CR510 PROMPT SHEET

This prompt sheet is intended for field use or as a reference by those familiar with CR510 programming; additional details and examples are in the CR510 Operator’s manual. Computer-assisted programming is supported by EDLOG and Short Cut; communication is supported by GraphTerm, TELCOM (DOS), PC200W and PC208W (Windows).

CR510 STATUS/ON-BOARD FIRMWARE

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
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<tr>
<td>01:xxxx</td>
<td>Program signature</td>
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<tr>
<td>02:xxxx</td>
<td>Operating System signature</td>
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<tr>
<td>03:xxxx</td>
<td>K bytes memory: Flash + SRAM</td>
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<tr>
<td>04:xx</td>
<td>No. of E08's (Key 88 to reset)</td>
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<tr>
<td>05:xx</td>
<td>No. of table overruns (Key 88 to reset)</td>
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<tr>
<td>06:xxxx</td>
<td>Operating system version number</td>
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<td>07:xxxx</td>
<td>Revision number</td>
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<tr>
<td>08:xxxx</td>
<td>Lithium battery voltage</td>
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<tr>
<td>09:xx</td>
<td>Low 12 V batt. detect counter (Key 88 to reset)</td>
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<tr>
<td>10:xx</td>
<td>Extended mem. error counter (Key 88 to reset)</td>
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<tr>
<td>11:xxxx</td>
<td>Extended memory time to erase, seconds</td>
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</table>

CR510 PROMPT SHEET

- **BEGIN LOGGING** (compiles program and logs data)

- **ENTER PROGRAM TABLE 1**
  - 01:xxxx Advance to a given Instruction location
  - 01:x.xxx Enter Execution Interval between 1/64 and 8191 s.
  - 01:Pxx Enter a Program Instruction (select appropriate instructions from the following pages).

- **ENTER PROGRAM TABLE 2**
  - Same structure as *1. Allows use of a different Execution Interval.

- **ENTER PROGRAM TABLE 3** (subroutines only)
  - Same structure as *1 except no Execution Interval

- **INPUT STORAGE** (display data values, flags, or port status)
  - 06:xxxx Advance to a given Input Storage Location

- **FINAL STORAGE** (display values stored in area 1 or 2)
  - 07:xx Select area 1 or 2 (skipped if 2 not allocated)
  - 07:xxxxx DSP location; enter location to advance to

- **MANUAL DATA DUMP**
  - 08:xx Select Storage Area 1 or 2 (skipped if 2 not allocated)
  - 01:xxxx Output Device/Baud Code (see Inst. 96 options)
  - 02:xxxxx Current or start Final Storage Location
  - 03:xxxxx DSP or end Final Storage Location
  - 04:xx Enter any number to start dump

- **STORAGE MODULE COMMANDS** - See Storage Module manual

- **MEMORY ALLOCATIONS** (display or change)
  - 01:xxxx Input Storage Locations
  - 02:xxxx Intermediate Storage Locations
  - 03:xx Final Storage Locations - Area 2
  - 04:xxxx Final Storage Locations - Area 1
  - 05:xxxx Memory allocated for program (bytes)
  - 06:xxxx Memory remaining program memory (bytes)

- **SECURITY** (display or change)
  - 02:xxxx Lock "4, *5 & *6 except display"

- **STORE OR LOAD PROGRAMS**
  - 1 Print program (ASCII)
  - 2 Load program (ASCII), '0' compile
  - 2- Load program (ASCII), '*6 compile
  - 6 Store program in Flash
  - 7 Load program from Flash
  - 7N Store/Load/Clear program in Storage Module N (N = 1-8)
    - 1x Store program x in Storage Module N
    - 2x Load program x from Storage Module N
    - 3x Clear program x from Storage Module N
    - x = program 1-8
  - 8 Set Datalogger ID
  - 10 Set Power-Up Options
    - 0 Clear ports, flags, timer, and input and intermediate storage
    - 1 Clear intermediate storage
    - 2 Retain ports, flags, timer and input and intermediate storage
    - 3 Do not change power-up settings

The CR510 can be interrogated or programmed via the 16 keys and display on the CR10KD. The * key is the most important because it controls access to each of the CR510’s 14 programming, data storage, and status areas (*"star" modes).

Once in a star mode, use A & B to move between entries. To enter a value, use the 0 through 9 keys, then press A to exit a star mode, key in a different star mode. To exit all star modes and begin logging, key in * 0 .

- **CLOCK** (set or display CR510 time)
  - *6 Commands
    - Display Input Location Number or enter location to advance to
    - Enter value in Input Location; change sign
    - Display flags 1-8, toggle flag w/keys 1-8
    - Display ports 1-2, toggle port w/keys 1-2

- **GENERAL KEYSTROKES**
  - Enter (Advance)
  - Back up
  - Change sign of a number
  - Decimal point
  - Clear digit just keyed

- **PARAMETER ENTRY TABLE** - See CR510 manual.
3 Program Table full
4 Intermediate Storage full
5 Final Storage Area 2 not allocated
8 CR510 was reset by watch dog timer
9 Insufficient Input Storage
10 Low battery voltage
11 Attempt to allocate unavailable storage
12 Duplicate *4 ID
20 Subroutine encountered before END of previous subroutine
21 END without IF, LOOP, or SUBROUTINE
22 Missing END
23 Non-existent SUBROUTINE
24 ELSE in SUBROUTINE without IF
25 ELSE without IF
26 EXIT LOOP without LOOP
27 IF CASE without BEGIN CASE
30 IFs and/or LOOPS nested too deep

31 SUBROUTINES nested too deep
32 Instruction 3 and interrupt subroutine use same port
40 Instruction does not exist
41 Incorrect Execution Interval
60 Insufficient Input Storage

*D Mode Errors
94 Program storage area full
95 Flash program does not exist
96 Addressed device not connected
97 Data not received within 30 seconds
98 Uncorrectable errors detected
99 Wrong file type or editor error

D AY O F Y E A R C A L E N D A R

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Add 1 to unshaded values during leap years.