



2S
— Power —

TINY GT7 **TINY GT8**

Instruction Manual

Safety Note : Fly only in safe areas , away from other people;
The company shall not be liable for any flight caused by accident or loss.

PNP input voltage only 2S,over voltage can cause damage

Name	TINY GT7	TINY GT8
FC+ESC	Betaflight SPRACINGF3+4in1 ESC 10A BLHeliS	
Receiver	RX2A PRO,DSM2,AC900(S-FHSS+D16)	
Camera	OV231(800TVL 150° NTSC)	
VTX	Q25OSD(25mW 16CH Smart OSD V1)	
Input Voltage	Only 2S	
Battery	7.4V 380mAh 50C	
Weight	40.5g(no receiver and battery)	47.8g(no receiver and battery)
Wheelbase	75mm	87.6mm
Motor	XT0803-9000KV	XT0804-7500KV
Prop	1535	1935

User manual and video please visit : WWW.LDARC.COM

Configuration

TINY GT7

Wheelbase : 75mm

FC+ESC :

Betaflight SPRACINGF3

4in1 ESC 10A BLHeliS

VTX : Q25OSD(25mW 16CH Smart OSD V1)

Camera : OV231(800TVL 150° NTSC)

Motor : XT0803-9000KV

Prop : 1535

Battery : 7.4V 380mAh 50C(XH2.54)

Weight : 40.5g(no receiver and battery)

Receiver : RX2A PRO,DSM2,AC900(S-FHSS+D16)



					
TINY GT7 PNP*1	1535Prop*4Pairs (Color random)	7.4V 380mAh 50C*1	USB Cable*1	Wire transfer*1	Sticker*1

TINY GT8

Wheelbase : 87.6mm

FC+ESC :

Betaflight SPRACINGF3

4in1 ESC 10A BLHeliS

VTX : Q25OSD(25mW 16CH Smart OSD V1)

Camera : OV231(800TVL 150° NTSC)

Motor : XT0804-7500KV

Prop : 1935

Battery : 7.4V 380mAh 50C(XH2.54)

Weight : 47.8g(no receiver and battery)

Receiver : RX2A PRO,DSM2 , AC900(S-FHSS+D16)



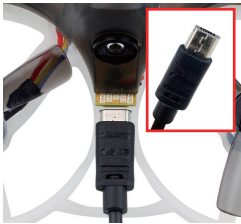
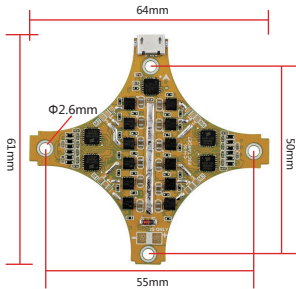
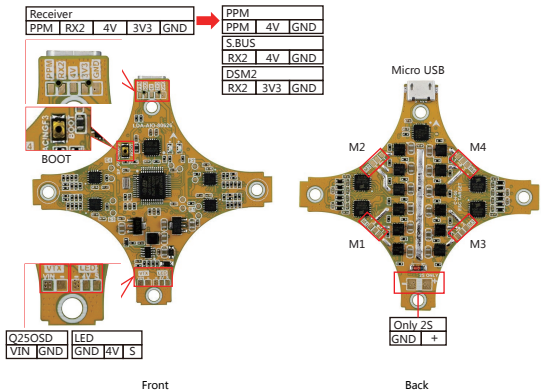
					
TINY GT8 PNP*1	1935Prop*4Pairs (Color random)	7.4V 380mAh 50C*1	USB Cable*1	Wire transfer*1	Sticker*1

FC+ESC

FC Firmware:Betaflight SPRACINGF3

ESC Firmware:BLHeliS C-H-50(16.7[Official])

- 1.The FC output voltage 4V can power 5V receiver and LED.
- 2.Supports only 2S battery input (maximum voltage 8.7V), single-channel 10A battery output when ESC 2S power supply.

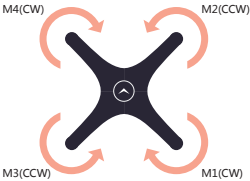


Please use the in-package USB cable connection settings, The mismatched USB cable will cause PCB damage

Motor



Note:Pay attention to the direction of rotation of the motor when installing the prop. The connecting line of the motor is placed below the card position, in case the connecting line and prop touch



