lxnav CAN Bridge Installation Guide

Contents

lxnav CAN Bridge

Specifications

- **Product:** LXNAV CAN Bridge
- **Installation Manual Revision:** 4
- **CAN Bridge Revision:** 4
- **Date:** February 2024

Product Information

The LXNAV CAN Bridge is a device that facilitates communication between a CAN bus and various devices through interfaces like RS232, RS485, and RS422. It is powered by the CAN bus itself, eliminating the need for external power. The device features a male or female M12 connector for CAN bus connection and a 10-pin 3.5mm header for interfacing with devices.

- Important notes include a yellow triangle for crucial information, red triangle for critical procedures, and a bulb icon for useful hints throughout the manual.
- The CAN bridge should be connected to the CAN bus using the provided male or female M12 connector. No external power source is required as the device draws power from the CAN bus.
- Only one device (radio/transponder) can be connected to one bridge. Additionally, the CAN bridge features two open-drain outputs for controlling connected devices.
- Refer to the wiring diagrams in the manual for the minimum required connections between the LXNAV instrument and a radio or transponder. For specific device connections, consult the respective device manuals for additional information.

FAQ

- **Q:** How do I obtain warranty service for the LXNAV CAN Bridge?
- **A:** To obtain warranty service, contact your local LXNAV dealer or LXNAV directly.

Important Notices

Information in this document is subject to change without notice. LXNAV reserves the right to change or improve its products and to make changes in the content of this material without obligation to notify any person or organization of such changes or improvements.

- A Yellow triangle is shown for parts of the manual that should be read very carefully and are important for operating the 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.

Limited Warranty

This LXNAV 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 discretion, repair or replace any components that fail in normal use. Such repairs or replacements will be made at no charge to the customer for parts and labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident, or unauthorized alterations or repairs.
THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN PLACE OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY OR OTHERWISE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE TO STATE.
IN NO EVENT SHALL LXNAV BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE, OR INABILITY TO USE THIS PRODUCT OR FROM DEFECTS IN THE PRODUCT. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you. LXNAV retains the exclusive right to repair or replace the unit or software, or to offer a full refund of the purchase price, at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.
To obtain warranty service, contact your local LXNAV dealer or contact LXNAV directly.

Installations

Packing List

- CAN Bridge
- 2 x M12 to DB9(CAN BUS cable) – only with for Sxxxx vario

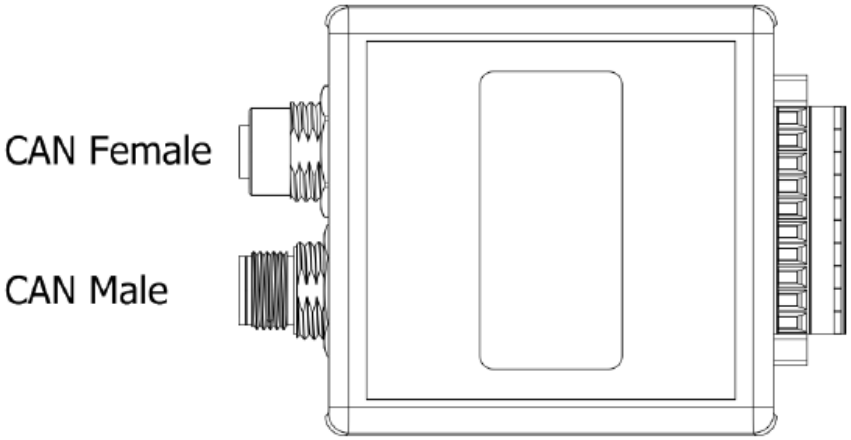
Basics

LXNAV CAN bridge is connected to the CAN bus through a male or female M12 connector. Power is derived from the CAN bus and no external power is needed. The device does not contain a CAN terminator.
On the other side, it has a 10-pin 3.5mm header. With the following interfaces:

- RS232
- RS485
- RS422

Only one device (radio/transponder) can be connected to one bridge.
Additionally, it has two open-drain outputs for controlling various devices that are connected to it.

