Failsafe Overview

The Arduino loss of transmitter signal failsafe is crucial to safe operation. Without a properly configured failsafe a loss of signal event could cause a crash. The loss of signal trigger is the throttle channel (CH 3) dropping below a certain threshold. To configure the throttle failsafe, firmware parameters must be set correctly and the RC receiver must be configured to lower the throttle channel after a loss of signal.

Parameter Setup

1. **THR\_FAILSAFE = 1**; Enables throttle failsafe

2. **THR\_FS\_Value = 950** ; PWM values to trigger failsafe

3**. FS\_SHORT\_TIMEOUT = 1**; seconds until short action triggers after THR value drops below threshold

4. **FS\_SHORT\_ACTN = 1**; Enables circle mode as short action event

5. **FS\_LONG\_TIMEOUT = 5**; seconds until long action triggers

6. **FS\_LONG\_ACTN = 1**; Enables RTL as long action event

Turnigy ia10 Receiver Setup on via Turnigy TGY-i10 Transmitter

1. **End Points 🡪 THR**, set lower end point to -120%

2. **RX Setup 🡪 Failsafe**, set THR to -120%

3. **End points 🡪 THR**, return lower end point to -100%

4. Verify in Mission Planner that PWM drops below 950 when you turn off transmitter, should drop from ~1000 to ~908