Support-FAQ

In general

In the advertisement I have read something about web server and other functions. How can I use these in TILA?
The Tixi Alarm Modem is already able to visualize data via a web server. Still many other functions are available which are not yet covered by the software TILA. TILA is always a little bit behind in the development of the modem firmware, however, we take care of a steady extension of the TILA functionality.
Hence, these functions can be programmed nowadays only directly in TiXML, for which we offer the software TICO together with trainings. Besides, we offer a Ready2Run to programming in TiXML after your details.

Does an automatic summer and wintertime rearrangement occur in the modem?
The battery-buffered RTC has no own time rearrangement. For the functions offered by TILA the clock time is also not really necessary. The time must be set if necessary by dialup with TILA. Projects with time-critical tasks (data logging, calendar functions) are programmed in TiXML. For these projects there are examples of an automatic time rearrangement (e.g., on the Internet, time synchronization with PLC etc.)

Telephone socket

Does the analogue modem support pulse dialing?
Our analogue modems do support pulse dialing. Indeed, the modems are set to the European norm CTR21 by delivery which intends no pulse dialing.
If you need pulse dialing, you can switch the modem by means of AT*NC3&W to a national norm.
Switching back to CTR21 is done by AT*NC9&W.

Can other devices be plugged into the same telephone socket as the Alarm Modem ?
To guarantee a proper operation (remote access, SMS receipt etc.) the alarm Modem should be the only device in the telephone socket. Further devices are automatically deactivated by missing return signal wires.

GSM

I have inserted a SIM card in the GSM modem, but, nevertheless, there flash all LEDs.
This can have different causes:
1. The SIM card was not inserted in the state without voltage.
➔   Switch off/on the modem again.

2. The SIM card is protected by a PIN which is not written down in the Alarm Modem project.
➔   Check the PIN registered in the project. Countercheck if necessary the PIN also with a mobile phone.

3. The SIM card is locked with a PUK by repeatedly wrong PIN input.
➔   Unlock the SIM card on a mobile by input of the SuperPIN (PUK).

4. The SIM card is several years old and supports only 5 V of voltage.
➔   These SIM cards are not compatible to the GSM modem. Your mobile provider can change this old SIM card to a 3.3 V variant.

5. The SIM card is faulty.
➔   Check the SIM card on a mobile phone.

I have received a new SIM card with new PIN what must I follow?
Remove the old SIM card (switch off modem!) and load afterwards a project with the new PIN. As soon as this was transferred into the modem, you can switch off the modem and insert the new SIM card.
Background:
The alarm Modem tries to access the SIM card with the PIN saved in the Eeprom. If this PIN does not unlock the SIM card, this is saved as an unsuccessful attempt to the SIM card. After three unsuccessful attempts (3x modem turning on) the SIM card is locked completely, and one needs the PUK (Super-PIN) to unlock it.

Which receipt quality should be reached to guarantee a proper operation?
Around data connections (remote access, reliably Internet dialup) the signal strength should be around -77 to -53 dBm (CSQ 18-30). Indeed, however, in the range from -95 to -79 dBm (CSQ 9-17) still SMS functions but connections often break down. Below -97 dBm (CSQ 8) no operation is possible.

Which antenna is recommended?
We offer three different antennas: the small stick antenna has no profit and should be used only with lab tests.
The small magnet foot antenna has 3db profit and is sufficient for the 900Mhz net.
With the 1800Mhz net we recommend the big magnet foot antenna with 5db profit.

I would like to establish a data connection to a GSM modem. What kind of modem do I have to use locally, and what must I follow?

As local modem an analogue modem as well as an ISDN adaptor with V.110 B channel protocol can be used.

Basically we recommend the use of a special data phone number for the SIM card of the GSM modem. This data number can be applied with the mobile provider, partly against a monthly fee. However, the modem is also able to accept data calls on the voice number. This is useful with Pre-Paid cards, because one can apply no data phone number for it.

The data call acceptance on the voice number is dependent on several factors:

1. A data phone number must not exist for this card.
2. The provider must permit the data transfer on this phone number (not everywhere the case).
3. If the phone call is done by a ISDN branch, this must be set to "multi function device" or "modem" instead of "voice".

The GSM modem is hooked to the network, I can dial into in the modem, however, the connection breaks down after the CONNECT.

1. The antenna is badly placed or is dimensioned insufficiently.
➔ Check the receipt quality with TILA. Adjust if necessary the installation place or choose a stronger antenna.

2. The GSM net announces the CONNECT too early.
➔ In TILA settings (Tools> options) activate the "Delay after remote CONNECT " option.

Where do I receive information which GSM nets are available at modem location?

On the Internet page http://www.gsmworld.com tables and maps of all GSM areas with net coverage can be found.

SMS

I would like to use SMS on landline in order to receive switch commands or use alarm acknowledgement.

