Y Reverse HV
Servos programmer module

USAGE MANUAL V1.0

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CONNECTIONS

Fix the device with a double-sided tape or with a velcro on the opposite side of programming button. We recommend to create an anti-vibrating support in order to insulate electronic circuit from possible vibrations sent by propulsive system.

CONNECTION TO THE RECEIVER:
Connect the input of the REVERSE module cable to the receiver channel you want to use

CONNECTION TO THE SERVOS:
Connect the output cables to servos you want to control, paying attention to the right polarity.
The upper output (number 1) is the reverse one and it will be controlled oppositely to the receiver signal. The lower output (number 2) moves according to the receiver signal.

For the right connection of the Y module to receiver and servos please refer to picture number 1.

Dear client,

We express our thanks for your purchase of REVERSE module: the simple and accurate programmable inverter for servos.

This device is able to manage the signal of one receiver channel by an Y connection with two reverse outputs. It is installed between the receiver and servos to improve more useful functions such as:

- to invert the servo sense of rotation;

- to connect 2 servos, with reversed movement, to one single receiver channel. It is useful for saving one receiver channel in case of two independent servos on flaps, brakes and tails;

- to match and center two servos mechanically coupled;

- to filter and amplify the servo position signal.

USAGE

After carrying out the connections showed into the "Connections" section, you can switch your RC system and your Y module is yet working: if you move your radio stick indeed the two servos connected to the module will move oppositely.

Place the servo arms of both servos so that the two mobile parts are lined up and the corresponding stick is in the central position. If this is not enough for the best alignment, please proceed with the electronic servo center programming (see the "Programming" section).

PICTURE 1

Output 1 = REVERSE
Output 2 = DIRECT

UP   Output 1

FRONT VIEW

BLACK
RED
SIGNAL

Connect to the receiver

DOWN   Output 2
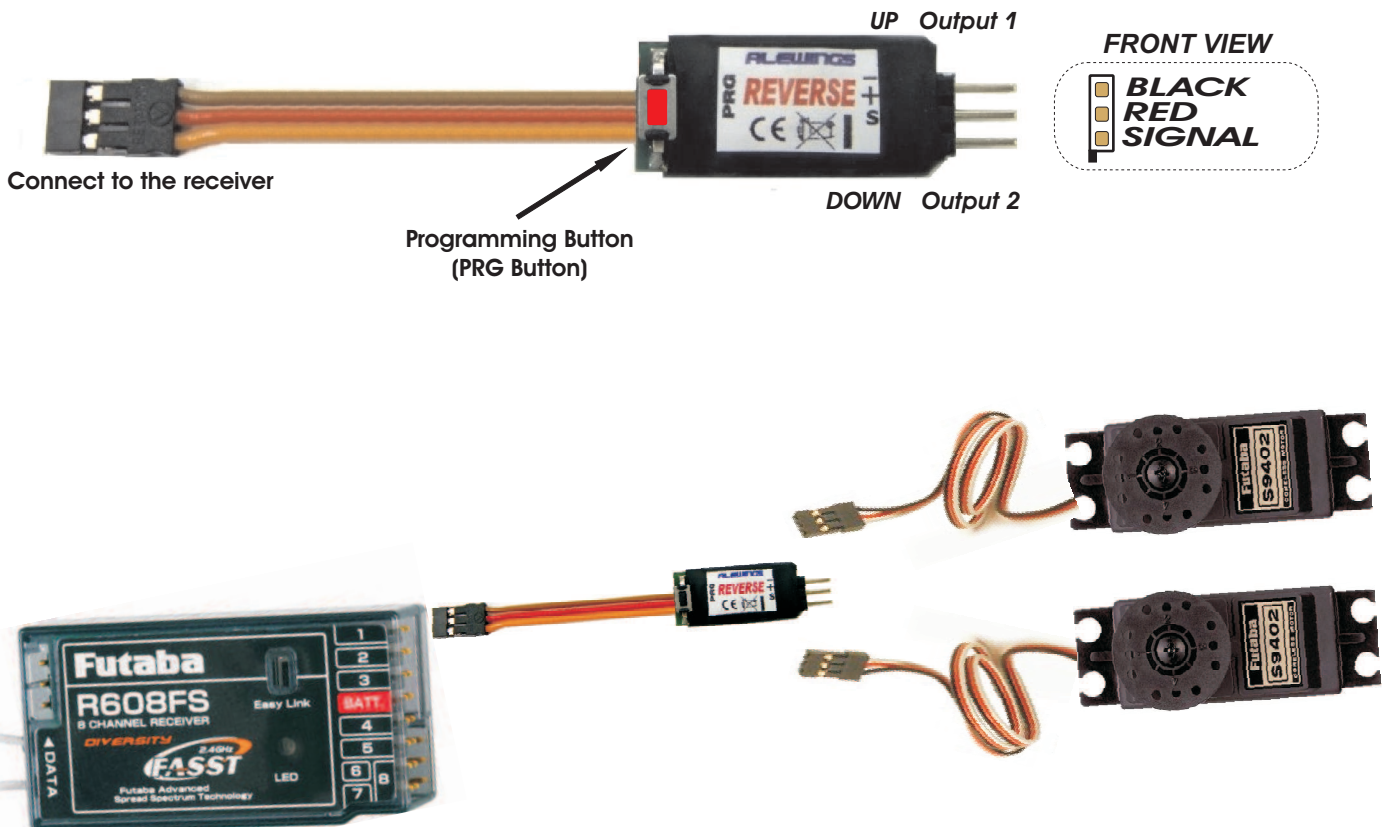
**Programming Button
(PRG Button)**