Installation



Pin number	Description	
Pin 10	Open-drain output 2	
Pin 9	Open-drain output 1	
Pin 8	RS232 Input	
Pin 7	RS232 Output	
Pin 6	Ground	
Pin 5	RS485 #2: B	RS422 Tx -
Pin 4	RS485 #2: A	RS422 Tx +
Pin 3	GND	
Pin 2	RS485 #1: B	RS422 Rx -
Pin 1	RS485 #1: A	RS422 Rx +

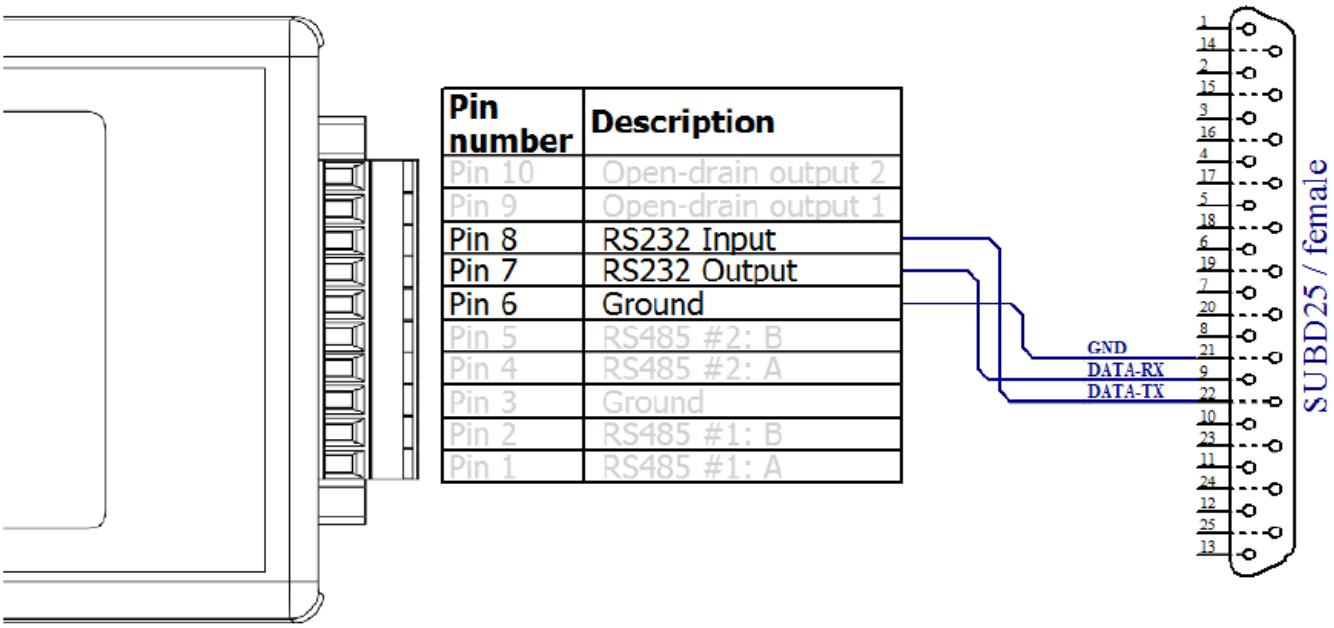
- If the CAN bridge is connected to S-vario, additionally is delivered M12 to DB9 (CAN BUS cable)