In both cases the telephone must be prepared for landline SMS:

1. The phone company must provide this service (in UK only BT)
2. The telephone socket must support callerID (CLIP). The service can be activated by the phone company (monthly fee) If a PBX is used, it must also support CLIP.
3. No barrier for 09x phone numbers may exist. If necessary the SMS numbers must be allowed.
4. Receiving of text messages must be enabled. With the SMS provider "BT" this is done by a SMS to the number 00000 with the text "register".

Ask your local phone company for more details

I would like to send SMS to several recipients at the same time (SMS group). How do i configure that within TILA?

Sending of groups SMS is no function of the modem, but one of the mobile providers. They may supply information to you about the configuration.

With the mobile provider a list of group members is registered to a special phone number. A phone number is assigned to this group. If one uses this phone number as a SMS recipient within TILA, the mobile provider distributes the SMS to all participants.

Which SMS provider is recommended for landline?
There are two different transference procedures: landline SMS gateways (1TR140) as well as mobiles SMS gateways with TAP/UCP protocol.
Basically we advise the use of landline SMS gateways, because these can send SMS in all receiver's nets (also internationally). Besides, the gateways are very reliable.
However, landline SMS gateways work only with major phone companies. Besides, the connection must support callerID (CLIP).
Should these services not be available, you may use a mobile SMS gateway. Indeed, these are relatively unreliable and can send only into their own net, which means the provider must be chosen dependent on the receiver.

How long does it last, until a SMS is delivered?
Normally a SMS is delivered within less seconds. Indeed, the SMS providers take over no delivery guarantee! It may happen that the SMS is not delivered, or the delivery considerably longer lasts (even up to 2 days)!
In this case with sensitive alarms we recommend to use alarm cascading or acknowledgements.

Internet & Email

I would like to send email. What do I need in addition?
At first a dialup account is required (PPP-dialup). If you have no contractual Internet access, there are of a lot of providers offering access without contract charged via phone bill.
e.g.
Pipex: dialup number: +44-845-6621534, username: Pipex, password: Pipex

In addition, an e-mail account is required for the modem (Sender-Email-Address).
An account consists of an e-mail address, a SMTP server (outgoing mail), a POP3 server (incoming mail) as well as the user's name and password for the servers.
A lot of providers offer free email accounts within minutes,
e. g.: http://www.gmx.net
SMTP-Server: mail.gmx.net
POP-Server: pop.gmx.net
Authentication: ESMTP (default) or pop before SMTP (after activation)

I would like to send emails with a GSM modem. Indeed, the dialup fails with my Internet provider.
From the GSM net special short dial numbers must be used for the Internet dialup. Ask your local mobile provider for more details.

From the Vodafone net:
+44-783-6900808, username: user@vodafone.net, password: user

From the O2 net:
+44-771-292 7927 (PAYG), username: O2, password: O2
+44-771-293 2932 (contract), username: O2, password: O2

The analogue modem receives a busy signal with the Internet dialup, however, the phone number is correct.
Most Internet dialup points uses 09x or 0845 phone numbers.

1. Perhaps special phone numbers (09x, 0845) are blocked by the PBX.
➜   Allow these phone numbers.
➜   Choose local dialup point without special phone number.

2. Some phone companies do not permit the dialup to every Internet provider (Call by Call barrier)
➜   Choose local dialup point without special phone number.

Local dialup points of a lot of providers can be looked up on the web page
http://www.thelist.com/

How long does it last, until an email is delivered?
Normally an email is delivered within less minutes. Indeed, the email providers take over no delivery guarantee! It may happen that Emails are not delivered, or the delivery considerably longer lasts (even up to 2 days)!

PLC

Which cables are used to connect a PLC to an Alarm Modem ?
In most cases the PLC is connected via its programming cable. If programming cable and Alarm Modem COM port are using the same gender, the Tixi „Red- „ or „Blue-Adapter" will be used. Pin layout of our cables and adapters can be found on our service website.

I have connected a PLC to the Alarm Modem. The PLC is correctly setup in the Modem project. Nevertheless, I receive no data (PLC DeviceState=0).
It was forgotten to restart the modem after the first activation of the PLC protocol.

I have connected a Mitsubishi Alpha XL to my alarm Modem . The PLC is correctly setup in the Modem project. The Alpha XL is set to "special communication". Nevertheless, I receive no data (PLC DeviceState=0).
It was forgotten to restart the Alpha XL after the activation of the "special communication".

I have connected a Mitsubishi Alpha XL to my alarm Modem. The PLC is correctly setup in the Modem project. The Alpha XL is set to "special communication", the modem reports communication (PLC DeviceState=1). Nevertheless, I receive no variable values.
You have bit or word operands configured (CB, CW) which do not exist in the Alpha XL.
➜   Remove the unused CB and CW variables.

