This SMART DGPS RECEIVER is based on an ultimate 16 channels GPS engine that delivers accuracy better than three meters by decoding the GPS correction signals from the satellite-based WAAS (Wide Area Augmentation System). The GPS engine, interface electronics and the passive antenna are enclosed inside the water-proof plastic housing. This provides advanced state of the art GPS performance in an easy to use package.

TECHNICAL SPECIFICATIONS

Physical Characteristics
- Color : Ivory white
- Dimensions : 97mm in diameter x 32mm in height (flush mounted) or 61.5mm on flag-pole mount
- Weight : 160 grams (without cable)
- Cable GSU : white 15 meter 8x28AWG cable with 6 pins female connector
- Cable GSU with connector : white 15 meter 8x28AWG cable with 6 pins female and 8 pins female connectors

Electrical Characteristics
- Input Voltage : 10 Vdc to 35 Vdc unregulated
- Power Consumption : 0.8 W max
- Electrical Interface : TTL voltage levels, RS-232 polarity

Performance
- Receiving Method : 16 channels parallel (up to 3 for WAAS Satellites)
- Receiving Frequency : 1575.42MHz (L1, C/A code)
- Receiving Sensitivity : Less than -134 dBm
- Time to First Fix (TTFF)
  - Warm Start : 33 seconds (typical)
  - Cold Start : 40 seconds (typical)
- Accuracy
  - Position : Less than 2.5mCEP; 5.0mSEP: GPS:(SA=OFF; HDOP<4)
  - Less than 2.0mCEP; 3.0mSEP: DGPS:(SA=OFF; HDOP<4)
- Dynamics
  - Acceleration : Strong Signals <= 4g
  - Weak Signals typical 1g
  - Altitude: 18000m
  - Velocity: 1850Km/h (515 m/sec)
- DGPS format : WAAS; EGNOS; MSAS
- Output format : NMEA-0183 Baud rate 4800 N81
- NMEA Output messages : GGA, RMC, GSA, GSV, TXT
- Geodetic Datum : WGS84
Connecting to Navman & Northstar Plotters

The GPS cable comes with an LT8 plug, 8 Pin each end.

The BLACK plug connects to the YELLOW socket on the Navman Plotter.

The WHITE plug connects to the WHITE socket on the GPS Antenna.

Navman Connections for GPS with APC (Antenna Plug Connector)

Navman Connections for GPS with fixed wire connection
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- Electrical Interface: TTL voltage levels, RS-232 polarity

**Performance**
- Receiving Method: 16 channels parallel (up to 3 for WAAS Satellites)
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- Receiving Sensitivity: Less than -134 dBm
- Time to First Fix (TTFF)
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Navman Connections for GPS with APC (Antenna Plug Connector)

<table>
<thead>
<tr>
<th>CABLE, Wire Color</th>
<th>FUNCTION</th>
<th>CONNECTOR, 8 pins</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>+10-35 Vdc</td>
<td>7</td>
</tr>
<tr>
<td>GREEN</td>
<td>GPS RX+</td>
<td>1</td>
</tr>
<tr>
<td>BROWN</td>
<td>GPS TX+</td>
<td>2</td>
</tr>
<tr>
<td>BLACK/YELLOW/SHEILD</td>
<td>GND/COMMON</td>
<td>3, 6</td>
</tr>
</tbody>
</table>

Navman Connections for GPS with fixed wire connection

The Service Centre
Maritime House, Sandford Lane
Wareham, Dorset
BH20 4DY
Trade Only +44 (0) 1929 554558
Retail Sales Tel: +44 (0) 1929 554503
Fax: +44 (0) 1929 554559
Email: administration@theservicecentre.eu
This SMART DGPS RECEIVER is based on an ultimate 16 channels GPS engine that delivers accuracy better than three meters by decoding the GPS correction signals from the satellite-based WAAS (Wide Area Augmentation System). The GPS engine, interface electronics and the passive antenna are enclosed inside the water-proof plastic housing. This provides advanced state of the art GPS performance in an easy to use package.

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**Electrical Characteristics**
- Input Voltage : 10 Vdc to 35 Vdc unregulated
- Power Consumption : 0.8 W max
- Electrical Interface : TTL voltage levels, RS-232 polarity

**Performance**
- Receiving Method : 16 channels parallel (up to 3 for WAAS Satellites)
- Receiving Frequency : 1575.42MHz (L1, C/A code)
- Receiving Sensitivity : Less than -134 dBm
- Time to First Fix (TTFF)
  - Warm Start : 33 seconds (typical)
  - Cold Start : 40 seconds (typical)
- Accuracy
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  - Acceleration : Strong Signals <= 4g
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- Output format : NMEA-0183 Baud rate 4800 N81
- NMEA Output messages : GGA, RMC, GSA, GSV, TXT
- Geodetic Datum : WGS84
Connecting to Navman & Northstar Plotters

The GPS cable comes with an LT8 plug, 8 Pin each end.

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- Power Consumption : 0.8 W max
- Electrical Interface : TTL voltage levels, RS-232 polarity

**Performance**
- Receiving Method : 16 channels parallel (up to 3 for WAAS Satellites)
- Receiving Frequency : 1575.42MHz (L1, C/A code)
- Receiving Sensitivity : Less than -134 dBm
- Time to First Fix (TTFF)
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Navman Connections for GPS with APC (Antenna Plug Connector)

Navman Connections for GPS with fixed wire connection
This SMART DGPS RECEIVER is based on an ultimate 16 channels GPS engine that delivers accuracy better than three meters by decoding the GPS correction signals from the satellite-based WAAS (*Wide Area Augmentation System*). The GPS engine, interface electronics and the passive antenna are enclosed inside the water-proof plastic housing. This provides advanced state of the art GPS performance in an easy to use package.

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- Power Consumption : 0.8 W max
- Electrical Interface : TTL voltage levels, RS-232 polarity

**Performance**
- Receiving Method : 16 channels parallel (up to 3 for WAAS Satellites)
- Receiving Frequency : 1575.42MHz (L1, C/A code)
- Receiving Sensitivity : Less than -134 dBm
- Time to First Fix (TTFF) Warm Start : 33 seconds (typical)
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Universal EGNOS/WAAS GPS Antenna

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- Power Consumption : 0.8 W max
- Electrical Interface : TTL voltage levels, RS-232 polarity

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