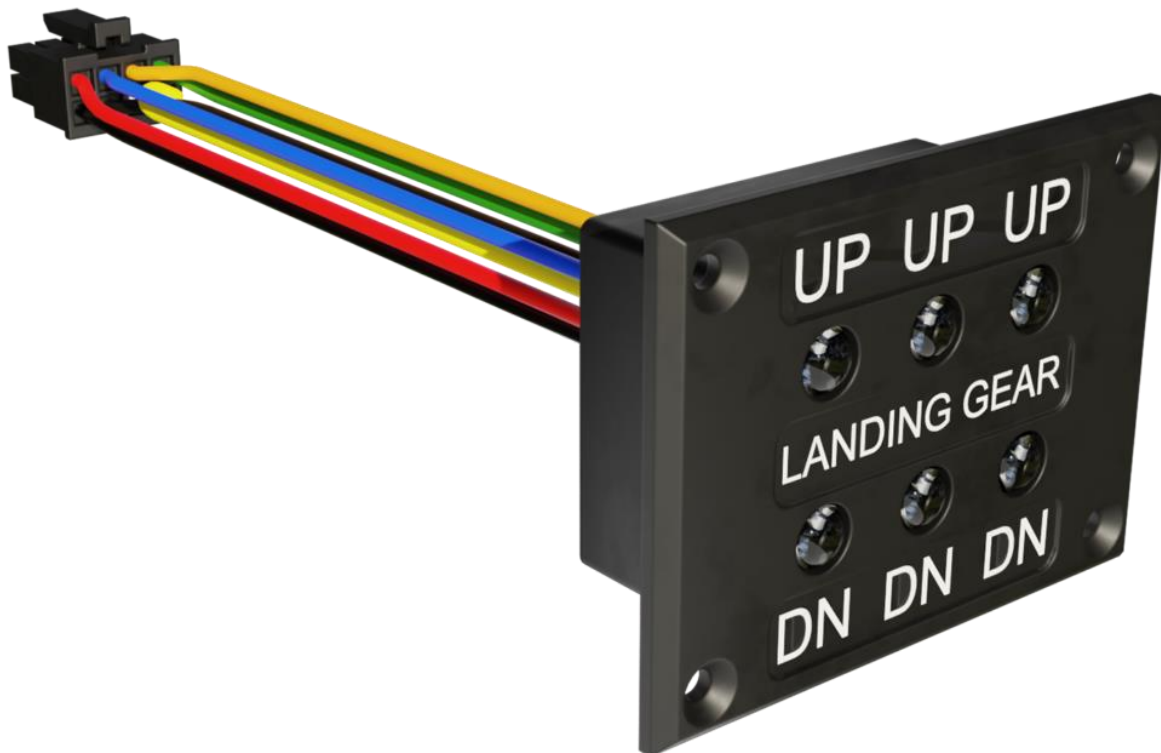


LANDING GEAR Indicator

Optical signaling unit for monitoring the condition of the aircraft landing gear.



Products description:

LANDING GEAR INDICATOR is a device designed to indicate the aircraft's landing gear state. It signals whether the chassis is fully extended (green LED lights up - position DN), is somewhere in between, or is fully retracted (yellow LED lights up - position UP). The indicator is connected to the chassis control unit, which detects the states of individual wheels sensors. The indicator has one control output to test its correct functionality (LED). Activating this pin (connect to GND) will light up all the green and yellow indicator LEDs. Signal visualization depends entirely on the type of chassis control unit, please check the compatibility with your control unit. The device is primarily intended for 10V power supplied by the chassis control unit.

The device is available as a separate piece or on request as a chassis set (indicator, ŘJ, set of sensors, FLAPS HBR, servos, cabling, UP/DOWN and TEST buttons). Its dimensions and metal design make it easy to install on any aircraft instrument panel. It is attached to the dashboard with four countersunk screws with a diameter of 2 mm. The device is intended for installation in NON-CERTIFIED AIRCRAFT.

