How to use the RTC with external Battery Backup Voltage

The DIL/NetPC DNP/5280 offers a Real Time Clock (RTC) chip and an external battery voltage input pin. The battery voltage supplies the RTC if the DNP/5280 main voltage is off.

- **1. Step:** Setup the RTC. Run the *date* command and set time of day to the Linux system clock. Then run the *clock-dnp5280* utility from the DNP/5280 directory */home* and write the current time to the RTC.

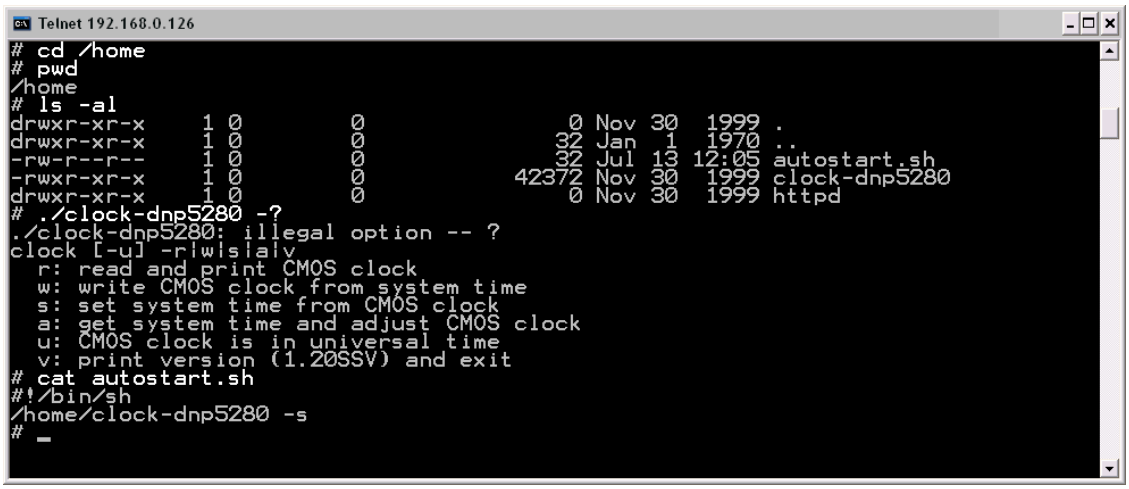
  ```
  date –s MMDDhhmmYYYY
  ./clock-dnp5280 –w
  ```

  Date is a build-in command of *Busybox* (the DNP/5280 shell). The *clock-dnp5280* utility is available from the DIL/NetPC DNP/5280 starter kit CD-ROM or via Internet download from www.dilnetpc.com/dnp0078.htm. Please copy the file *clock-dnp5280* to the DNP/5280 directory */home*. Don't forget the executable rights.

- **2. Step:** Build a shell script file */home/autostart.sh* and insert a command line for the *clock-dnp5280* utility with parameter *–s*. The next two lines show a sample for */home/autostart.sh.*

  ```
  #!/bin/sh
  /home/clock-dnp5280 –s
  ```

  This sample is executed after each DNP/5280 reset or boot process. With the –s parameter, *clock-dnp5280* reads the time from the RTC (CMOS clock) and writes this time to the Linux system clock.



That's all.