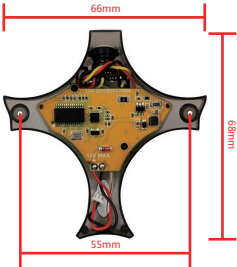
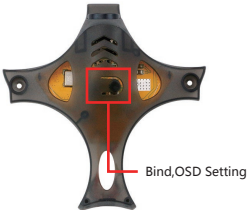
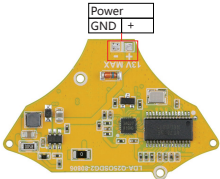
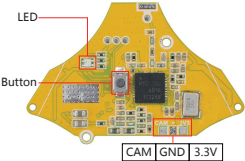
VTX+Camera

OSD:Smart OSD V1

VTX:5.8G 25mW 16CH

Working voltage:100mA(7.2V,no camera)

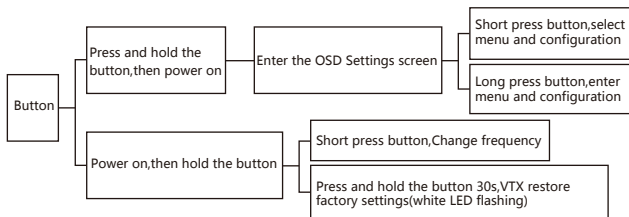
VTX input voltage:2-3S(7.2-13V)Lipo battery,
(PNP only supports 2S)



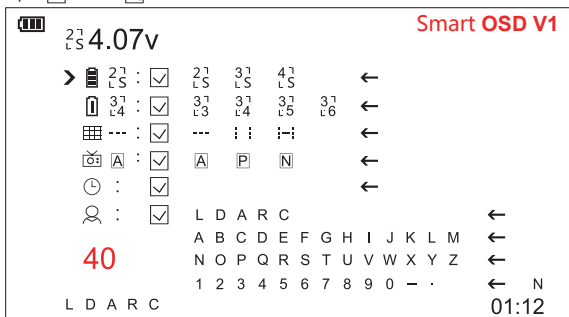
Frequency Table

5800MHz	5828MHz	5733MHz	5769MHz
5806MHz	5843MHz	5866MHz	5745MHz
5847MHz	5740MHz	5760MHz	5780MHz
5790MHz	5820MHz	5860MHz	5752MHz

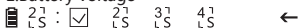
Operating Instructions



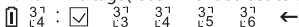
Open ☒, Close ☐, Back



1. Battery voltage



2. Alarm voltage (recommended set to 3.3V or 3.4V)



3.Auxiliary line



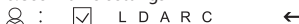
4.Camera mode settings



5. Time display



6. User name settings



7.40s no key operation,it will exit OSD setting interface

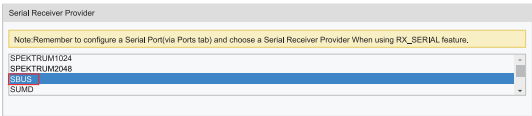
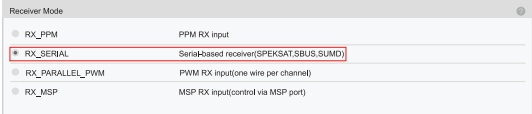
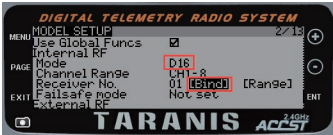
Receiver

AC900(S-FHSS+D16) bind,transmitter(FRSKY X9D/Futaba T18SZ)

Bind:Check receiver mode before bind,the first blink after power on indicate the setting, ■ is S-FHSS, ■ is D16

FUTABA S-FHSS BIND:Turn on the TX then power on AC900 while pressing the key, green LED fast blink meaning already in bind mode, user can release the key. Bind procedure is completed and the receiver is working normally when green LED is solid

FRSKY D16(NO Telemetry) BIND:Power on AC900 while pressing the key, green LED fast blink meaning already in bind mode, user can release the key, then set your TX into D16 bind mode. red LED solid meaning bind finished, exit TX from bind mode, receiver's green LED solid meaning working normally



RX2A PRO Bind(S.BUS),transmitter(FLYSKY FS-i6)

BIND:Power on the receiver while pressing the key,green LED fast blink meaning already in bind mode,user can release the key, then set your TX into bind mode.Green LED turn off and red LED solid mean bind finished,exit TX from bind mode,receiver's green LED solid mean working normally.

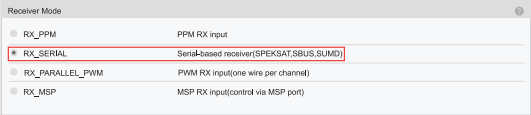
FAILSAFE:Support 2 failsafe mode,press the key and hold 3s while receiver working normally can switch failsafe mode.Please make sure failsafe is working correctly before use the receiver!

Failsafe mode 1: ■ After 1s when lost transmitter signal,S.BUS keep output,throttle will 988us,all other channels will 1500us.

