lxnav Can Remote Control Stick Instruction Manual

INSTALLATION MANUAL
LXNAV CAN Remote
Control stick
Version 1.11

Contents

Important Notices

The LXNAV CAN Remote 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 LXNAV CAN Remote must be installed in accordance with applicable airworthiness standards according to the country of registration of the aircraft.

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 the 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 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 CAN Remote 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 replacements will be made at no charge to the customer for parts and labor, 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 LIEU 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.

Technical Data

- Power input 8-18V DC
- Consumption at 12 V: 60mA
- Weight 300g

Versions

Functionality

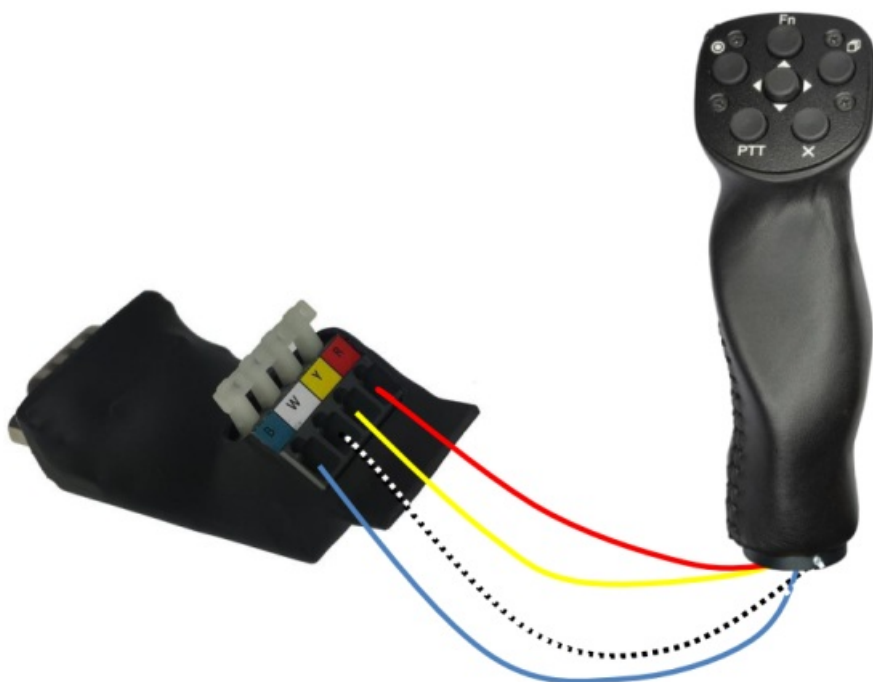|		
Standard version with custom configurable function button "Fn"	Schempp-Hirth version with red starter button for M gliders	EB28 version with trim switch

Diameter of command handles

Diameter	Gliders
19,3mm	DG, LAK, Schempp-Hirth
20,3mm	LS, Stemme, Apis, EB29
24,0mm	Schleicher, Pipistrel Taurus, Alisport Silent, EB28
25,4mm	JS

Shapes

Left-handed (optionally)	Symmetrical (optionally)	Right-handed (standard order)

Installation

LXNAV remote stick is connected to CAN bus through Remote-Can adapter.

⚠️ Be careful, that connect the correct color wire to the pin, which is marked with the same color.
PTT wires are connected to the radio, SC is connected to the Speed to fly input of vario unit.

⚠️ The remote stick will not operate until is registered on the device. The remote stick can be registered under a setup-hardware-Remote stick. Registration must be done on each unit (S80 and S80D)

⚠️ The can bus is under power supply at all times, consequently, the remote stick is also under power. After the flight, please disconnect batteries or switch off the master, to prevent discharging batteries.

