Failsafe brief instruction

1. Basic information about the "Failsafe" function

In the case that the transmission signal gets lost, the elevator and all the other functions or servos should move to a predefined position. For example the throttle should move to idle or switch off, or the surfaces should move to zero position or to a smooth bang angle for a stable circle.

All weatronic receivers can be set with failsafe "hold" or to a designated position for each channel or for each servo output.

The default setting for each servo output is "hold". If the Radio to receiver connection is interrupted the last transmitted positions is kept.
This setting prevents the so called "servo twitching" whenever the connection is interrupted at very short intervals.

Important!
Failsafe settings of the transmitter itself are not active.
Settings are stored directly at the weatronic receiver!

1.1 Channel failsafe

weatronic offers the chance to set a certain position as preset failsafe positions for each channel.
Whenever multiple servo outputs for that channel are assigned, all these servos will move accordingly.

1.2 Servo failsafe

As an additional option weatronic provides the "Servo failsafe".
This can be done for each servo separate.
Example of a "Servo failsafe":
The landing light is controlled with the same channel like the flaps.
If failsafe occurs the landing light should be switched on independently of the flap position. Now the failsafe is indicated by the landing light .

Read chapter 2.2 how to adjust the Servo failsafe

1.3 Hold

Factory setting of all weatronic receivers and here for all channels is the "Hold" setting
In this case, the last received channel position is maintained.

1.4 Failsafe Timeout

As mentioned before the "hold" setting is default. The failsafe timeout can be set to delay the programmed failsafe position. If no special failsafe position is programmed the "hold" is active.

The value failsafe timeout can in GigaControl - be changed > receiver settings. Available settings are from 0.1 s (100 ms) to 1.0 s (1000ms) . Factory setting is 0.3 s (300 ms)

Hold or Failsafe is immediately terminated when a valid signal is received.
The model is immediately controllable.

2 Set failsafe at the Tiny , Clever, Micro and Smart Series

There are two possibilities to set the failsafe positions.

2.1 Setting the Failsafe with GigaControl

The weatronic software GigaControl offers the easiest way to adjust failsafe.

Navigate to the "Servo mapping" tab, here you will find the adjustment of the Failsafe type.
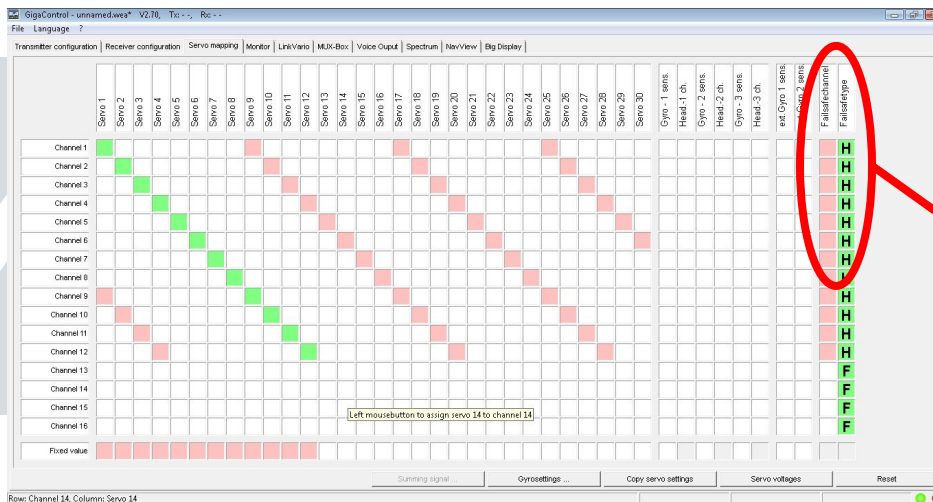
There are 3 different options: Choose between H (hold), F (failsafe) and L (Learn)
Hold means: hold the last transmitted position.

