



POSITIVE or NEGATIVE VOLTAGE STEPPER

GYRO RETRANSMISSION UNIT KW941-BP

INTRODUCTION

The interface converts heading data into traditional step transmission, or acts as a stepper amplifier.

Using the KW941-BP allows a new heading sensor such as a gyro, magnetic compass or satellite compass to connect to existing bridge repeaters, radars and navigational aids. Retrofits can use the existing distribution unit to save cost.

The **bi-polar (+/- polarity)** step voltage output suits the 4 popular voltages found at sea. The interface has a single stepper output for connection to the distribution unit.

The KW941-BP is replacing the KW941C. As an optional extra a stepper output distribution board can be fitted.



SPECIFICATION

INPUTS: NMEA 0183. \$HEHDT, \$GPHDT and all valid heading sentences. Or Standard stepper 6 steps per degree. +/-4 to 35 volts. or Furuno clock and data.

OUTPUT: 6 steps per degree. Single output for feeding to a distribution unit. Output voltage nominal 24v, 35v, 50v, 70v, DC. (3 Amps per line) **2 standard transformers, please specify which one you need:** a) 24v/50v b) 35v/70v. The output voltage varies with the load; it is not a regulated supply. Rotation or follow up 12 or 24 degrees per second from NMEA input. With step input the step output is the same, except that false states are removed.

OUTPUT: NMEA 0183. RS232 and RS422 compatible. (For test and monitor purpose.) Sentence \$HEHDT (This is not aligned in the step input mode.)

OUTPUT: Alarm relay energised when OK. 1 Amp DIL relay for an independent alarm.

CONNECTORS: Lift off terminal blocks. Power is orange snap-in connector.

POWER: Nominal 115 volts or 230 volts 50/60 Hz double fused, switched and filtered.

ENCLOSURE: 400 x 300 x 150 grey-brown standard electrical enclosure with door. Undrilled gland plate.

FEATURES: LEDs on all inputs and outputs. Simple design. Watchdog restart circuit.

CHANGES MADE FROM PREVIOUS MODEL KW941-C:

- Both + and – step voltage is output (instead of – steps only,) so that AMI can interface the two polarities of repeater found at sea. AMI wants to have an answer for all interfacing requirements.
- A single stepper output connector is fitted for connection to a separate distribution unit, instead of having 6 outlets on the board. On retrofits the existing distribution system and repeaters are being used so the 6 outlets of the KW941-C are not needed.
- The distribution board can be used for all AMI's transmission units, KW903SP, SX & M.
- Stepper input is now + or – steps. Previously it was only common positive, negative steps only, so some transmitting magnetic compass systems could not be interfaced.

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