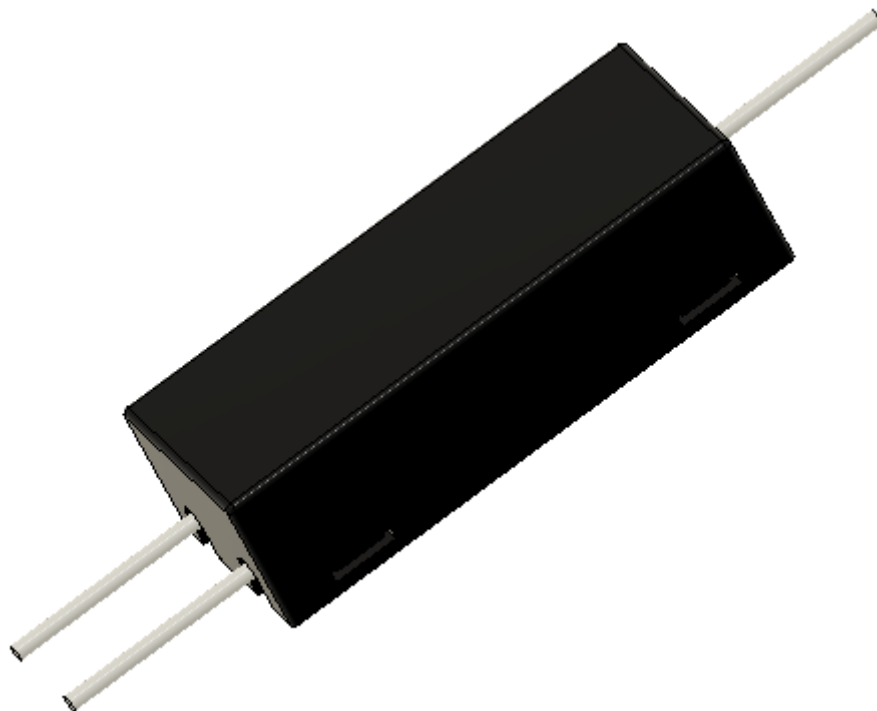


# DIM BOX

The converter of a positive-type PWM signal to a negative-type PWM signal



## Product description:

The **DIM BOX** product is a dimming signal converter with a positive PWM type (switched plus) to a negative PWM type (switched minus). It is necessary to use it as an intermediate element, for example, when connecting a DOUBLEDIMMER (dimmer) and a FLAPS unit (dimnable product).

The product is attached to the cabling with binding tapes. We connect the input signal IN (PWM+) and GND. We connect the output signal OUT (PWM-) to the target device.

## Electrical parameters:

Parameter	Min	Typ	Max	Unit	Note
PWM IN Voltage	7	12	16	V	
Consumption	0	3,5	5	mA	
PWM Frequency	100	122	1k	Hz	
PWM duty-cycle	0	-	100	%	
PWM IN - type	-	positive	-	-	switching plus
PWM OUT Voltage	7	12	30	V	
PWM OUT current	0	- 5	- 50	mA	
PWM OUT - type		negative			switching minus

## Mechanical parameters:

Parameter	Value	Unit	Note
Width	42	mm	*see. fig. 3 – box dimension
Depth	11,5	mm	
High	15,5	mm	
Weight	6	g	
Cable cross-section	0,34	mm <sup>2</sup>	22AWG
Cable length	20	cm	

## Wire signal marking:

Name	Wire marking
Input PWM (positive)	IN
Output PWM (negative)	OUT
Negative potential/ground	GND

## Installation schema:

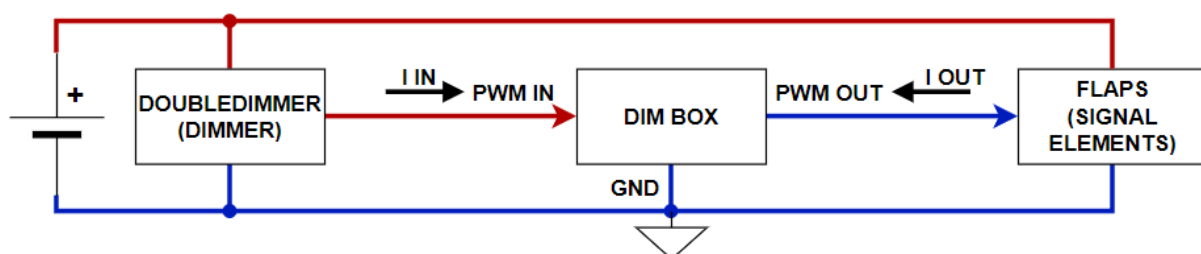


Fig. 1 Drawing diagram

## Product view:

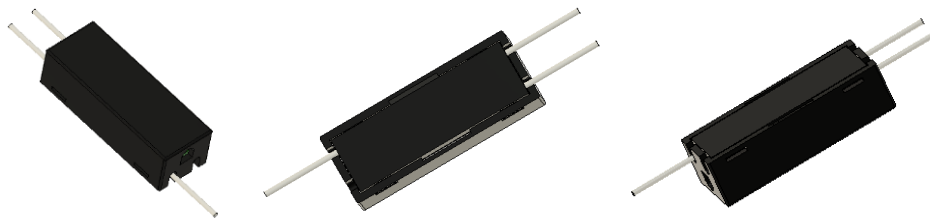


Fig. 2 Product view

## Device dimension:

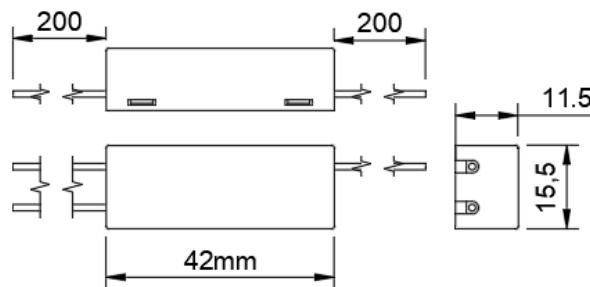


Fig. 3 Box dimension (mm)

## Operating conditions:

Parameter	Value	Unit	Note
Operating temperature	-30 ÷ 60	°C	
Operating humidity	20 ÷ 85 %	RH	
Atm. Pressure	800 ÷ 1100	hPa	
IP protection	IP20	-	
Mounting type	on the surface/into the cable harness	-	fastening with binding tapes
Working position	Any	-	

## Important notes and warnings

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

- Although the **DIM BOX** 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 INSTALLING 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 rests entirely on the installer.
- Responsibility for performed control actions based on information indicated by the product is fully with 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 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 revision:

<i>date</i>	<i>Version</i>	<i>Change description</i>	<i>author</i>
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