1st: F - Failsafe

Use "F" to set an individual position for this "Servo Output - Channel COMBO". Enter the servo curve edit window by "right mouse click" on the corresponding green matrix square.
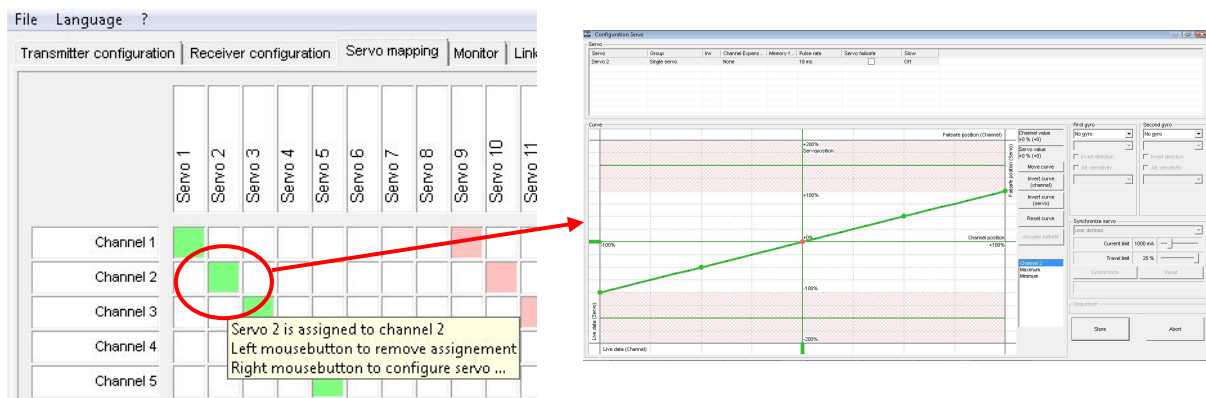
Just move the red point by mouse or if selected by the arrow keys and adjust your desired Failsafe Position.
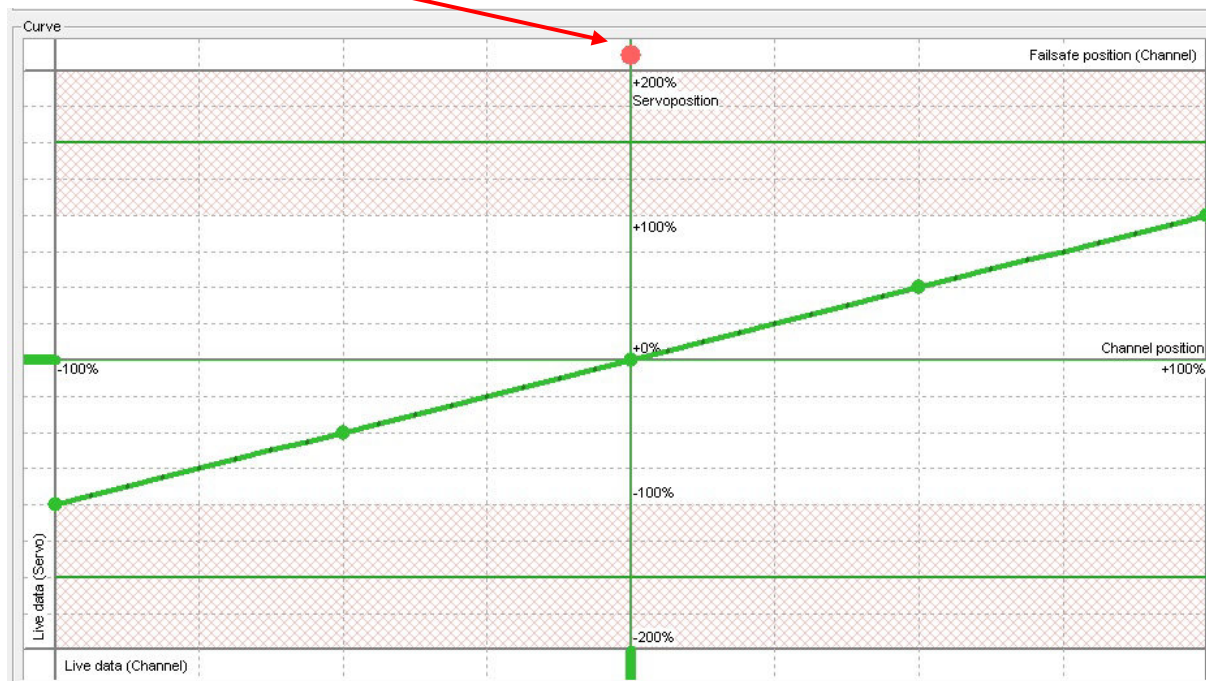
Or just click the button "assume failsafe"
and the position will be adopted from the current <u>channel position</u>.
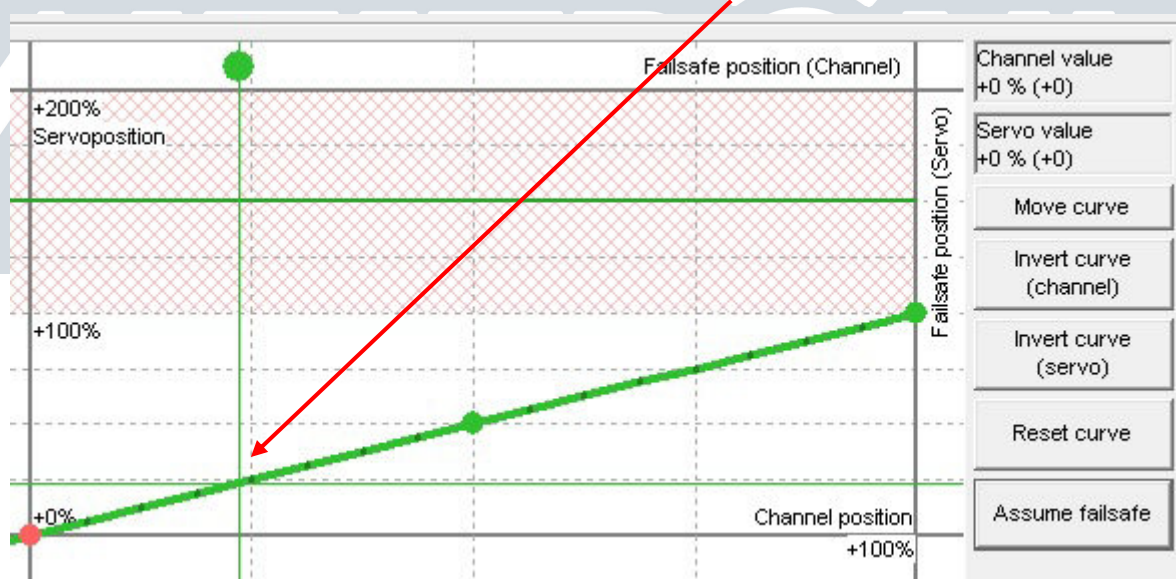

