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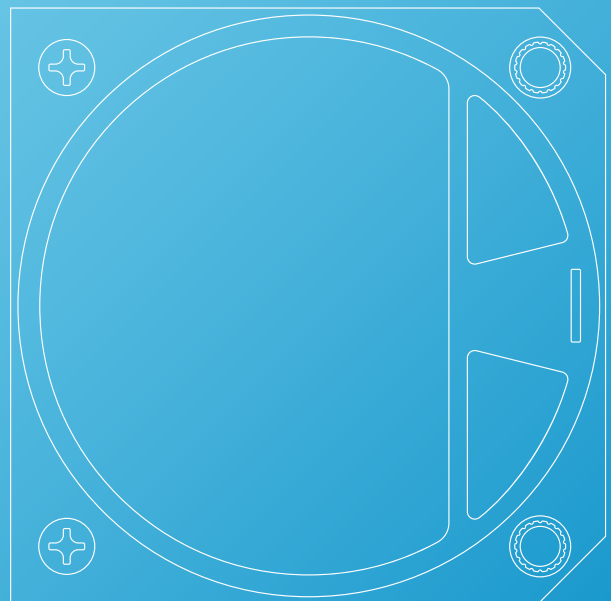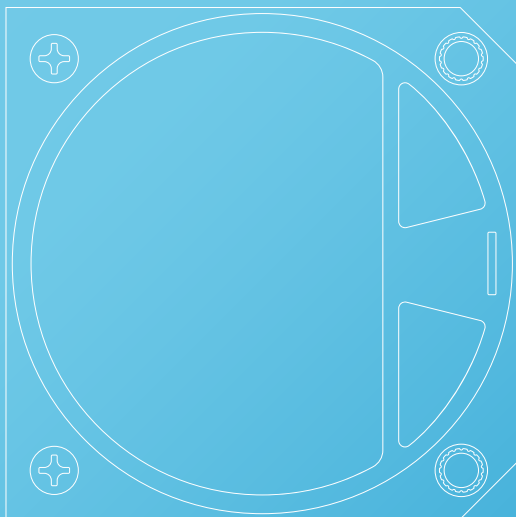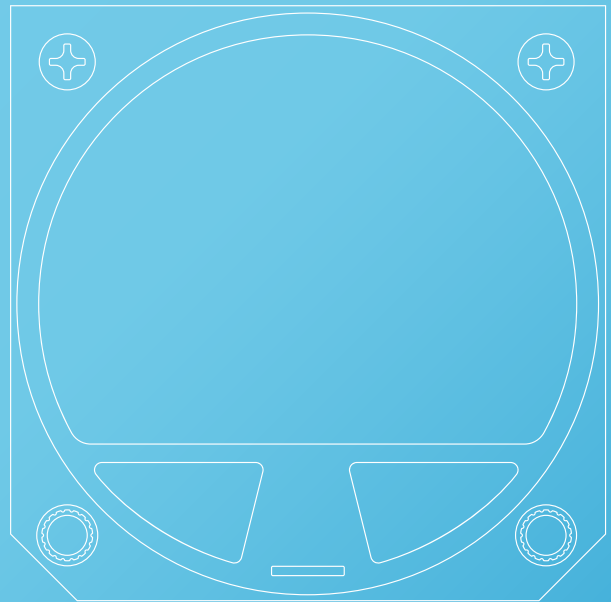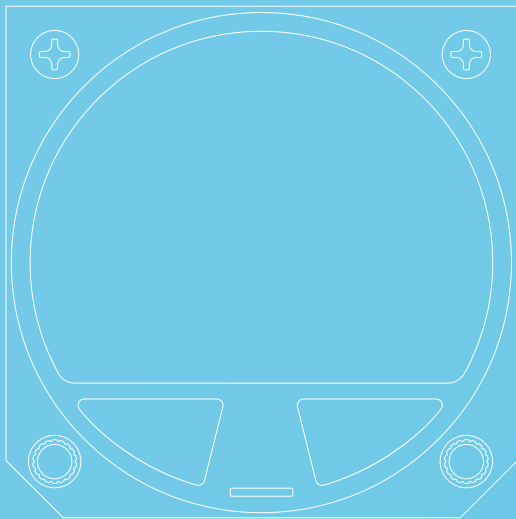# LX10K, LX Era, LX Traffic Monitor and iris series installation manual

version 3.0

LX 10k, LX Era, LX Traffic Monitor and iris series installation manual

Installation manual
(All versions)