After the connection, it is strictly recommended to carry out the following steps, before proceeding on REVERSE module programming:

- initialize the REVERSE module pressing the ERASE button

- choose from your transmitter ("Servo-reverse menu") the direction you want to associate to the servo connected to the output number 2 and check it is correct;

- program the SUBTRIM to put the servo connected to DIR output in central position.

- check the proper movement of the servo connected to REV output;

- program the central position of the servo connected to the REV output by the PRG button.

REVERSE module initialization (ERASE):

To initialize the REVERSE module you have to proceed as follows:

When the receiver is off, push the PRG button and switch on your radio system. Release the button.
The module has been initialized and all the parameters have been reinstated as factory-new.

The initialization causes the total loss of the programming of the servo center connected to REV output.

Programming center position of REVERSE output:

Bring the transmitter stick corresponding to the channel to which you have connected the module in the central position.
When the device is switched on push PRG button for about 5 sec and wait for the servo connected to REV output begins to move.

At this point you have activated the programming mode.

Move the transmitter stick up and down or right and left keeping the PRG button pressed to decide the rotation sense and the extent of the movement of the servo.

A single button pressure creates a movement of 1 tenth of degree; if you continue to press you will obtain a continuous movement.

When you set the right position you have to wait 5 seconds without pushing PRG button.
The REVERSE module will exit from the programming mode and will record the new position.

WARNING

This is not a toy.
Pay close attention to the following points, as the non observance of them can destroy the product, nullify your warranty and lead to property damages or personal severe injuries!
- Never leave the product unattended while it is switched on, in use or connected with a power supply. If a defect occurs, it could set fire to the product or to the surroundings.
- Avoid incorrect connections or connections with reversed polarity.
- All wires and connections have to be well insulated. Short-circuits might destroy the product.
- Never allow this product or other electronic components to come into contact with water, oil, fuels or other conductor liquids, as these could contain minerals, which are harmful for electronic circuits. If this happens, stop the use of your product immediately and let it dry carefully.
- Always wire up all the parts of the equipment carefully. If any of the connections loosens, due to vibrations, you might damage your device.
- Never cut off or modify the original plugs
- Never change the polarity of the receiver connectors
- Do not open the product and never solder on the PCB

SPECIFICATIONS

Dimensions:	15x29mm
Weight:	5g including cables and connectors
Operating voltage:	from 4V to 9V MAX
Max load:	3A continuous

Protection for short circuits on every output

Receiving resolution:	0,025°
Output resolution:	0,1°
Programmable range:	+-50°
Programmable steps:	0,1°
Working temperature:	-10 up to +60 °C

These specifications may be changed without advance notice.

WASTE DISPOSAL

At the end of its life cycle this product is subject to special waste disposal and it cannot be disposed with urban waste