COURSE & DATA RECORDER KW950-E

- **Printout on low cost printer**
- **Digital heading repeater**
- **Low cost replacement for "course recorders."**
- **Connects to a gyro and a GPS.**
- **Highly reliable, 1000s in service.**

The KW950-E is programmed to output a single line of data at certain intervals. The data is printed on a standard low cost printer, or to a PC for recording on disk. The interval between outputs varies according to these rules, in order to minimise paper used, and to provide a good record of data.

a) One line output every 6 minutes on a 6 minute interval. (0, 6, 12 etc. 1/10th hour.) Paper usage on passage would be typically 4 pages per day.
b) An output if course changes by 2 degrees from the last output. This occurs no faster than at a 10-second interval. Paper usage during manoeuvring would be typically 3 pages per hour.
c) An output on demand by pressing the keypad AL button.

SPECIFICATION

INPUT 1: NMEA 0183, GPS data or GPS and heading data.
These sentences provide the data required. $GPRMC or $GPGGA + $GPVTG + $GPZDA.
The system will not function as a course and data recorder without GPS input.

INPUT 2: DC and rectified unsmoothed DC stepper, 4 to 90v.
360:1 synchro up to 115v/90v. 50/60 400/500 Hz. 90X 400 Hz contactless transmitter.
Tracking rate = Frequency/3 deg/sec. (DC step 333 deg/sec)
Or: NMEA 0183 input, so both input channels are NMEA. Input 1 $HE, AG or GP, HDT,x.x,T

OUTPUT: 4800 baud. 8 bits. No parity. 1 stop bit. 5v CMOS RS422 and RS232 compatible.
Example: time, position, course, speed and course over ground, date.

12:30:00 51 30.521N 003 23.456 W 359 deg 12.0 sog 012 cog 25:12:99

RUDDER ANGLE: If rudder angle (RSA sentence) is input along with GPS data the rudder angle is printed.

GENERAL DATA

DISPLAY: 4 digit red LED 0.6 inch, 15mm high for heading speed etc. Adjustable illumination.
CONTROL: 3 push button switches for align, increase, decrease.
OUTPUT: 5v CMOS drivers via 47 ohms
POWER: 10 to 32 volts DC at 5 watts.
CONNECTIONS: Via cable glands to lift-off terminal blocks. (Cables not supplied.)
ENCLOSURE: DIN case 144 wide, 72 high, 142 mm deep. Flame retardant to DIN 43700
Supplied with a trunnion. Screw clamps for panel mounting optional extra
APPROVALS: IEC 60945 from AMI

PRINTER: 80 columns, 4800 baud, for fanfold or paper roll.
Set printer for International English font, and Auto-LF.
Dealer normally supplies the printer, power unit and paper.

OPTIONS: The KW950-E options are published on the web site below. Email to request latest EPROM data. The KW950-E can do many more things than record course. Check it out on the web.
SPECIFICATION is subject to change at any time. DATA SHEET UPDATED 08/09/2010.

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