Wirings

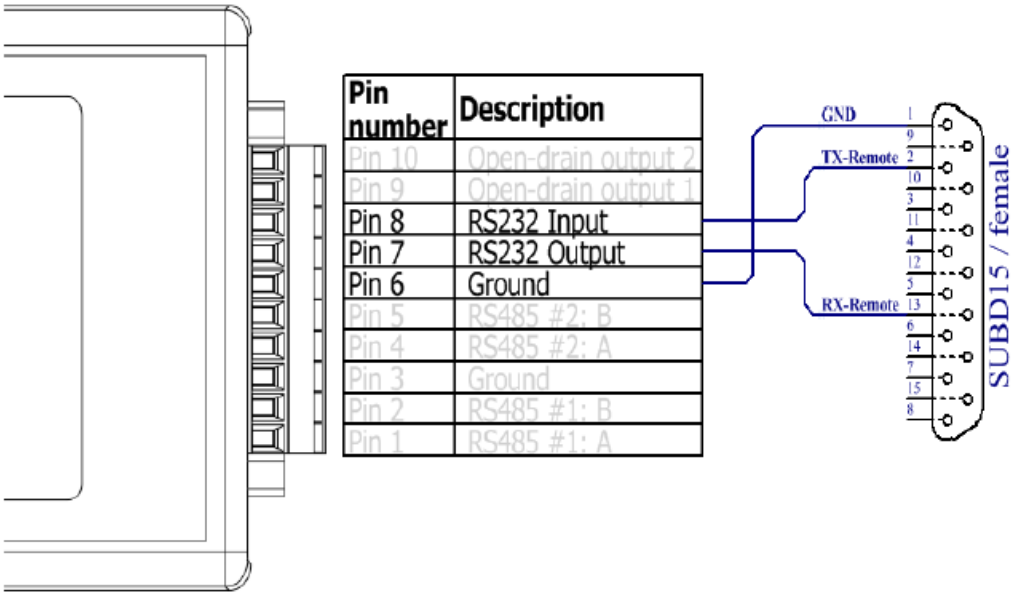
- The wiring diagrams show the minimum required connection for communication between an LXNAV instrument and a radio or transponder.
- The user should check the manual of the connected device for any further information.