Remote with trim switch

Remote can be ordered with 3 position momentary switch for trimming purposes. Such remote has four additional wires with the label "IN: WHITE, OUT: RED" where two white wires should be wired to positive and negative potential in a glider, and the second pair of red wires go to the trim driver. Polarity is not important, if the trimmer has the wrong moving direction simply switch one pair of wires between them and the direction will be reversed.
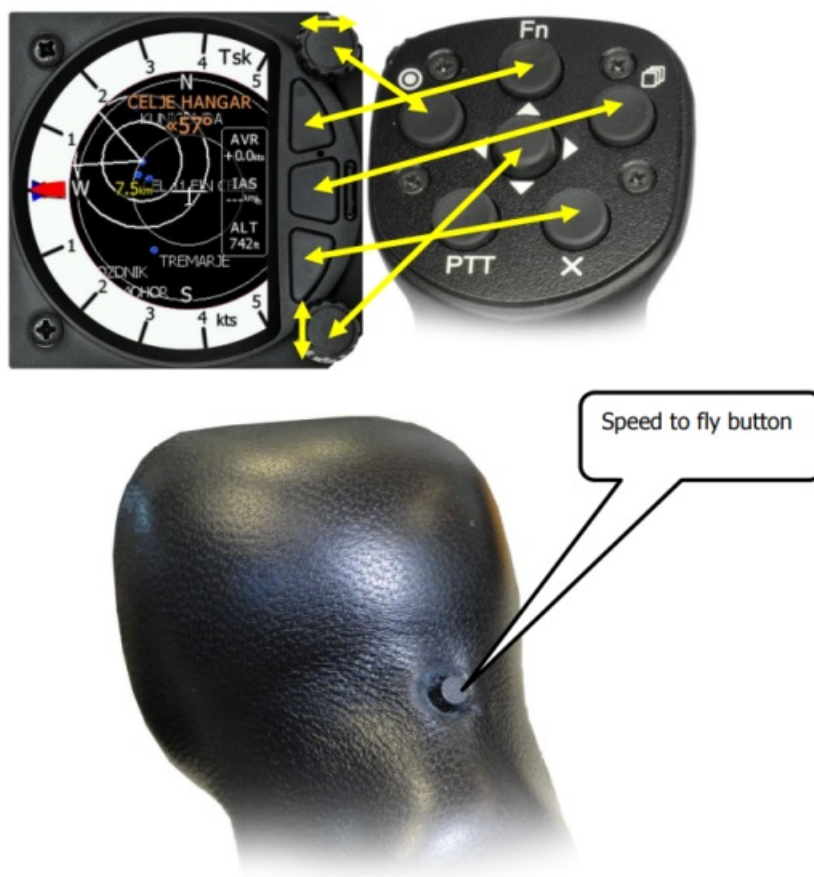

Remote with starter button

This option is for gliders with electric starters on internal engines. Remote has a red momentary button for starting engines on the ground or in the air. The button is in a normally open configuration and makes contact when it is pressed. Coaxial cable is separated from other wires and labeled as "Starter" and should be wired to the engine control unit as stated in their manual.

Functions

Speed to fly button

Remote without SC cable

We have been working very hard to simplify the remote stick so that we can have the same functionality but use fewer cables. The LXNAV new remote stick comes without the standard SC cable but the functionality is still available.
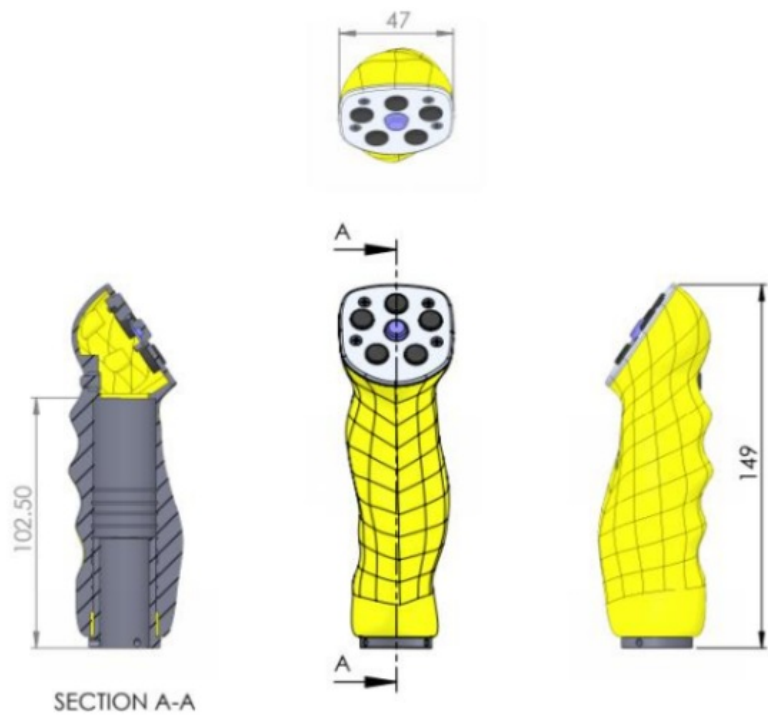
With the new stick, there is no more need to solder these wires to the Vario wiring loom. The SC function is programmable through S8/80/S10/S100.