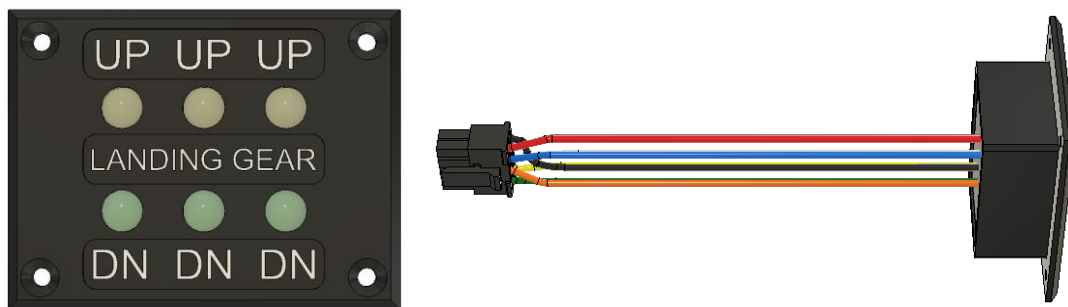


Fig. 1 Landing Gear Indicator – Front and side view

Electrical parameters:

Parameter	min	Typ.	max	unit	note
Supply voltage	9	10	15	VDC	Supply from the control unit
Current consumption of 1 LED	6	8,5	17	mA	
Current consumption of all LED	50	60	105	mA	
Power of 3 LED	162	255	765	mW	Standard working state
Current consumption OFF		0		mA	All LEDs off
Number of channels		3		-	

Connector signals:

Pin	Wire color	Signal	Note	Pin on the connector
1	Black	TEST	If connect to GND all LEDs light on. Test pin.	5
2	Gray	R_DN_K	Right landing gear on down	8
3	White	N_DN_K	Middle landing gear on down	1
4	Yellow	L_DN_K	left landing gear on down	4
5	Red	+10V	Power supply +10 V	
6	Blue	R_UP_K	Right landing gear on up	
7	Orange	N_UP_K	Middle landing gear on up	
8	Green	L_UP_K	left landing gear on up	
POZN:	individual LEDs are lit by connecting the control wire to ground.			

Mechanical characteristic:

Parameter	Value	Unit	Note
Width	45,8	mm	*See fig. 2 and 3 product dimension
Depth	16,8	mm	
Countersunk depth	14,5	mm	
High	16,8	mm	
Assembly hole	M2 Countersunk	mm	
Weight	35	g	
Cable size	0,34	mm ²	22AWG
Cable length	18	cm	Finished with a connector MOLEX 2x4

Gear indicator dimension:

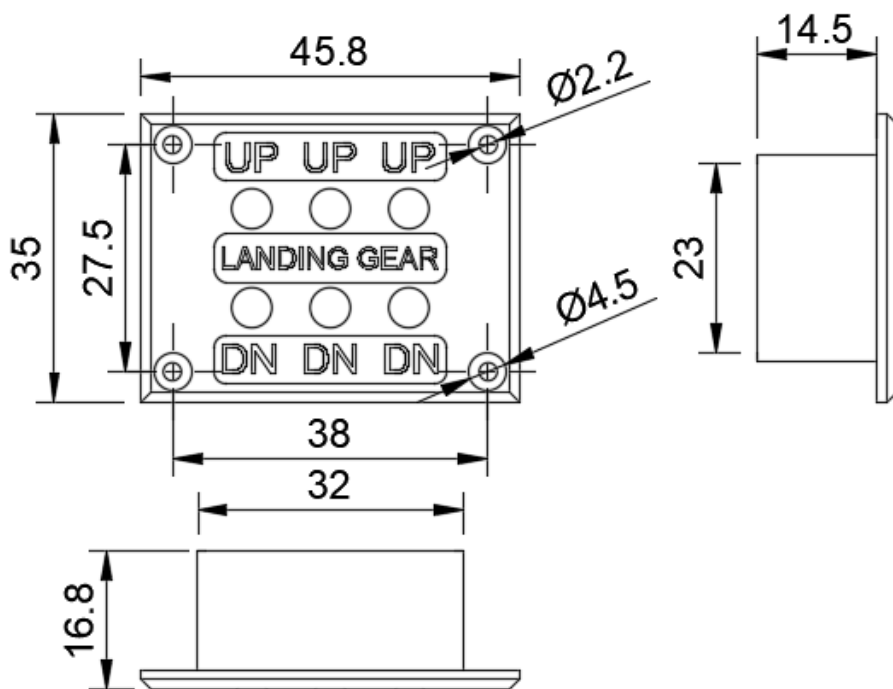


Fig. 2 Product size [mm]