Radios

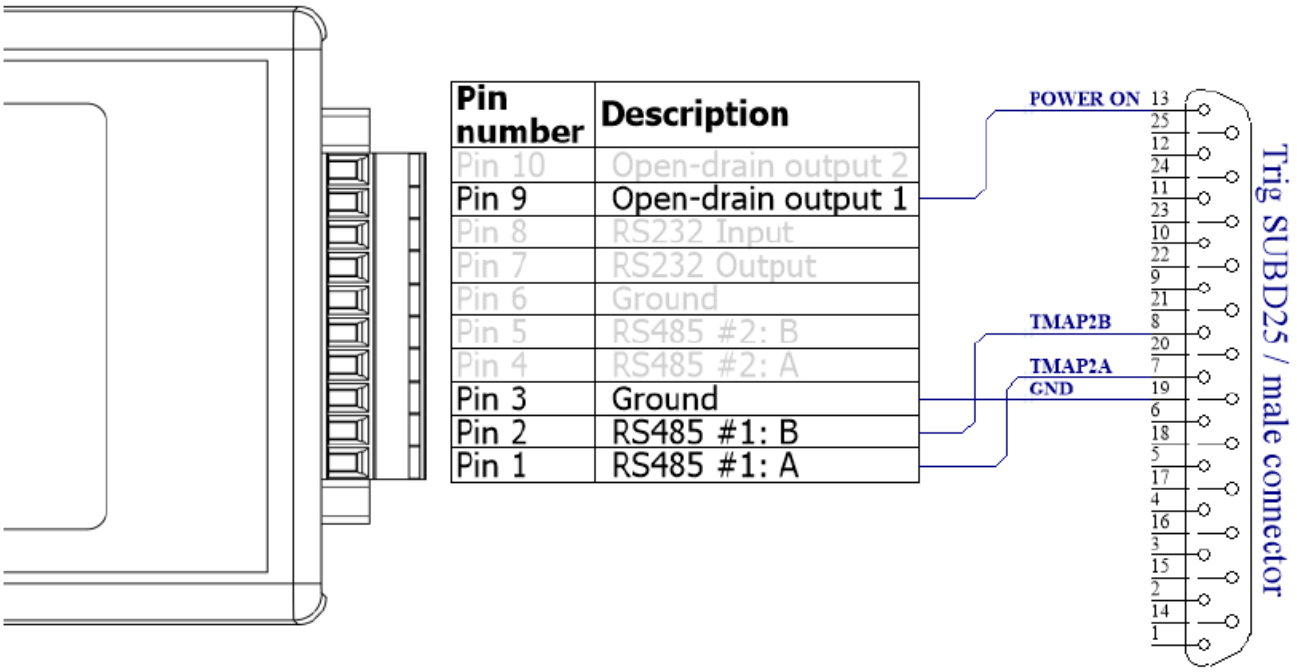
Funkwerk ATR833



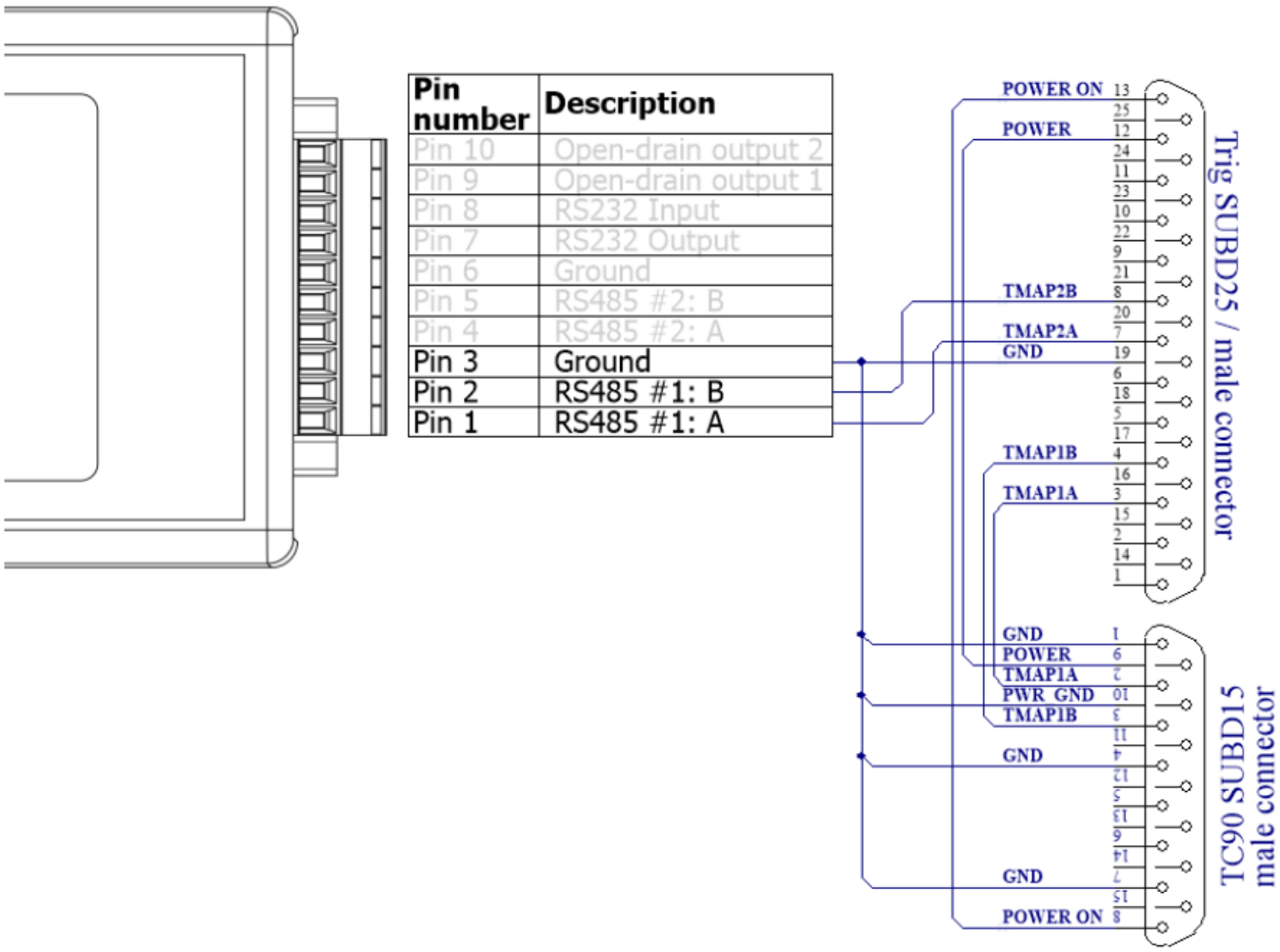
