

NAVITRON SYSTEMS LTD

NT921 MKII SMALL VESSEL AUTOPILOT

Specifically designed for small professional vessel use (typically 11-20m LOA) the NT921 MKII Autopilot provides a powerful combination of steering system control and interface facilities based on an extremely intelligent Control Unit which is clearly marked and simple to operate.



Accordingly, the NT921 MKII offers Navitron steering expertise in a robust and compact package which is purpose designed to communicate as efficiently with the radar and GPS as with the steering gear due to the incorporation of special features which include: -

- **Dual Channel Heading Inputs**
Direct NMEA 0183 (GPS Compass etc) and Mag sensor coil acceptance.
- **Built in Radio Navigator Interface**
for automatic track steering between waypoints.
- **Three heading output types**
NMEA 0183, Step by Step and Furuno format for radar stabilisation etc.
- **Automatic stability adjustment**
compensates for rudder speed variations.

Model NT921 MKII (259 x 176 x 115mm)

Straightforward operation is a key feature of the NT921 MKII thus operator controls are kept to a minimum and are clearly identified by control panel markings which are red backlit for night viewing via a variable intensity illumination control.

A conventionally marked Course Setter provides simple course selection backed up by dedicated LCD displays of heading and rudder angle information which, combined with other indicators, provide permanent visual confirmation of Autopilot status and performance.

When connected to receive Cross Track Error (CTE) or Heading Steer Command (HSC) data transmitted from a proprietary source (GPS, Track Plotter System etc) the RadioNav section may be engaged by simple switch operation (OFF/LO/HI) to 'track' steer between predetermined waypoints stored in the GPS / Trackplotter.

Suitable for console or bracket mounting, the NT921 MKII Control Unit is intended for wheelhouse location and is immediately compatible with GPS compasses transmitting NMEA 0183 heading data in addition to being supplied complete with Heading Sensor Coil and Rudder Reference Unit for installation to solenoid hydraulic systems.

All Navitron Autopilot Systems are covered by comprehensive warranty terms and incorporate the following features as standard: -

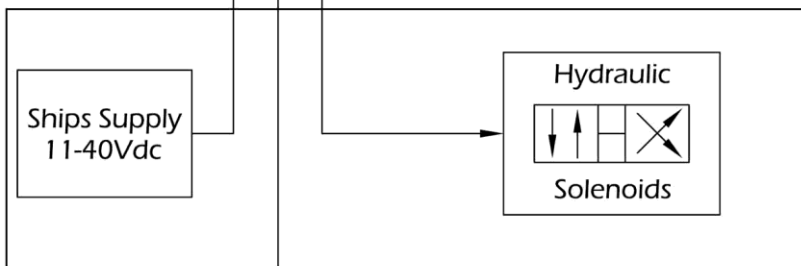
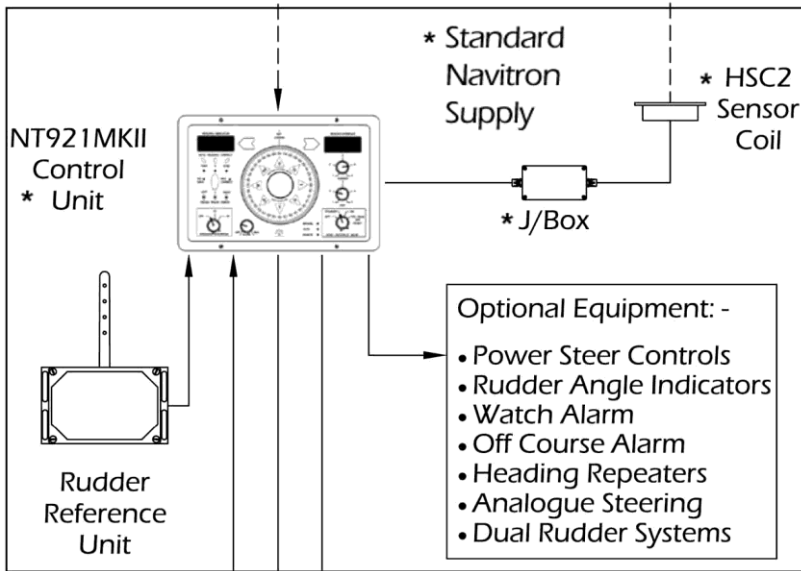
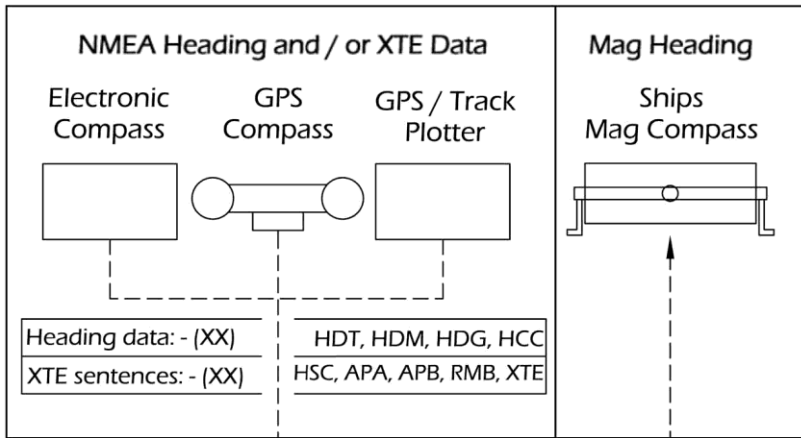
- Full P.I.D. Intelligence.
- Servo driven Heading Repeater (Standby mode).
- Dual Course Setting and Steer on Lock on facility.
- Full Automatic Permanent Helm.
- Bar graph and digital Rudder Angle Indication.
- Operator variable control panel illumination.
- 11-40Vdc Power Supply compatibility.
- Solid State Output stages. (11-40Vdc / 5A max.)
- Full range menu driven installation adjustments.