CONTENTS

PART ONE – INTRODUCTION

The aim of this manual

is to make sure that the devices you purchase and install by yourself are installed properly.

Since this manual is shared for multiple devices, at the name of each step in square brackets [/] initials of the device, for which the step is valid for, will be written. The initials used are as follow:
- LX 10k   – **[K]**
- LX Era   – **[E]**
- LX Traffic Monitor   – **[T]**
- LX iris series   – **[I]**
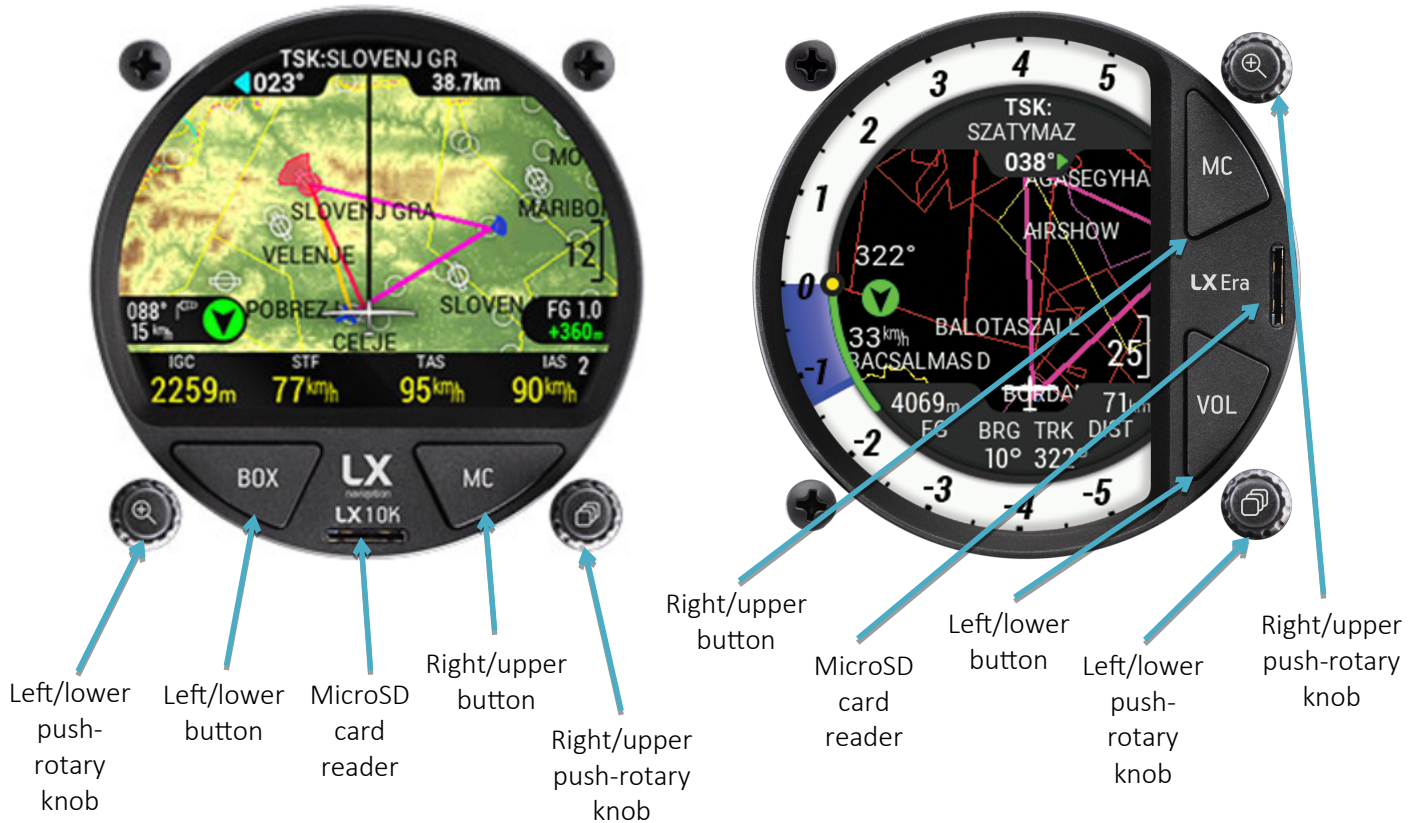
The reason for sharing steps and manual is that these devices share the same hardware platform, with the distinction of the LX Era being of a different orientation (rotated left by 90°) to the other devices.

