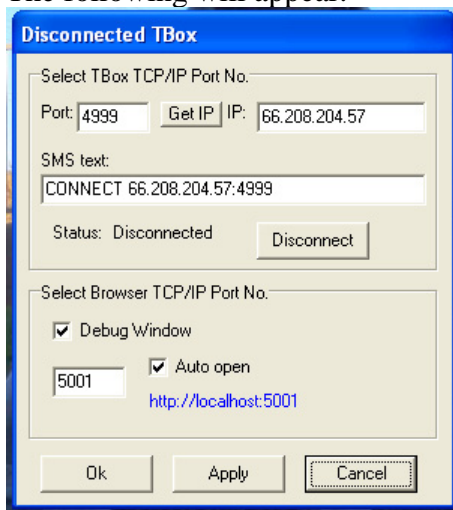
Go to Users and make sure the telephone number is preceded by the international “+” (plus) sign.

Disconnect the RS-232 Cable

Exit or close Server on the Task bar. (Right click Icon, Click “Close Server”

Run the MServer. (Start> Teltonika> MServer)

The following will appear.



Click on Get IP

Click on Apply

Using the Cell Phone with the phone number that is assigned under Bridged Network, send a text message to the Tbox. The message is as shown in “SMS Text” and is the IP address followed by a comma and the port number. No spaces.

They must be all capitals.

The programming screen will appear. It is exactly the screen from using the RS-232 cable and “Server” but the connection is through GPRS/GSM.