



## Sensor Correction on the T1

Beginning with software revision 20.04 (2/1/08) and revised at revision 20.10 (9/3/09), the T1 can now correct for individual sensor non-linearities by means of sensor correction tables.

On startup, the T1 looks for four text files named

- windang.cor
- windspd.cor
- boatspd.cor
- compass.cor

If they exist, they are loaded and applied to the relevant readings immediately after determination of the raw value. Corrections are added to the raw reading. All sensor corrections can be disabled by setting Option 31 to 1 (generating error 108). For instance, if file compass.cor exists and contains

```
;Compass correction table
0,0
90,10
180,0
270,-10
```

Then, if the compass output was 90°, the system heading would be 100°.

Syntax rules;

- Lines beginning with semicolon are ignored.
- A maximum of 20 lines are scanned.
- Active lines contain two comma-separated numbers; The first is the raw input at which the second is applied.
- The first number must be monotonically increasing.
- Wind angle and compass assume 0 thru 360 degrees.
- Values are linearly interpolated between entries.

Loading a correction table;

- Remove the T1 Compact flash card and copy the file onto it, or, transfer the file using T1Status (see <http://ockam.com/docs/T1Status.pdf> and toolkit: <http://ockam.com/docs/T1Status.zip>).
- Replace the CF card and restart the T1. If properly performed, you should get 'errors' 110 thru 113 corresponding to the above tables having been loaded.