Failsaft mode 2: ■ After 1s when lost transmitter signal,S.BUS not output,user should setting related parameters to ensure flight controller handle failsafe.

STATUS LED : LED of RX2A-PRO blink twice then solid when power on,the meaning as follow

First blink(air system)	Second blink(failsafe mode)	Then solid(signal status)
■ AFHDS2A air system	■ Failsafe mode 1	■ No signal
	■ Failsafe mode 2	■ Signal received



FM800 bind (default S.BUS, nonsupport PPM), example (FUTABA T8FG)

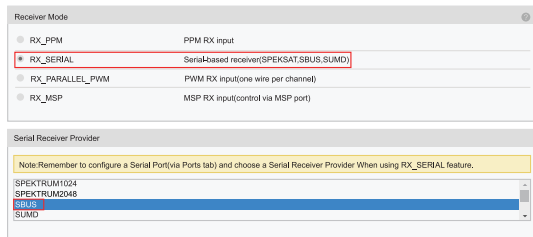
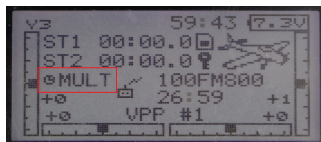
1. Open remote control, hold receiver bind button to power
2. Green light constant lighting means bind success

Note:

S.BUS and CPPM mode switch

Close remote control, press bind button 6S when red light flash, loosen until enter S.BUS and CPPM mode switch

1. Green light quick flashing, press bind button and disconnect power, power-on again, enter S.BUS mode
2. Green light slow flash, press bind button and disconnect power, power-on again, enter PPM mode



DSM bind, example (T-SIX)

1. Remote control in off state, bind button to power
2. Loosen until indicator light fast blink, enter to bind mode
3. Open remote control bind mode, indicator light constant lighting means bind success

Note 1:

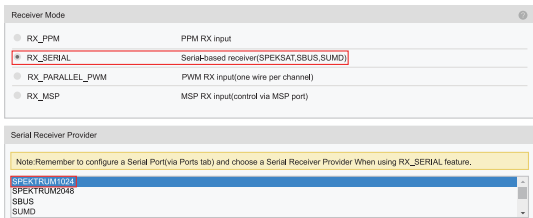
DSM2 uses SPEKTRUM1024 or SPEKTRUM2048 protocol, according to the remote control model to choose corresponding serial port protocol (example T-SIX, set protocol as SPEKTRUM1024)

Note 2:

DSMX remote control bind to DSM2 and DSMX receiver, but DSM2 remote control only bind to DSM2 receiver.

DSM2: Old SPEKTRUM and JR remote control protocol, widely-used with good compatibility.

DSMX: Newest SPEKTRUM remote control protocol, DSMX backwards compatible DSM2.



Battery Charger



JST Connecting the Charger charging terminal power supply

XH2.54 Connecting the charger Balance Head

Product and Factory Code

TINY GT7	
Name	Factory Code
TINY GT7 PNP NO RX	PNPTINY GT7.NO RX
TINY GT7 PNP AC900	PNP.TINY GT7.AC900
TINY GT7 PNP RX2A PRO	PNP.TINY GT7.RX2A PRO
TINY GT7 PNP DSM2	PNPTINY GT7.DSM2
TINY GT7 KIT	KIT.TINY GT7

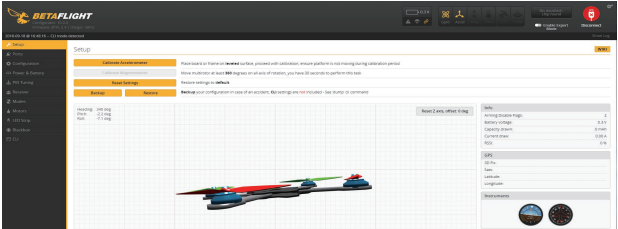
TINY GT8	
Name	Factory Code
TINY GT8 PNP NO RX	PNP.TINY GT8.NO RX
TINY GT8 PNP AC900	PNP.TINY GT8.AC900
TINY GT8 PNP RX2A PRO	PNP.TINY GT8.RX2A PRO
TINY GT8 PNP DSM2	PNP.TINY GT8.DSM2
TINY GT8 KIT	KIT.TINY GT8

Public Parts	
Name	Factory Code
1935 Prop	PROP.1935.3
1535 Prop	PROP.1535.3
Battery 7.4V 380mAh 50C	BAT.7.4V 380MAH 50C
XT0803-9000KV	MOTOR.XT0803-9000KV
XT0804-7500KV	MOTOR.XT0804-7500KV
FC+ESC	FC.F3E10A
VTX+Camera	VTX+CAM.Q25OSD+OV231
OV231	CAM.OV231