It is also important to note, that all of the devices, apart from the 10k main device, all units come in either an 80 or 57 [mm] standard aviation size instrument panel hole.

PART TWO – BASIC NOMENCLATURE

The main IO of the device(s) are

the front panel interface:

Left/lower
push-
rotary
knob

Left/lower
button

MicroSD
card
reader

Right/upper
button

Right/upper
push-rotary
knob

Right/upper
button

MicroSD
card
reader

Left/lower
button

Left/lower
push-
rotary
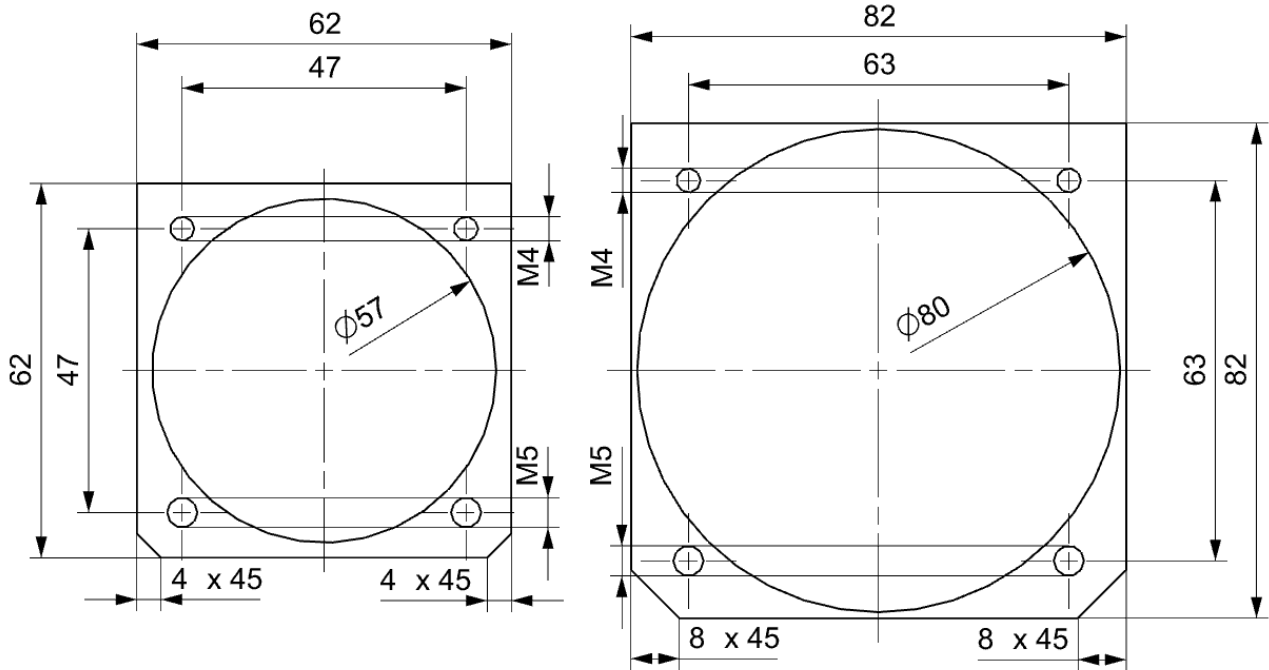knob

Right/upper
push-rotary
knob

You can see that the Left push-rotary knob on the 10k coincides with the Lower push-rotary on the Era, the same is true for the Upper push-rotary knob and both push buttons.

Buttons and push-rotary knob may have different engravings and functions in different units, but this will not influence the installation procedure itself.

PART THREE – CUT OUT

10k, Era, Traffic Monitor and iris series

Note that both units are in landscape orientation, meaning the push-rotary knobs are in the bottom two M5 holes.

PART FOUR – ELECTROMECHANICAL CHARACTERISTICS

Use a circuit breaker rated at 2 A for one and two devices. For each additional device added to the system depending on the same power source a 1 A stronger circuit breaker should be used.

Characteristic	80 [mm] (3.125″) size	57 [mm] (2.25″) size
Dimensions	82 x 82 x 52 [mm] 3.23″ x 3.23″x 2.05″	62 x 62 x 63 [mm] 2.44″ x 2.44″x 2.48″
Mass	279 grams 9.84 oz.	215 grams 9.84 oz.
Input Voltage Range	9.0 – 30.0V DC	9.0 – 30.0V DC
Average Current	150 milliamps @ 12V DC	150 milliamps @ 12V DC
Wi-Fi / Bluetooth range	100 metres / 20 metres	100 metres / 20 metres

PART FIVE – INSTALLATION STEPS

We are going to expect that you've already prepared the future mounting position, meaning you have drilled all of the holes, cleaned the edges can checked that everything fits.

1. Unscrew the two regular M4 Phillips head screw from the device. **[K, E, T, I]**

2. Take the caps off of the push-rotary knobs. **[K, E, T, I]**