I have connected a Moeller Easy to my alarm Modem . The PLC is correctly setup in the Modem project. Nevertheless, I receive no data (PLC DeviceState=0).
The serial interface of the Easy is protected with a password.
➜   Remove the password protection of the serial interface.

I have connected a Siemens S7-200 to my Alarm Modem. With the attempt to access it remotely I get timeout and communication errors.
The Siemens Microwin software thinks that the S7 is connected directly to the PC, and, hence, works with short answer times. These cannot be kept through a modem connection. On the CD

is a Registry patch which adjusts the timeout times.

I would like to remote access a S7-200 or VIPA control. Indeed, the connection via TILA fails.
The named, as well as some other controls, work with a 11-bit-data format (8E1, 8O1). This data format is not supported by every Hayes modem. You need a 11-bit-compatible industrial modem, e.g., our Tixi SM03 or Tixi HSM.

I am using an Alarm Modem with MPI interface. How can i access the S7-300/400 ?
The integrated TS-Adapter is compatible to the genuine Siemens adapter. Therefore you can use the Step7 PG-PC-interface "TS Adapter" to access the CPUs locally (through the modem) or upon modem dialup using the Siemens tele service software.

TILA

While testing an alarm in TILA I receive the error message "Error in the job creation occured". What does this mean?
An important parameter was missing while generating the message.
1. It was forgotten to setup a sender address for this kind of message, e.g., to put down email-sender's address.
2. It was attempted to send an email without having setup an Internet access.

While testing an alarm the modem has started to send it (Data out LED), nevertheless it never reached the recipient.
During sending of messages numerous mistakes can appear. For this purpose the modem writes down the finished jobs in logbooks. These can be read within TILA (Log->System-Log-Books->Job Processing).
Nowadays the entries are given still unfiltered as XML, e.g.:

If the message was sent successfully
(The error is to be checked with the receiver):

<ID_33 _="2005/05/11,15:43:18">
<JobReport>
<ID _="1"/>
<Time _="2005/05/11,15:42:50"/>
<Type _="Script"/>
<JTState>
<ErrNo _="0"/>
<StartTime _="2005/05/11,15:42:55"/>
<EndTime _="2005/05/11,15:43:17"/>
<Attempts _="1"/>
</JTState>
<Modem>
<ConnectTime _="2005/05/11,15:43:07"/>
<SConState _="stOpen"/>
<MediaType _="GSMSMS"/>
<ModemResult _="OK"/>
</Modem>
</JobReport>
</ID_33>

In error case (ErrNo> 0) the information is extended, e.g., with the fax:

….
<JTState>
<ErrNo _="-300"/>
<ErrText _="modem connection failed"/>
<Line _="500"/>
<Module _="ModmComS"/>
<Class _="TXModemCommService"/>
<StartTime _="2005/05/11,16:10:49"/>
<EndTime _="2005/05/11,16:11:08"/>
<Attempts _="1"/>
</JTState>
…
<Modem>
<SConState _="stError"/>
<ModemResult _="NoCarrier"/>
<DialString _="ATX3DT3040608400"/>
</Modem>
…

In this case the dialed phone number has be to be checked. In the example the national prefix "0" was forgotten in the project. (03040608400)
With email (SMTP) the error messages of the e-mail server are given, in addition, e.g.:

If the sender email address does not fit to the mail server:
…
<InetStat>
<LastCmd _="MAIL"/>
<LastCmdLine _="MAIL FROM: <Tixi-Training@gmx.net>"/>
<ReceivedLine _="550 5.1.7 {mp032} <Tixi-Training@gmx.net>... **User is unknown**"/>
<StatusDesc _="5.1.7 {mp032} <Tixi-Training@gmx.net>... User is unknown "/>
<Status _="550"/>
<ErrorCode _="0"/>
</InetStat>
…

If POP before SMTP is required:
…
<InetStat>
<LastCmd _="MAIL"/>
<LastCmdLine _="MAIL FROM: <Tixi-Training1@gmx.net>"/>
<ReceivedLine _="550 5.7.0 {mp028} **Current IP address does not match IP address of POP3 access**"/>
<StatusDesc _="5.7.0 {mp028} Current IP address does not match IP address of POP3 access "/>
<Status _="550"/>
<ErrorCode _="0"/>
</InetStat>
…

If SMTP authentication is necessary:

```
…
<InetStat>
<LastCmd _="MAIL"/>
<LastCmdLine _="MAIL FROM: &lt;Tixi1@gmx.net&gt;"/>
<ReceivedLine _="550 5.7.0 {mp008} Need to authenticate via SMTP-AUTH-Login"/>
<StatusDesc _="5.7.0 {mp008} Need to authenticate via SMTP-AUTH-Login "/>
<Status _="550"/>
<ErrorCode _="0"/>
</InetStat>
…
```