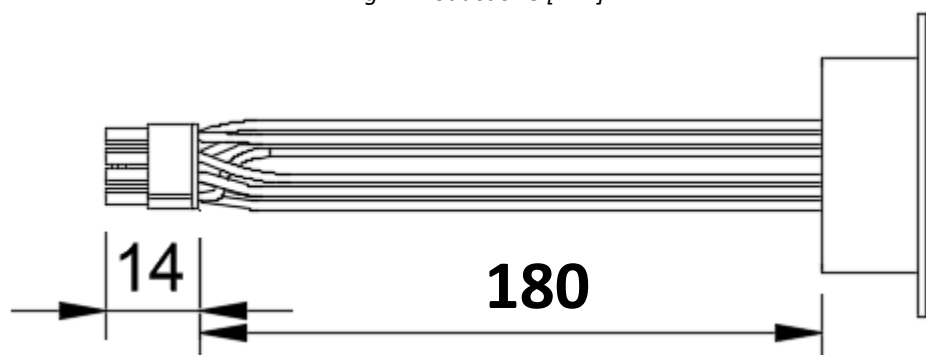


Fig. 3 Wire length [mm]

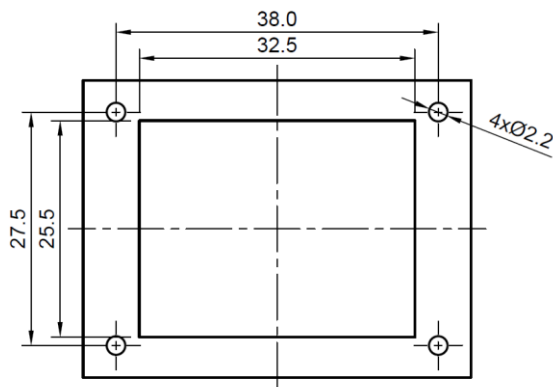


Fig. 4 Assembly hole

Landing gear system block diagram:

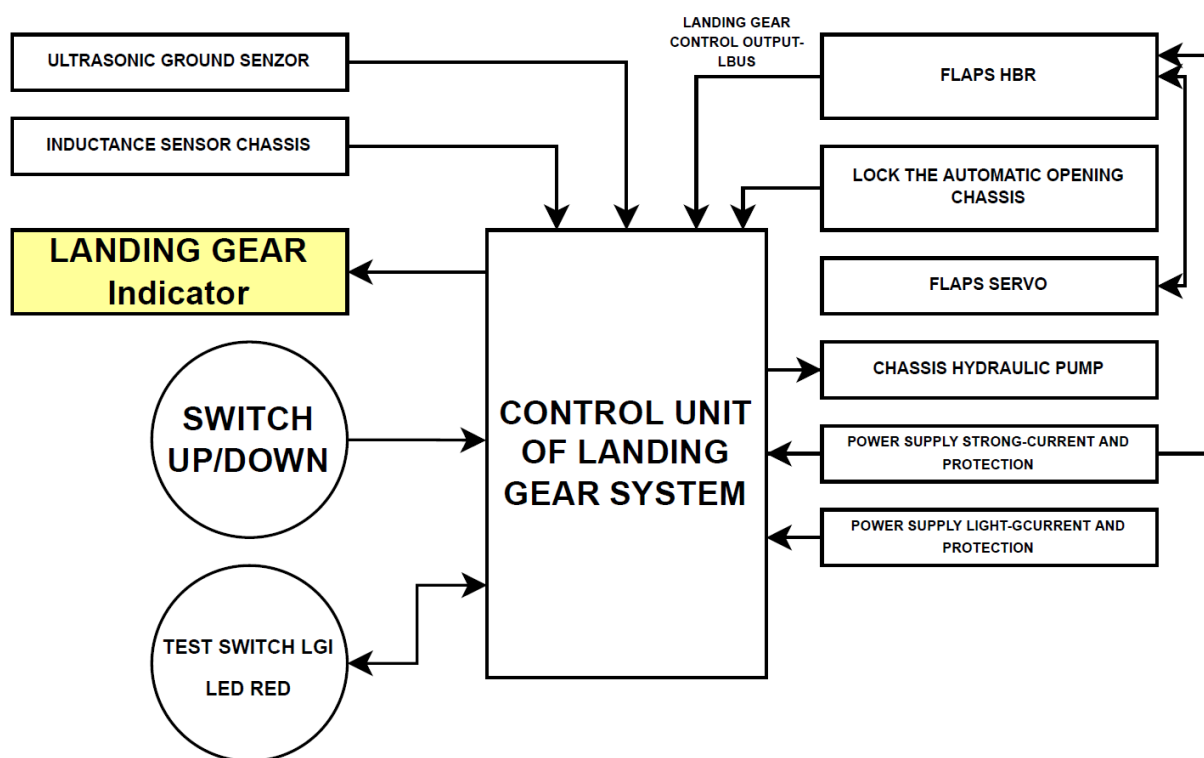


Fig. 5 Block diagram of landing gear system

Operation conditions:

Parameter	Value	Unit	Note
Working temperature	-30 ÷ 60	°C	
Humidity	10 ÷ 90 %	RH	
Atmospheric pressure	900 ÷ 1100	hPa	
IP	IP40	-	
Assembly type	To panel	-	Screw M2
Working position	any	-	

Important notes and warnings

Thank you for purchasing **Landing Gear Indicator**. For a comfortable and safe use of this product, please pay attention to THE ENTIRE MANUAL, especially the notes and warnings below.

- Although the **Landing Gear Indicator** has been thoroughly tested to ensure maximum safety in all conceivable situations, THE RIGHT FUNCTIONALITY DEPENDS ON THE RIGHT INSTALLATION AND SETTINGS.
- Therefore, it is **NECESSARY to READ CAREFULLY and UNDERSTAND THIS MANUAL COMPLETELY**.
- Keep this manual printed in an airplane for cases of emergency or change of ownership.
- THIS PRODUCT IS NOT APPROVED FOR INSTALLATION IN CERTIFIED AIRPLANES.
- The pilot MUST UNDERSTAND the control of this product before the first flight. DO NOT use the product unless you are sure how it works!
- Do not allow unauthorized persons to handle the installed product.
- After installing the product, before the first flight, turn on ALL possible sources of electromagnetic interference on board the aircraft and ensure that the instrument is functioning properly.
- Use of the device in conflict with this manual, with bad wiring, outside the allowed operating conditions, etc., may cause the device to malfunction or damage and endanger flight safety.
- If the product repeatedly indicates an error, do not use it and turn off the power!
- AVOID contact with liquids and chemicals
- Before installation, check the mechanical integrity of the device and its accessories
- DO NOT disassemble the device!
- After installation, carefully check the functionality of the device and its installation
- The responsibility for the installation is entire with the installer.
- Responsibility for performing control actions based on information indicated by the product is full of the operator (pilot). The operator must be able to evaluate an incorrect indication even if the product does not indicate an error.
- Ensure regular maintenance of the aircraft's main battery
- If you do not agree to the notes and warnings above, do not use this product.

Company LAMBERT AERODEVICES s.r.o reserves the right to change or improve the product or manual without prior or subsequent notice.

Document history:

<i>Dare</i>	<i>Rev</i>	<i>Change description</i>	<i>Author</i>
18.08.2022	0	Start version of the document, LA	NEPOR
20.02.2023	1	Text correction	NEPOR



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