3. Unscrew the flat headed screw from within the push-rotary knob while holding the push/rotary knob still by its black plastic. Pull the black plastic part off of the push-rotary shaft. **[K, E, T, I]**

4. Unscrew the M5 hex bolt, enclosing the push-rotary shaft. **[K, E, T, I]**

5. Place the device into its future place in the instrument panel. **[K, E, T, I]**

6. Check that all of the holes are properly aligned.
    Connect the power supply and turn the device on. Check that all of the buttons are working as expected. To turn the device on, hold the Lower/left push-rotary knob. **[K, E, T, I]**

7. Connect the correct pressure ports to the device IO in the back.
    - P_{ST} should be used for connecting the static pressure. This static pressure will be used for calculation of airspeed.
    - P_{TOT} should be used for connecting the total pressure. This pressure will be used for calculation of airspeed.
    - TE/P_{ST} should be used for connecting the pressure from the Total Energy probe, in case Total Energy probe is going to be used for compensation, or to the static pressure, in the case that electronic compensation will be used.
    Check that all of the pressure are working correctly. **[K, E, I]**

8. Connect the GPS and Bluetooth/Wifi antenna, if needed. Please not that the Bluetooth/Wifi antenna is already built in into the Era 57. Check that all connections are working. The GPS antenna should not be under any electrically conductive materials (metals, carbon fiber, etc.). **[K, E, I]**

9. Connect the rest of the IO:
    - Flarm – The Flarm port uses standard Flarm pin-out in the 6-pin configuration. Use a 1:1 RJ12 to RJ12 cable
    - Inputs port with the microswitches correctly wired and set up in the setup menu.
    - User port
    - Can port
    [K, E, T, I]

After finishing the installation, check that the device is completely working, prior to closing the instrument panel cover.

If you run into any issues, contact us at info@lxnavigation.com for assistance.

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