## DC1000 Firmware Upgrades

**Please note:** The firmware on the DC1000 can only be upgraded if you have already have version 1.07 or above. If you have version 1.06 or below, please contact either Voltech or your local supplier for further information.

The firmware of the DC1000 can be changed by the user in the field. New versions of the firmware are made available periodically and electronic copies are available free of charge. To maximize the performance and longevity of your DC1000, you should install these upgrades as they become available. Contact your local supplier or see the Voltech web site at www.voltech.com for details.

## Requirements

- 1. Windows PC with HyperTerminal or equivalent
- 2. 9 way Male to 9 way female null modem cable such as Voltech part 77-045
- 3. Latest version of DC1000 code in the file DC1000.hex

## Directions

- 1. Download the latest version of DC1000.hex from Voltech's web site (www.voltech.com).
- 2. Connect the null modem cable from an RS232 port on your PC to the RS232 IN port on the DC1000.
- 3. Start HyperTerminal (usually found under Start -> All Programs -> Accessories -> Communications). The file to run is hypertrm.exe.
- 4. enter a name for the new connection. For example "DC1000 download". This connection can be saved and used again in the future. Click on OK.
- 5. Set "Connect Using" to the available RS232 communications port that you want to use. Click on OK.
- 6. Set up HyperTerminal with the following settings:
  - a. Baud rate = 9600
  - b. Data bits = 8
  - c. Parity = none
  - d. Stop bits = 1
  - e. Flow control = none
- 7. Turn off the DC1000.
- 8. Press and hold the space bar on the PC.
- 9. Turn on the DC1000.

- 10. You should see the message "32k DC1000 download V1.00" or "64k DC1000 download V1.00" followed by "Transfer file". If not, repeat from step 5.
- 11. In HyperTerminal click on Transfer -> Send Text File... (DO NOT CLICK SEND A FILE).
- 12. In "Files on Type", change to \*.\*.
- 13. Navigate to DC1000.hex and select it.
- 14. Click Open.
- 15. The code should start downloading as indicated by ".".
- 16. Once the code has completed downloading, the DC1000 will reset and boot in to normal mode.
- 17. Exit HyperTerminal & Remove RS232 Lead.
- 18. Switch off and back on the DC1000. The display should show the new firmware version for 2 seconds.

If the power is removed from the DC1000 or the communications disrupted in any way during this process, the DC1000 will be rendered inoperable until the new firmware is successfully downloaded. The directions should be followed from step 5.

Please do not hesitate to contact either Voltech or your local supplier if you have any questions regarding this procedure.

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