

DBI3-V01	URRA
dbi3_v01_r1_80_0_2021_06_02_1.odt	DBI3 V0.1 FW rev 1.8

DBI3 V01 Firmware version 1.8

Dewpoint Info Page

A **Dewpoint INFO** page is added. Page show:

- Barometric Pressure
- Ambient Temperature
- Relative Humidity
- Dewpoint with Temperature Dewpoint Spread on same line
- Cloud Base

Temperature and Humidity data source is DBA3-V02 Temp/Dewpoint meter. When a DBA3-V02 is active it takes precedence over DBA3-V01. DBA3-V01 (similar to DBT3-V01) measures only temperature.

Dewpoint is calculated from temperature and humidity readings applying the Magnus formula.

Cloud base is calculated from dewpoint, temperature reading and barometric set pressure e.g. barometric pressure set to QNH, cloud base reads cloud base over sea-level.

Adjusted TOPT Code setup function

The x1000 increment/decrement is removed leaving x1, x10 and x100 modes.

Setup from Command Line

When performing setup units from command line using **su** command, values was not converted when changing unit. That is now corrected.

Dewpoint info added to read command and logfile records

Temperature, humidity, calculated dewpoint and cloudbase is added to output for read command as well as for log file record.

DBI3-V01	URRA
dbi3_v01_r1_80_0_2021_06_02_1.odt	DBI3 V0.1 FW rev 1.8

Distance Made Good and Elapsed time added to MAX page

Info/Max page has been extended with distance made good (DMG) and elapsed time (LAP).

DMG and LAP are reset at instrument power on. Values displayed for DMG is big circle distance from first GPS fix from instrument power and for LAP, elapsed time from instrument power on.

MAX page LAP time is separated from DBI3 ELAP display.

GPS data output, NMEA mode

From setup menu, a selection between NMEA and CLI mode is now implemented.

When NMEA mode is selected, instrument output NMEA GPGGA and GPRMC messages at a one herz rate. This is compatible with TwoNav ® PC application software. TwoNav ® PC application shall be setup as: protocol NMEA, baudrate 115200, communications port COMn (USB Serial port). NMEA MSL altitude is substituted with DBI3 pressure altitude. Uncheck 'GPS uses ellipsoidal altitudes'. Also make sure application program datum match DBI3 setup datum.

CLI mode works as before. Note CLI mode need to be selected for firmware update and log file download.

Added text line to setup display

One text line is added to setup display. Text line explain abbreviation for setup options.

DBI3-V01	URRA
dbi3_v01_r1_80_0_2021_06_02_1.odt	DBI3 V0.1 FW rev 1.8

Command Line Interface FW rev 1.80

Perform warm reboot

rst - restart system

Show help contents

? - show help

Initialize Real Time Clock

ri - rtc init

Set Real Time Clock

rs yyyy mm dd hh mm ss - rtc set

Power off instrument

po - turn hard off

Simulation mode on or off

sm on|off - sim data

Set instruments units

su alt {feet|meter} | roc {fpm|mps} | bar {ihg|hpa} | temp {fahr|cent} | sog {knot|mps|kmh|mph}
- set units

DBI3-V01	URRA
dbi3_v01_r1_80_0_2021_06_02_1.odt	DBI3 V0.1 FW rev 1.8

Set instrument alarms

sa alth {off|value} | altl {off|value} | clmb {off|value} | desc {off|value} | topt {off|value} - set alarm

Set instrument functions

sf aut {off|static|timeout} | frs {off|pon|toff|toffc|lapc} | aof {off|on} | dat {222-0} - set funcs

Set instrument variometer

sv resp {6.0-1.2} | audio {off|on} | clmbt {value} | desct {value} - set vario

Set instrument top and ambient temp code

st top {4-1} {off|9999-1} | amb {2-1} {off|9999-1} - set topt

Get instrument unit settings

gu alt|roc|bar|temp|sog - get units

Get instrument alarm settings

ga alth|altl|clmb|desc|topt - get alarm

Get instrument function settings

gf aut|frs|aof|dat - get funcs

Get variometer settings

gv resp|audio|clmbt|desct - get vario

DBI3-V01	URRA
dbi3_v01_r1_80_0_2021_06_02_1.odt	DBI3 V0.1 FW rev 1.8

Get top and ambient temp code settings

gt top{4-1}|amb{2-1} - get topt

Set defaults (settings), metric, imperial or urb

sd met|imp|urb - set defaults

File system commands

fs vinit|vdel|start|stop|list|del [filename]|read[filename]|state|clear - file system

Set nonvolatile info parameters

si mod|brd|date|loc{adr} str - set info

Get nonvolatile info parameters

gi mod|brd|date|loc{adr} - get info

Set console mode

md mach|con - set CLI mode, machine or console

Print instrument serialnumber

sn - print serialnumber

Print firmware version

vr - print firmware version

DBI3-V01	URRA
dbi3_v01_r1_80_0_2021_06_02_1.odt	DBI3 V0.1 FW rev 1.8

Get windlog data

gl {360-1} - get wlog data

Read instrument flight data

rd presm|presb|bar|alt|roc|top|amb|ambc|ambw|lap|long|lat|sog|cog|utc|msl|all - read DBI3 flight data

Read instrument battery status

cc - battery fuel gage