- D-LIB HELP FILE (for librarian version 0x123) -

COMMANDS:
- Command line return status: <OK> = successful; <?> unsuccessful, followed by error.
- The general format is parameters (if any) first, separated by spaces,
  terminated by the command, followed by a white space (SPACE, ENTER, etc.).
- Preset / profile file extension *.dlp automatically added / removed.
- System profile slots [0:3] are mapped to slots [100:103].
- Use slots [0:3] for system profile commands ending in "_sys".
- Use slots [100:103] for system profile commands not ending in "_sys".
- "r" refresh files and directories on F2 page.
- "d" toggle decluttered view of files and directories on F2 page.
- "quit" or "exit" quit the program.
- "help" display this file.
- "term" interactive terminal mode, ESC to exit.
- "ktoe" current knob values to editor.
- "etok" current editor values to knobs (including sys knobs).
- "ver" read EEPROM software CRC value (as stored, not calculated).
- <dir> "cd" or "chdir" change working directory.
- <name> "rene" rename editor (name mandatory).
- <file> "print" print screen to text file (append; file optional).
- <file> "viewf" view file (file mandatory).
- <file> "delf" delete file (file mandatory).
- <file> <file> "renf" rename file (files mandatory).
- <file> <file> "copf" copy file (files mandatory).
- <file> "ptoe" preset file to editor (file optional).
- <file> "ptoe_sys" profile file to editor (file optional).
- <file> "etop" editor to preset file (file optional).
- <file> "etop_sys" editor to profile file (file optional).
- <slot> "stoe" slot to editor (download; slot mandatory).
- <slot> "stoe_sys" profile slot to editor (download; slot mandatory).
- <slot> "etos" editor to slot (upload; slot mandatory).
- <slot> "etos_sys" editor to profile slot (upload; slot mandatory).
- <slot> <file> "stop" slot to preset file (download; slot & file mandatory).
- <slot> <file> "stop_sys" slot to profile file (download; slot & file mandatory).
- <slot> <slot> "stop_num" slots to preset numbered files (slots mandatory).
- <file> <slot> "ptos" preset file to slot (upload; file & slot mandatory).
- <file> <slot> "ptos_sys" profile file to slot (upload; file & slot mandatory).
- <slot> "stol" slot to list (download; slot optional).
- <slot> <slot> "stol" slots to list (download; slots optional).
- <file> "ltob" list to bank file (file mandatory).
- <file> <slot> "btos" bank file to slots (file & slot mandaory). Neg slot goes neg!
- <file> "spi_pump" upload D-Lev SW file to EEPROM (file mandatory).
- <file> "eeprom_pump" upload D-Lev presets & SW file to EEPROM (file mandatory).
- <file> "eeprom_dump" download D-Lev EEPROM presets & SW to file (file
mandatory).

KEYS:
- L, R, CTRL + (L, R), BKSP, DEL, HOME, END, act as usual w/o hilite.
- UP, DN recall command history.
- TAB filename auto-complete ("r" to refresh internal list).
- ESC clear hilite, clear command line.

- ENTER cursor to end & insert space.
- F1 EDITOR screen; press again to toggle hilite & edit.
- F2 FILES screen; press again to toggle hilite & scroll.
- F3 SLOTS screen; press again to toggle hilite & scroll.

F1 EDITOR screen:
- Press F1 to toggle hilite, ESC to exit. WHEN THE HILITE IS ACTIVE:
- L, R, UP, DN move hilite one knob.
- CTRL + (UP, DN) +/-1 the hilited knob value
- CTRL + (R, L) +/-16 the hilited knob value
- ALT + (R, L, UP, DN) move hilite one UI screen
- HOME / END move hilite to start / end.
- DEL zero out the hilited knob value.
- number, ENTER|space will set the hilited knob value.
- If the hilite is on a UI page name then all knobs on that page
  are changed to the entered set value.

F2 FILES screen:
- r refresh list of files and directories.
- d toggle decluttered view of files and directories.
- Press F2 to toggle hilite, ESC to exit. WHEN THE HILITE IS ACTIVE:
- L, R, UP, DN move hilite one file.
- HOME / END move hilite to start / end.
- ENTER copy the hilited file name to command line.
- DEL delete hilited file.
- e edit hilited voice preset file & rename editor.
- s edit hilited system profile file & rename editor.
- v view hilited file.
- c chage to hilited directory.

