



## NMEA/STEPPER RETRANSMISSION UNIT & STEPPER AMPLIFIER

The X941 interface converts serial heading data into traditional gyro stepper transmission, and also acts as a stepper amplifier.

The X941 allows a new heading sensor such as a modern gyro, magnetic compass or satellite heading sensor to connect to existing bridge repeaters or existing radars and navigational aids.

The X941 can be used in both retrofit and new installations.

### CASE STUDY

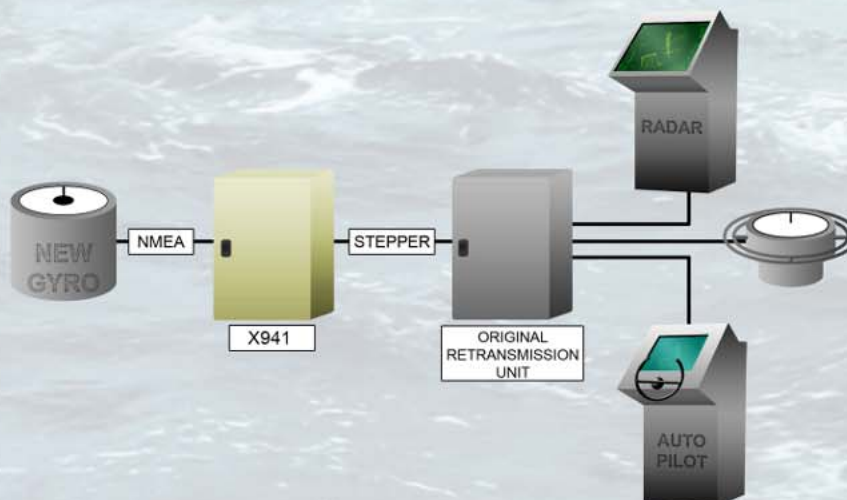
A vessel replaced one of its gyros which only had NMEA as an output, to avoid the cost of replacing the original motorised step repeaters a X941 was used at a fraction of the replacement cost of new repeaters.



X941  
Standard



X941-P  
Bi-Polar



## SPECIFICATIONS

**STEPPER INPUT:** Standard stepper 6 steps per degree. 5 to 70 volts +ve or -ve common.

**DATA INPUT:** NMEA 0183. \$HEHDT, \$GPHDT and all valid heading sentences or Furuno AD10 format serial data and clock. (DIP switch selectable)

**OUTPUT: X941 (Standard)**

Negative Step:

6 steps per degree. 6 output ports.

Option 1- nominal 24/50 volts DC (1Amp per port).

Option 2- nominal 35/70 volts DC (1Amp per port).

**X941-P (Bi-Polar)**

Positive Step or Negative Step:

6 steps per degree. 1 output port.

Option 1- nominal 24/50 volts DC (1Amp).

Option 2- nominal 35/70 volts DC (1Amp).

Please specify your voltage and polarity requirements when ordering.

**NMEA 0183 OUTPUT:** \$HEHDT output, following the NMEA 0183 or Furuno input only.

**OUTPUT:** Alarm relay. 1 Amp DIL relay.

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

**POWER:** 115/230 volts 50/60 Hz. Double fused, switched and filtered.

**ENCLOSURE:** X941 400 x 300 x 160mm 11.5kg  
X941-P 400 x 300 x 160mm 11.8kg

**FEATURES:** LEDs on all inputs and outputs. Simple design.  
Watchdog restart circuit.  
All connections removable terminal blocks.

**APPROVALS:** IEC60945