

## It won't communicate with my Chipcon/Maxstream/Jennic/Meshnetics device

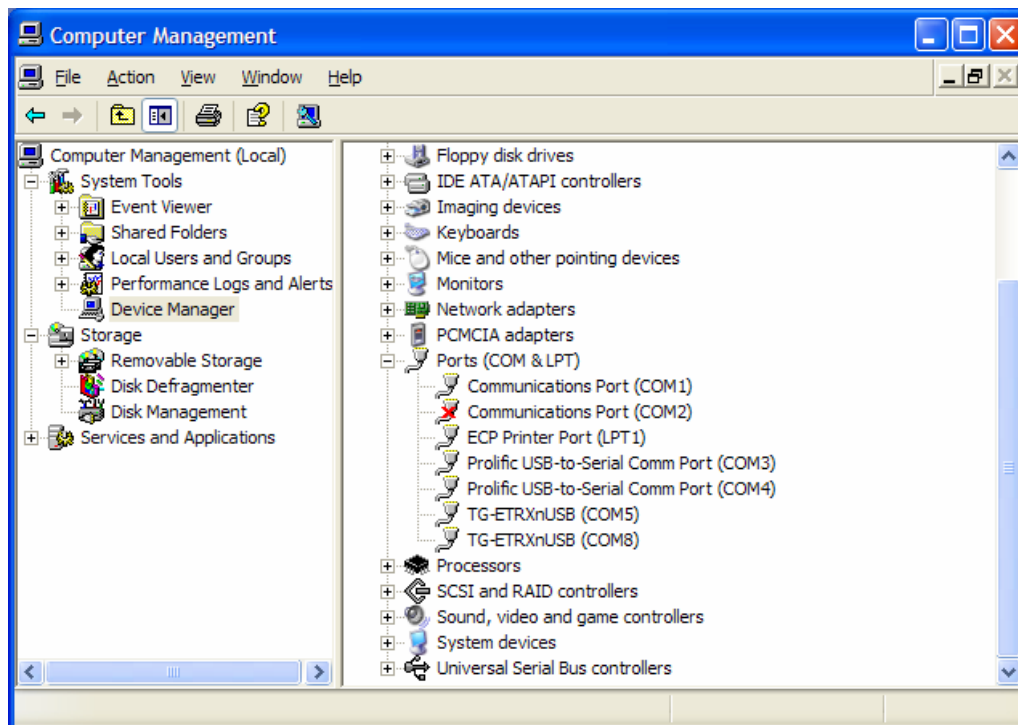
ZigBee devices have to run the same profile to form a network and communicate. The ETRX2 runs a private profile and won't talk to any of the others.

## Will it communicate with my WiFi/GSM/Bluetooth equipment?

No. They're completely different technologies, they just happen to use the same radio band.

## ATI just responds "56k" or "OK"

You're talking to your 56kb/s dial-up modem or some other device on your PC. Right-click on "My Computer", select "Manage", then select the Device Manager and COM ports. That will show you which COM port to connect your terminal program to.



## It doesn't respond at all

You might be connected to the wrong COM port - see above.

You might have the wrong baud rate. Try 19200.

It might be running the bootloader. Change the baud rate to 115200 and hit <cr>. If you get a bootloader response, select option 2 and return to 19200 baud. This can happen if pad A/D2 is held low on power-up.

Or you might have the wrong combination of hardware- and software-handshaking. Try turning

off the handshaking.

Or you might have the TXD/RXD wires crossed.

## **What's the range?**

Not easy to predict, which is why we don't claim precise figures.

250m in the open with line-of-sight (1km+ with an ETRX2PA)

Maybe 10m indoors, depending on how the walls are constructed. It's comparable to setting up a WiFi link at home - it's all a matter of siting things in the right place.

If it's a problem, try inserting a Router into the network to bridge the gap. A devkit has enough parts to let you try it.

## **Why can't I get 250kb/s through it?**

250kb/s is the raw bit rate in a radio packet, and not all the packet is available for the payload.

The available data rate has to be shared among all the nodes on the network. A device can't transmit continuously, it has to listen for acknowledgements and housekeeping messages. A more realistic speed is 20kb/s.

## **How do I load my program on to it?**

You don't, you run your application on a host processor. However, the ETRX2's built-in functions may be enough for the device to operate automatically.

## **What's the difference between an ETRX2 and an STRX2?**

They are functionally equivalent. An ETRX2 can replace an STRX2, and you can mix them in the same system.

## **Do I have to use Telegesis Terminal?**

No. Telegesis Terminal doesn't translate the AT commands into any other format, the ETRX2 accepts the commands just as they are written. HyperTerminal works just as well, though it isn't as flexible.

## **Does it have an SPI or I2C interface?**

No, there isn't enough memory space for us to implement it.

## **Can I just use the 802.15.4 layer?**

No. You have to program the EM250 chip using Ember's library, and they assume it's going to be ZigBee.

## **Where are the manuals?**

<http://www.telegesis.com/ZigBee/Dmanuals.htm>

## **Problems that aren't easy to diagnose**

Do you have the latest firmware?

Are you mixing different firmware versions in the same network?

Refer to [zigbeesupport@telegesis.com](mailto:zigbeesupport@telegesis.com)