LX DAQ

Installation manual

Version 1.10
1  Important Notices 3
   1.1  Limited Warranty 3
2  Packing list 4
3  Installation 5
   3.1  Connecting LX DAQ 5
       3.1.1  Wiring 5
   3.2  Technical data 7
   3.3  Connecting sensors 7
4  Revision history 9
1 Important Notices

The LXNAV LX DAQ system is designed for VFR use only. All information is presented for reference only. It is ultimately the pilot's responsibility to ensure the aircraft is being flown in accordance with the manufacturer's aircraft flight manual. The LX DAQ must be installed in accordance with applicable airworthiness standards according to the country of registration of the aircraft.

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⚠️ A Yellow triangle is shown for parts of the manual which should be read carefully and are important for operating the LXNAV LXDAQ system.

⚠️ Notes with a red triangle describe procedures that are critical and may result in loss of data or any other critical situation.

💡 A bulb icon is shown when a useful hint is provided to the reader.

1.1 Limited Warranty

This LXNAV LXDAQ product is warranted to be free from defects in materials or workmanship for two years from the date of purchase. Within this period, LXNAV will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts and labour, the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident, or unauthorised alterations or repairs.

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To obtain warranty service, contact your local LXNAV dealer or contact LXNAV directly.

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2 Packing list

- 1x LX DAQ
- 1x Terminal block plug 10pin
3 Installation

3.1 Connecting LX DAQ

3.1.1 Wiring

LX DAQ connects to RS485 BUS through D-Sub 9 connector to main instrument which also powers it.
External sensors are connected via 10pin terminal block connector located on opposite side from D-Sub 9 connector.

Pin names (from left to right):

1- +12V Supply for sensors (output)
2- +12V Supply for sensors (output)
3- GND
4- Input 1 (AIN1- input)
5- Input 2 (AIN2- input)
6- Input 3 (AIN3- input)
7- Input 4 (AIN4- input)
8- GND
9- Not in use (Do not connect)
10- GND
3.2 Technical data

LX DAQ features 4 fully configurable analog inputs for:
- Voltage sensors: 0-5V
- Resistive: European, ABYC (US) and Asian standards
- Current output sensor 4-20mA

All of the analog inputs have an internal switchable pullup resistor to 5V, thereby relieving the user of manual resistor installation.

<table>
<thead>
<tr>
<th>Name</th>
<th>Min</th>
<th>Nom</th>
<th>Max</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input impedance (each input)</td>
<td>&gt;10M</td>
<td></td>
<td></td>
<td>Ω</td>
</tr>
<tr>
<td>Voltage range</td>
<td>0.3</td>
<td>9.7</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Absolute maximum voltage input</td>
<td></td>
<td></td>
<td>12</td>
<td>V</td>
</tr>
<tr>
<td>Pullup resistor resistance</td>
<td>4700</td>
<td></td>
<td></td>
<td>Ω</td>
</tr>
<tr>
<td>Voltage resolution</td>
<td>2.926</td>
<td></td>
<td></td>
<td>mV</td>
</tr>
</tbody>
</table>

3.3 Connecting sensors

⚠️ Maximum input voltage for analog input is 12.0V on any of four channels.

The following example illustrates how to connect sensors.
### 4 Revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>March 2018</td>
<td>Initial release</td>
</tr>
<tr>
<td>June 2019</td>
<td>Inserted chapter 3.2 Technical data</td>
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