



## Application Note #171: Decreasing CH1794 Handshake Time

### INTRODUCTION

This application note describes a method to decrease handshake time for current production CH1794<sup>1</sup> modem modules by disabling V8 protocol negotiations.

### OVERVIEW

Although V8 protocol is desirable for a variety of applications, the V8 negotiation adds to the handshake time. For those applications that do not require V8 negotiation, or those applications desiring a faster connect time, the V8 protocol support may be disabled.

### PROCEDURE TO DISABLE V8 NEGOTIATION

The following **AT** commands will set current production CH1794<sup>1</sup> modem modules for a faster connect time by disabling V8 protocol negotiations.

Enter: **AT&F<CR>** Retrieve factory default parameters  
Response: **OK**

Enter: **AT+A8E=,,,0<CR>** Disable V8 negotiation  
Response: **OK**

This connect configuration may be saved in NVRAM so that it will not be lost when power is removed. Execute the following **AT&Wn** commands to save the new configuration profile in NVRAM.

Enter: **AT&W0<CR>** Save new configuration profile in location W0  
Response: **OK**

or

Enter: **AT&W1<CR>** Save new configuration profile in location W1  
Response: **OK**

The following **AT** commands establish which stored profile (either W0 or W1) is to be loaded into the active profile during power up.

Enter: **AT&Y0<CR>** Directs the CH1794 to use configuration profile W0  
Response: **OK**

or

Enter: **AT&Y1<CR>** Directs the CH1794 to use configuration profile W1  
Response: **OK**

**Programming Tip.** Saving the new configuration profile in both W0 and W1 negates the need to execute the **AT&Yn** commands because, regardless of whether W0 or W1 is loaded during power-up, both stored profiles are identical.

<sup>1</sup> Current production CH1794 modem modules may be identified with a dash -2 after the part number or, alternatively, have a date code indicating a date of manufacture after 1 January 2001.

**PROCEDURE TO ENABLE V8 NEGOTIATION**

The following **AT** commands will restore V8 protocol negotiation.

Enter: **AT&F<CR>** Retrieve factory default parameters F0  
Response: **OK**

or

Enter: **AT&F1<CR>** Retrieve factory default parameters F0  
Response: **OK**

Enter: **AT&W0<CR>** Save factory default parameters in W0  
Response: **OK**

Enter: **AT&W1<CR>** Save factory default parameters in W1  
Response: **OK**

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406 TASMAN DRIVE | SUNNYVALE CA 94089 | LOCAL: 408-752-5000 | TOLL FREE: 1-800-882-6271  
FAX: 408-752-5004 | WEB SITE: <http://www.cermetek.com> | EMAIL: [sales@cermetek.com](mailto:sales@cermetek.com)