2nd L - Learn

There is the possibility to adjust a failsafe position during flight.
In order to trigger the failsafe position first of all channel have to have the "L" tag.

Then a 3 position switch has to be assigned to the choosen "Failsafe channel".
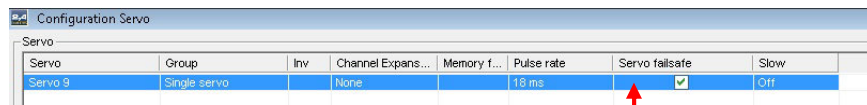
by switch the channel from 0% to -50% the failsafe position
will be recognized and by switching to +50% the position will be stored.

PLEASE NOTE: the failsafe position will be active with the next switch on of the receiver.
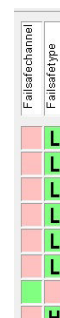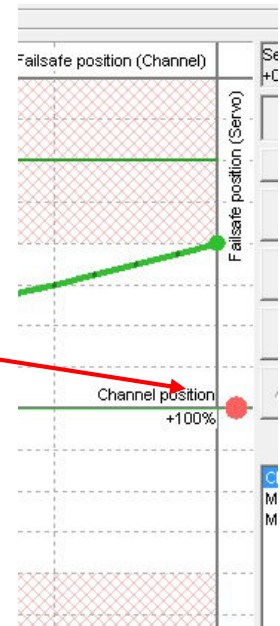
2.2 Setting ServoFailsafe

Navigate to the "Servo Mapping" tab at the GigaControl and make a **"right mouse click"** at the green field linked to the "servo output" you like to adjust.

Here you have to check the "Servo failsafe" box

Now you can adjust the servo failsafe position by moving the red point.

2.3 Setting the failsafe with a jumper

Follow the steps:

1st Plug the jumper to the SCU / USB connection plug on the receiver.
In the DR Micro series use the **lower** and **middle** contact.
In the DR Smart series use the **left** and **center** contact.
In the series Clever use the **upper** and **middle** contact.
In the Tiny series use the **lower** and **middle** contact.

2nd Now switch on the receiver.
The red LED will flash to indicate the fail-safe learning mode.
This mode last until the jumper is deducted.

3rd Now move all channels that should learn a new failsafe position.
Please **NOTE**: move the channel more than 50 % and beware of travel reduction at your radio.

4th Each "moved" channel has been marked now.
Please **NOTE**: All not "moved" ones are set to hold!

5th Now please maintain the desired "Failsafe Position"

6th Remove the jumper - here you go! The receiver is now back to normal operation mode and the red LED should not longer flash.

Please NOTE: The adjustment with the jumper is a "channel" failsafe! NOT a "servo" failsafe. Settings made with the software GigaControl are deleted.

3 Set failsafe at the Gizmo / 12 -22R series

There is only one possibility to adjust failsafe for the Gizmo Series. As described in **chapter 2.1**

4 Preflight Check

Please check your failsafe settings extensively!

It is often sufficient to simply turn off the transmitter. Some radios have a let's call it: " life of its own ." when switched on. Thus in the very first moment after switching on some radios transmit a channel position which does not correspond to the stick position and/or switch position. But this is a transmitter problem and not a failsafe problem.
In such cases: Switch off the transmitter - test failsafe - switch off the model - Switch on the transmitter - then switch the model on again.

If you have any questions don't hesitate to contact our service.

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