To make the SC function work with the new stick, please check the SC setting in the configuration/setup page. Go to **Setup->Hardware->Digital inputs**
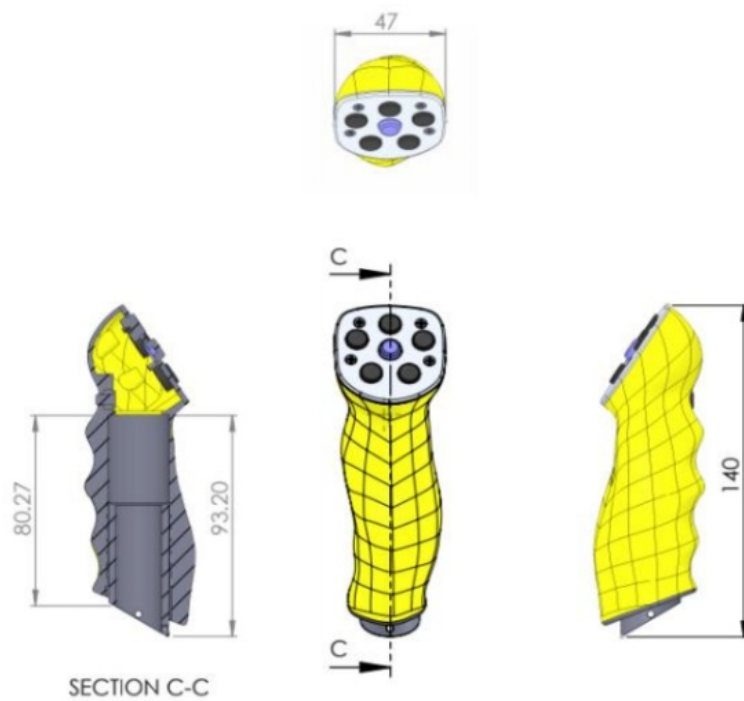
Please make sure that NONE of the input is set to "SC on/off switch" or "SC toggle button".
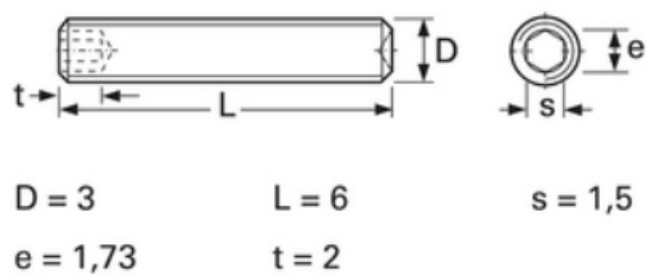
Dimensions

Normal insert

47

149

A
A

SECTION A-A

102.50

Slanted insert

47

C
C

140

80.27

93.20

SECTION C-C

Mounting screws (DIN 916/ISO 4029 M 3 x 6)

t→ |← L → D

e

s

D = 3   L = 6   s = 1,5

e = 1,73   t = 2

Revision history

Rev	Date	Comment
1	Apr-18	Added chapter 1, 3, 6 and 7
2	May-20	Added chapte7
3	Jan-21	Style update
4	Feb-21	Updated chapter 7
5	May-21	Added chapters 4.1 and 4.2 Updated chapter 7

The pilot's choice

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Documents / Resources

lxnav Can Remote Control Stick [pdf] Instruction Manual
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References

- **LXNAV Gliding**