Dittel KRT2



Trig TY 91/92 (no TC90 head)

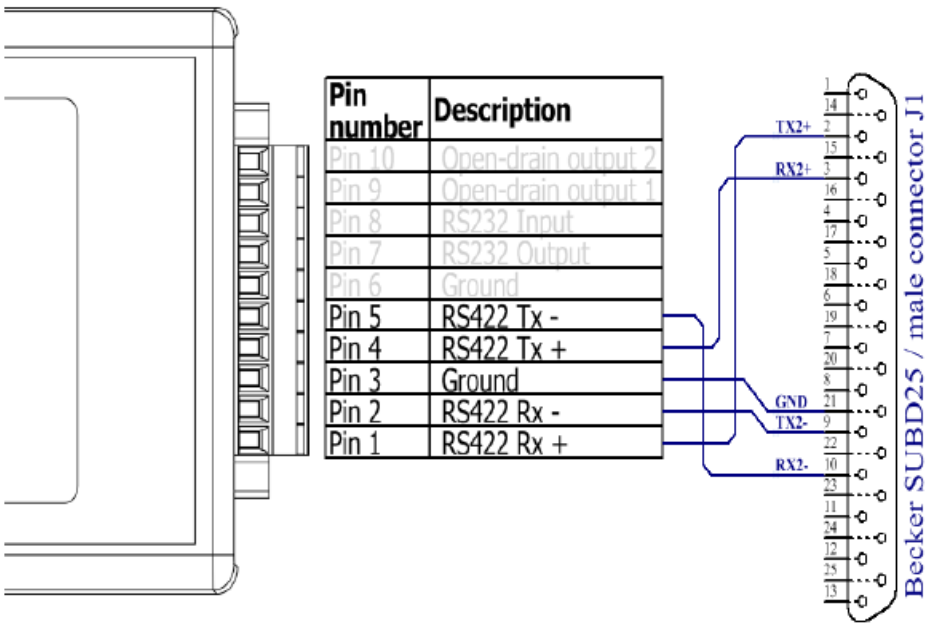


Trig TY 91/92 (with TC90 head)

