

Prop size

18 inches

Arducopter 4.0 and later

| | | |
|------------------|-------|--------------------------------|
| ACRO_YAW_P | 2.2 | |
| ATC_ACCEL_P_MAX | 60700 | |
| ATC_ACCEL_R_MAX | 60700 | |
| ATC_ACCEL_Y_MAX | 19800 | |
| ATC_RAT_PIT_FLTD | 13 | |
| ATC_RAT_PIT_FLTE | 0 | |
| ATC_RAT_PIT_FLTT | 13 | |
| ATC_RAT_RLL_FLTD | 13 | |
| ATC_RAT_RLL_FLTE | 0 | |
| ATC_RAT_RLL_FLTT | 13 | |
| ATC_RAT_YAW_FLTD | 0 | |
| ATC_RAT_YAW_FLTE | 2 | |
| ATC_RAT_YAW_FLTT | 13 | |
| ATC_THR_MIX_MAN | 0.1 | Set to 0.5 after test flights |
| INS_ACCEL_FILTER | 20 | Set lower for high vibrations |
| INS_GYRO_FILTER | 26 | Leave at 20 – see caveat below |
| MOT_THST_EXPO | 0.73 | |
| MOT_THST_HOVER | 0.2 | Hover Learn will fix this |

Arducopter 3.6 and earlier

| | | |
|------------------|-------|--------------------------------|
| ACRO_YAW_P | 2.2 | |
| ATC_ACCEL_P_MAX | 60700 | |
| ATC_ACCEL_R_MAX | 60700 | |
| ATC_ACCEL_Y_MAX | 19800 | |
| ATC_RAT_PIT_FILT | 13 | |
| ATC_RAT_RLL_FILT | 13 | |
| ATC_RAT_YAW_FILT | 2 | |
| ATC_THR_MIX_MAN | 0.1 | Set to 0.5 after test flights |
| INS_ACCEL_FLTER | 20 | Set lower for high vibrations |
| INS_GYRO_FLTER | 26 | Leave at 20 – see caveat below |
| MOT_THST_EXPO | 0.73 | |
| MOT_THST_HOVER | 0.2 | Hover Learn will fix this |

INS_GYRO_FLTER will need to be higher than 20 for smaller frames BUT also re

LiPo Battery

12 Cells

| | | |
|------------------|------|-------------------------|
| BATT_ARM_VOLT | 44.3 | |
| BATT_CRT_VOLT | 42 | 3.5 x no. of LiPo cells |
| BATT_LOW_VOLT | 43.2 | 3.6 x no. of LiPo cells |
| MOT_BAT_VOLT_MAX | 50.4 | 4.2 x no. of LiPo cells |
| MOT_BAT_VOLT_MIN | 39.6 | 3.3 x no. of LiPo cells |

After test flights and hover learning

| | | |
|-----------------|------|---------------------------|
| ATC_THR_MIX_MAN | 0.5 | |
| PSC_ACCZ_I | 0.5 | 2xMOT_THST_HOVER |
| PSC_ACCZ_P | 0.25 | Enter MOT_THST_HOVER here |

Suggested settings

| | | |
|-----------------|-----|---------------------------|
| BATT_FS_CRT_ACT | 1 | |
| BATT_FS_LOW_ACT | 2 | |
| FENCE_ACTION | 3 | |
| FENCE_ALT_MAX | 50 | |
| FENCE_ENABLE | 1 | Wait for valid GPS 3D fix |
| FENCE_RADIUS | 100 | |
| FENCE_TYPE | 3 | |

requires more manual tuning of PIDs