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NT921 MKII

Outline Specifications



NT921 MKII Heading Output to Radars / Track Plotters etc.

| | | | |
|---|---|------------------------------------|----------------------|
| Step by Step | Selectable 3, 6, 12 or 24 steps/degree | | |
| | 1Hz | 11Hz | 22Hz |
| NMEA 0183 Sentence types @ 1, 11 & 22Hz | APHDG, APHCC HCHDG, HCHCC or HEHDT, AGHDT | HCHDG, HCHDM or HEHDT, AGHDT | HCHDM or HEHDT |
| Furuno Format | Selectable 0.1° or 0.166° resolution | | |
| | Selectable 5Vpp or 11Vpp output | | |
| | Selectable 5Hz or 40Hz update rate | | |

| | | |
|----------------|----------|--|
| Supply Voltage | 11-40Vdc | |
|----------------|----------|--|

| | | |
|--------------------|------|------|
| Power Consumption | 12v | 24v |
| Standby | 3.0w | 3.6w |
| On | 3.3w | 3.9w |
| Illumination (max) | 5.8w | 7.0w |

| | |
|-------------------------|-------------------------|
| Solenoid Switch Ratings | |
| Voltage | 11-40 Vdc |
| Current | 5A (max) |
| Switchline Polarity | Installation Selectable |
| Switch Type | Solid State |

| | |
|-----------------------|---------------|
| Operator Controls | |
| Yaw | |
| Rudder | |
| Autopilot Mode Switch | |
| RadioNav Mode Switch | |
| Illumination | Red Backlight |

| | |
|-------------------|--|
| Panel Displays | |
| Rudder Angle | 2 Digit LCD + LCD Bar |
| Heading Indicator | Servo Card In Standby Mode and 3 Digit LCD Display |
| XTE Indicator | LED |
| Autopilot Mode | LED Indication of Standby, Auto & Remote |
| RadioNav Mode | LED Indication of XTE & Auto Heading Correct |
| XTE | 3 Digit LCD Display |
| Correction Angle | 2 Digit LCD Display |
| | (via automatic Heading display updates at 15 second intervals) |

| | |
|-----------------------|---------------|
| Panel Alarms | |
| Remote | LED + Audible |
| Data Input Fail (XTE) | LED + Audible |
| Max Correction (XTE) | LED + Audible |

| | |
|--------------------|-------------------------|
| Mechanical | NT921 MKII Control Unit |
| Width | 259mm |
| Height | 176mm |
| Depth behind bezel | 115mm |
| Weight | 3.9Kg |