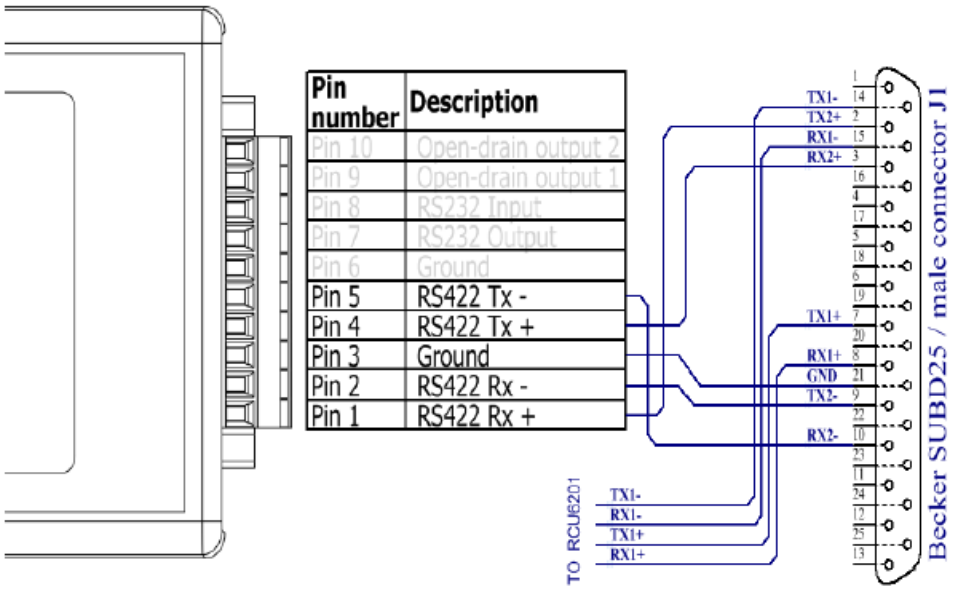


Becker AR6201 / RT6201

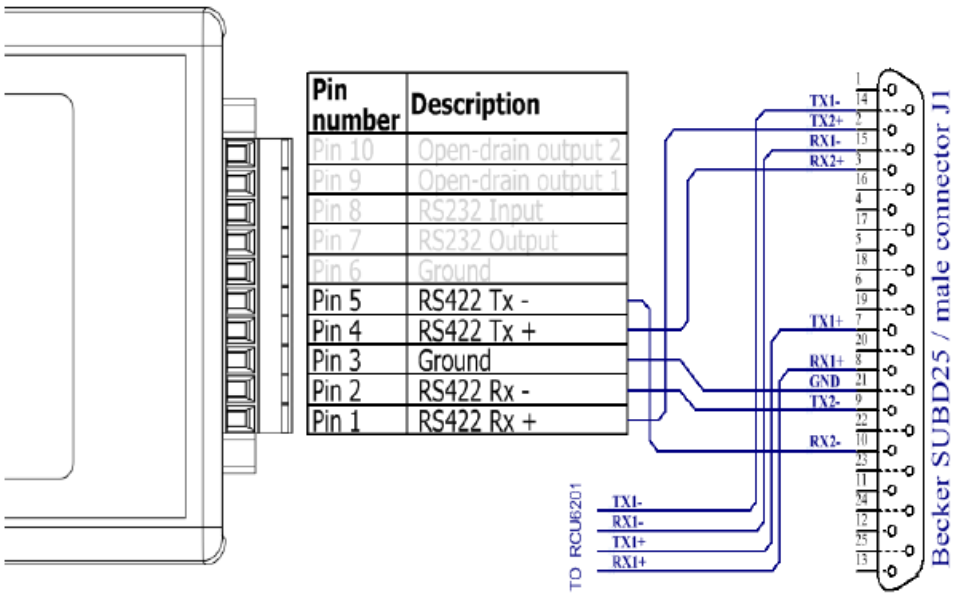
1. AR6201 single seater



2. AR6201 twin seater

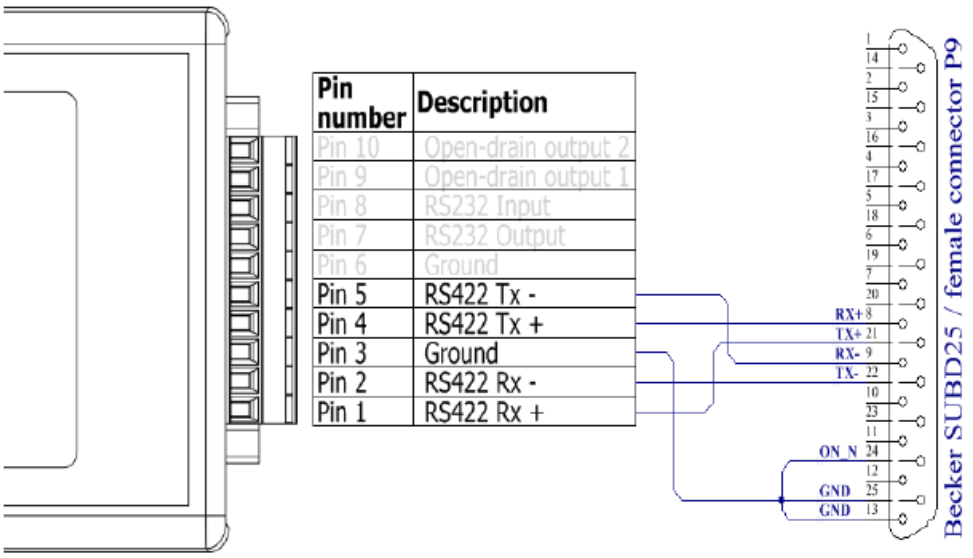


3. RT6201 single-seater remote control

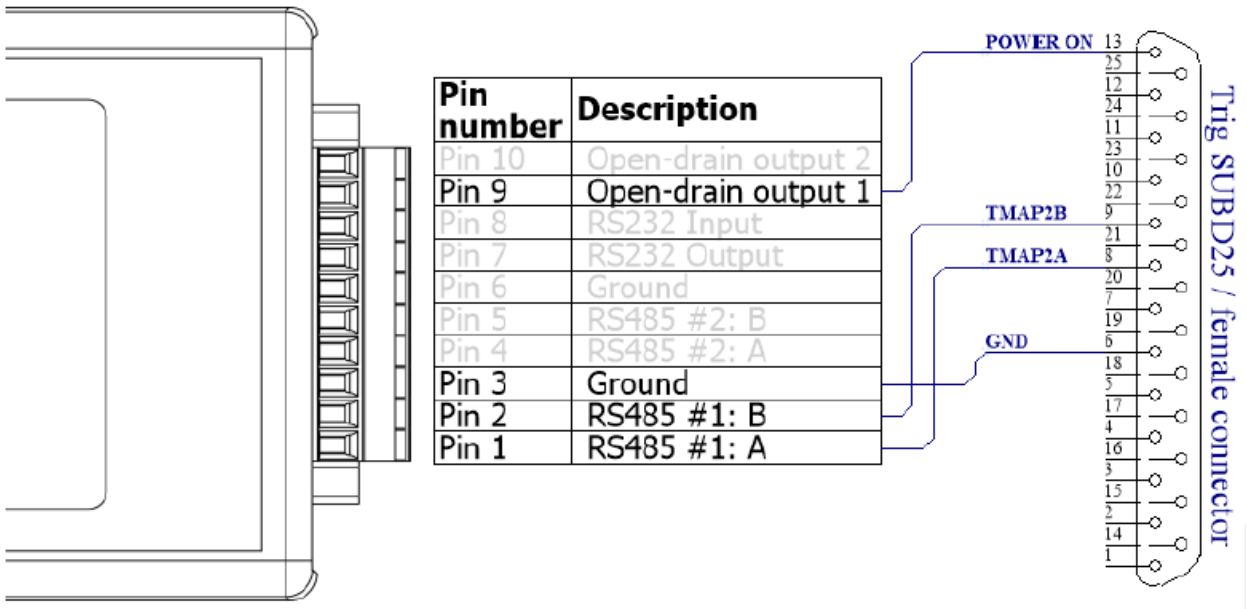


Transponders

Becker BXP6402



Trig TT 21/22



Revision History

July 2016	Rev 1	The initial release of the owner manual
August 2017	Rev 2	Modified wiring pinout on CanBridge for Trig units: 2.4.1.3, 2.4.1.4, 2.4.2.2
August 2018	Rev 3	Modified wiring for ATR833: 2.4.1.1
February 2024	Rev 4	Updated chapter **Error! Reference source not found.**,2.1

CONTACT

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- www.lxnav.com

Documents / Resources

	lxnav CAN Bridge [pdf] Installation Guide CAN Bridge, Bridge

References

- LXNAV Gliding
- User Manual