F3 SLOTS screen:
- <slot start> <slot end> "stol" to populate; "stol" to update.
- Press F3 to toggle hilite, ESC to exit. WHEN THE HILITE IS ACTIVE:
- L, R, UP, DN move hilite one slot.
- HOME / END move hilite to start / end.
- ENTER copy the hilited slot name to command line.
- e download and edit hilited slot & rename editor.

USAGE EXAMPLES:
- Download knobs to EDITOR (do this to check serial connection):
    ktoe
- Upload EDITOR to knobs:
    etok
- Download voice preset slot 11 to EDITOR:
    11 stoe
- Download system profile slot 2 to EDITOR:
    2 stoe_sys
  or
    102 stoe
- Upload EDITOR to preset slot 20:
    20 etos
- Upload EDITOR to profile slot 3:

3 etos_sys
  or
    103 etos
- Save EDITOR to preset file "oboe9.dlp":
    oboe9 etop
- Load preset file "dobro.dlp" to EDITOR:
    dobro ptoe
- Refresh the list of FILES:
    r
- Toggle FILES view of only relevant / all files & directories:
    d
- Change to directory below:
    .. cd
- Change to "presets" directory above:
    presets cd
- Upload preset file "cello8.dlp" to preset slot 9:
    cello8 9 ptos
- Download preset slot -5 to preset file "female7.dlp":
    -5 female7 stop
- List preset SLOTS 0 thru 20:
    0 20 stol
- Relist those same SLOTS again:
    stol
- List of SLOTS to bank file "mybank.bnk":
    mybank ltob
- Upload bank of presets in bank file "mybank.bnk" to preset slots 10, 11, 12, etc.:
    mybank.bnk 10 btos
- Upload bank of presets in bank file "oldbank.bnk" to preset slots -1, -2, -3, etc.:
    oldbank.bnk -1 btos
- Download preset slots 3 thru 6 to preset files 003.dlp, 004.dlp, etc.:
    3 6 stop_num
- Download profile slot 0 to profile file "my_sys.dlp":
    0 my_sys stop_sys
  or
    100 my_sys stop
- Upload profile file "_sys_9.dlp" to profile slot 3
    _sys_9 3 ptos_sys
  or
    _sys_9 103 ptos
- Drop to the terminal and read uP registers 0 through 9 (use space @ end!):
    term
    0 9 rr
- Drop to the terminal and calculate the EEPROM software CRC (S/B debb20e3):
    term
    crc
- Clear (zero out) preset slot 1:
    _empty 1 ptos

- Clear (zero out) preset slots 21 thru 30:
    _empty_10.bnk 21 btos
- Clear (zero out) preset slots -40 thru -89:
    _empty_50.bnk -40 btos
- Upload software file "f9e1c5c7.spi":
    f9e1c5c7 spi_pump
- Upload all presets and software file "factory.eeprom":
    factory eeprom_pump
- Download all presets and software to file "2022-01-23.eeprom":
    2022-01-23 eeprom_dump

PROGRAM SETUP:
- Unzip all files to a folder.

PROGRAM COMPILE:
- For POSIX target: comment out #define MSWIN at top of "d-lib.cpp".
- compile "d-lib.cpp" with -std=gnu++11 option.

RUN IN MSWIN:
- Create desktop shortcut & edit it:
- Properties | Layout
- Screen Buffer Size: 86x30
- Window Size: 86x30

RUN IN LINUX:
- Create desktop launcher & edit it:
  [Desktop Entry]
  Name=term
  Exec=gnome-terminal --title="D-LIB" --geometry 86x30 -x
/home/demo/Documents/CPP/d-lib
  Comment=
  Terminal=false
  Icon=exec
  Type=Application
  Path=/home/demo/Documents/CPP/
  Name[en_US]=D-LIB

TIPS:
- At startup do a "ktoe" to check if serial connection is OK.
- Preset files must be in the current directory for F3 preset list names.
- The highlight must be off to use the command line.
- All files (preset, bank, list, print) are text files and are editable.
- Use eeprom_dump to capture a snapshot of your entire system.
- Use eeprom_pump to restore your system, or to perform a factory reset.
- Within an eeprom file, preset 0 starts on line 1.
- Within an eeprom file, the software load starts on line 16385.