# uniLIGHT Modul AFTERBURN DUAL

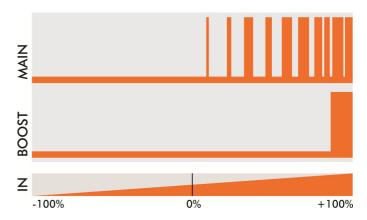
Our 2-channel module BLACK.AB2 supports up to two very powerful afterburner rings, usable for dual-exhaust aircrafts or as double ring for highest light power on giant model planes.

Besides the typical "flickering" effects the controller supports now also a steady glowing function over the full throttle way. Like all uniLIGHT modules, the function selection is made via servo travel or via parts of it respectively. The receiver selects the behaviour by setting low-throttle and high-throttle positions. Additionally, the speed of the effect can be selected on the button and several operation options can be selected by the setup process. Now it is also possible to use the controller also in a "step" mode, means it can be connected parallel with the throttle servo and the activation point can be set by the button during normal operation.

## Functions for MAIN channel (1&2)

This is the main output channel for the afterburner ring. The contacts are provided twice and internal connectedin parallel to carry the required current. Connect the contacts ALWAYS ONLY in parallel by connecting both cables of the ring homopolar.

The main channel will then simulate the afterburner function. Thereby, the highest sector of the servo travel is used (beginning with  $\sim 20\%$ ).



#### Functions for **BOOST** channel (3&4)

The second channel can be used for another functional enhancement (Boost) and is beeing patched in the top sector of the servo travel. This means that a second afterburner ring can be patched in. In addition, a pump can be triggered to inject smoke or fluid.

Info By the derated RINGX products, the power reduction arises through purposely using thin cables. Here, the boost can be generated through connection of a line on MAIN and one on BOOST. Just give it a try and pay attention to the heat!

Info Neither the controller MODUL-AB2 is part of the BLACK Series, there is no protection against over-current and reverse polarity to allow the handling of the huge power needs. Please be carefull while connecting rings and wires!

#### **Programming**

To set the controller, DO NOT connect the afterburner ring to the unit. The small LEDs on the control show the real output, so the following signals are not displayed correctly due to the parallel routing of the cables.

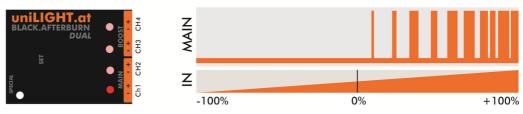
Info If you press and hold the button for >10 seconds at startup, a reset is performed and all basic settings are loaded. This is indicated by a continuous light on all outputs.

For more information and further manuals visit www.unilight.at

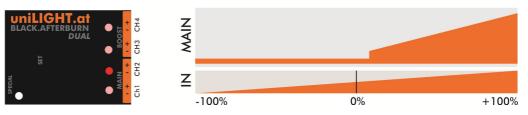
#### **Operation Modes**

You can set the module to four different operating modes and additionally select four different options. To do this, hold down the set button and turn on the power supply. The LEDs indicate the current mode. A short press changes the state, a long jumps to the options.

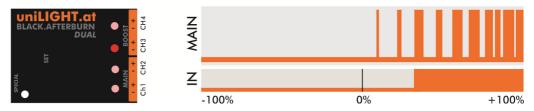
MODE 1 Output is directly dependent on servo input, direct mode. The behavior can be influenced by remote control via the servo travel / mixer curve. A random stuttering effect is generated, which becomes stronger with increasing servo travel. Effect speed can be changed by pressing the button on the module.



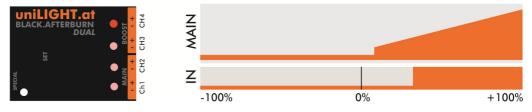
MODE 2 Output is directly dependent on servo input, direct mode. An increasing glow is generated as output signal.



MODE 3 Output is autonomous generated when a step value is exceeded, the control can be connected parallel to the gas servo. A random stuttering effect is generated which automatically becomes stronger. The switch point can be set via the button in a meaningful range (approx. 20% to 80%).



MODE 4 Output is autonomous generated when a step value is exceeded, the control can be connected parallel to the gas servo. An increasing glow effect is generated.

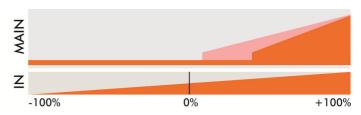


#### **Options**

After selecting the operating mode, the options can be activated. Press the button for about 3 seconds and jump to the options menu. A flashing LED means OFF, a steady LED means ON. Pressing briefly changes the option, long press to jump to the next point.

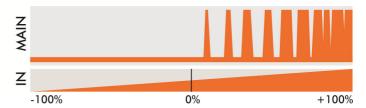
**OPTION 1** Delayed response of the light output to the input signal. In the case of the direct operating mode, this is a delay of the input signal, in stepped mode it is a deceleration of the automatic rise. The default setting is ON.





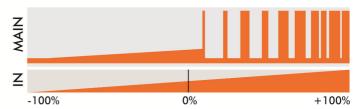
OPTION 2 Ramp stuttering generates a softer light signal and a more beautiful effect. The basic setting is ON.





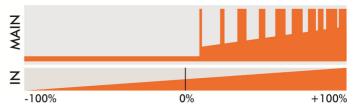
**OPTION 3** A slight, ascending glowing is generated in the region of the lower throttle. The on-time of the LEDs increases and thus also the temperature. The basic setting is OFF.





**OPTION 4** In main operation area, a basic continuous basic glow is integrated under the stutter signal. This significantly increases the light output and weakens the hard stuttering. The on-time of the LEDs increases and thus also the temperature. The basic setting is OFF.





Technical Data	MODUL-AB	MODUL-AB2
Receiver side:	3,6-9,6V	3,6-9,6V
Weight (without wires):	3g	9g
Dimensions:	45x22x6mm	50x35x6mm
Current per channel:	4A, up to 16V	8A, up to 16V
Combined load:	6A	12A
Galvanish sperated:	YES	YES
Short-Cut protected:	NO	NO, deactivated
Reverse Polarity protected:	NO	NO, deactivated
Deep discharge protected:	YES	YES
Servo output:	NO	YES, for valves while BOOST
Configuration via PC/APP:	NO	YES

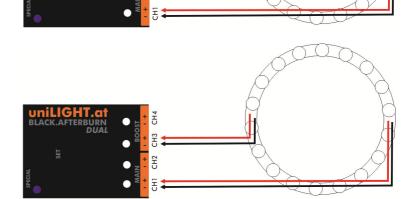
## **Connection**

Depending on the used afterburner ring you have one or two connection wires. They allways have to be connected homopolar.

## 1. Standard connection

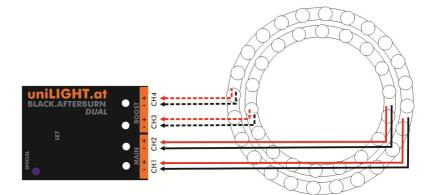
## 2. BOOST effect

Best for big RINGX series

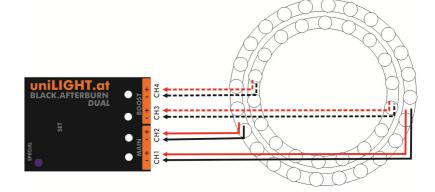


# 3. Concentrical rings

Parallel connection



Connection with separated BOOST ring



# 4. Double pipe system

