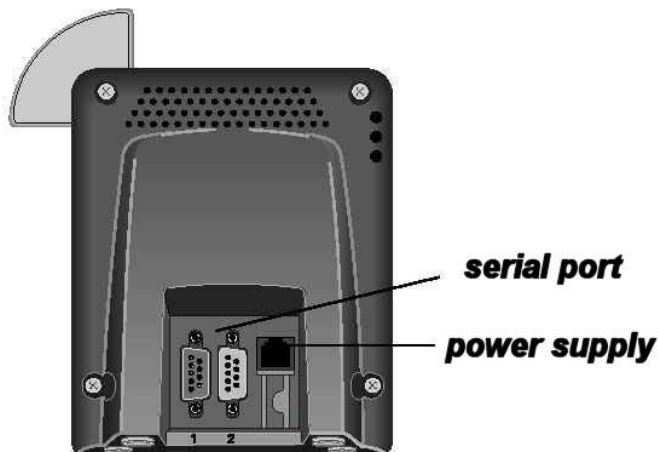


### 12V power supply for wireless RS232 link based on Siemens DECT units

I got some requests how to connect the serial DECT link “SIEMENS GIGASET M101” respectively “TELECOM Sinus 45 Data 1” to a portable +12V DC supply. So that’s what I am going to address here.

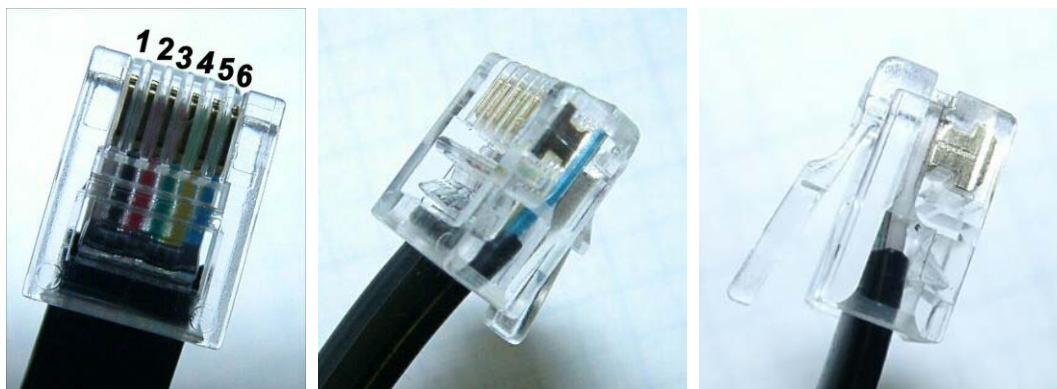
The connectors on the back of the DECT terminal are the serial RS232 ports (male and female connectors do exist for your convenience, just choose the one you want to use) and a 6 pin Western-jack for the power supply. Together with the terminal an AC mains power converter is included. However for portable operation, as here together with a telescope, often +12V DC rechargeable batteries are used. Fortunately the terminal only needs a single supply voltage.



The pin-out of the 6 pin Western connector is:

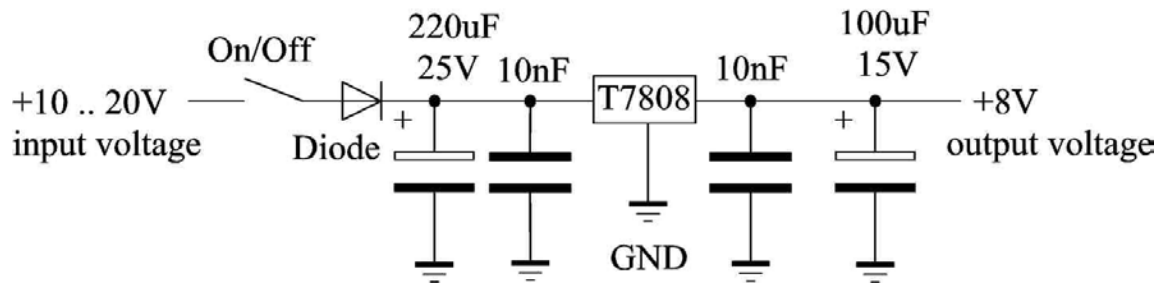
- 1 white NC (non connected)
- 2 black NC (non connected)
- 3 red IC (internally connected test pin)
- 4 green IC (internally connected test pin)
- 5 yellow +8V DC (normally unregulated 7.5V from power supply)
- 6 blue Ground (normally unregulated 7.5V from power supply)

For our application we need only to connect the pins 5 & 6. Lacking an appropriate crimp tool I decided to made use of an unused cable I had lying around and cut off a piece with the connector.



I built the little circuit to generate a load independent stabilized +8V DC voltage from an unregulated +12V input voltage. I use a “7808” fixed voltage regulator in a TO220 package and added some capacitors, an ON/OFF switch as well as a reverse bias protection diode around it. Please note that I do already have a fuse in the power supply line. If you don’t I recommend to add a fuse of approx. 500mA rating in the box somewhere near the ON/OFF switch.

Here is the simple schematic:



Finally this all goes in a small plastic package to protect and insulate it. In my opinion a PCB is not needed for these few components.



That's all. Finally a picture of the whole device with a cable supplying the +10 ... 20V input voltage and the Western plug with the output voltage for the DECT-terminal.



Kind regards

Matthias

Email: [DDIUS@AMSAT.ORG](mailto:DDIUS@AMSAT.ORG)  
Homepage: <http://www.dd1us.de>