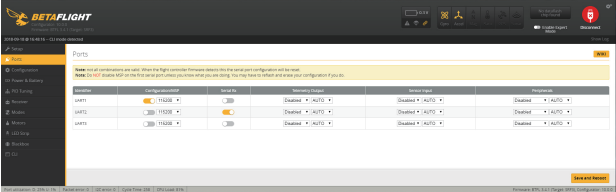
Factory setting

The factory has already load the firmware, default angle mode, please set directly (flight modes and FLIP OVER mode can be self-setting in betaflyght)

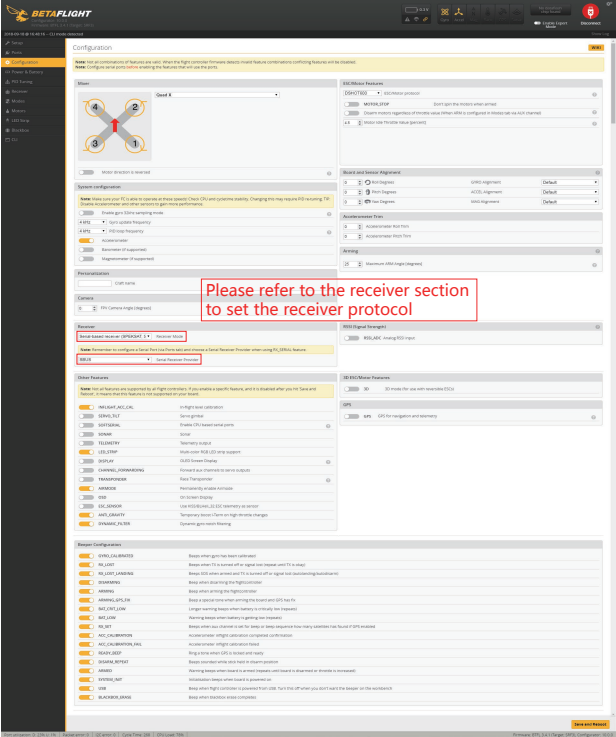
- 1.Open Betaflight
- 2.Click “Calibrate Accelerometer”



3.Open UART2 , then saved



4.Select ESC protocol “DSHOT600” , set up the receiver protocol,open LED.



The screenshot shows the Betaflight PID Tuning interface. The top left section is titled 'PID Tuning' and contains a 'Profile 1' dropdown and a 'Range Profile 1' dropdown. Below this is the 'PID Settings' section, which has a red box around the 'Proportional', 'Integral', and 'Derivative' columns. The 'PID Controller Settings' section is at the bottom left, also with a red box around the 'Proportional', 'Integral', and 'Derivative' columns. On the right side, there are three graphs: 'PID Graphs' (a sine wave), 'PID Graphs' (a step function), and 'PID Graphs' (a ramp function). The 'PID Graphs' section has a red box around the 'Proportional', 'Integral', and 'Derivative' columns. The 'PID Graphs' section has a red box around the 'Proportional', 'Integral', and 'Derivative' columns. The 'PID Graphs' section has a red box around the 'Proportional', 'Integral', and 'Derivative' columns.

Receiver

Please read receiver chapter of the documentation. Configure serial port if required, receiver mode (serial/gps/usb), provide the (serial receiver), bind receiver, set channel map, configure channel endpoints (range on TX so that all channels go from -1000 to +1000. Set midpoint (default 1500), set trim (default 1500), configure rssi threshold, verify behaviour when Tx is off or not change.

IMPORTANT: Before flying, read receiver chapter of documentation and configure defaults.

Channel	Value
AUX 1	1200
AUX 2	1200
AUX 3	1200
AUX 4	1200
AUX 5	1200
AUX 6	1200
AUX 7	1200
AUX 8	1200
AUX 9	1200
AUX 10	1200
AUX 11	1200
AUX 12	1200
AUX 13	1200
AUX 14	1200

Channel Map

RC Channel: Disabled

Stick Left / Threshold: 1000 / 50

Stick Center: 1000 / 50

Stick Right / Threshold: 1000 / 50

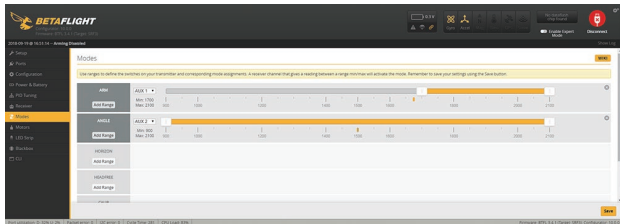
RC Dashboard: New Dashboard: 30 Threshold: 50

RC Interpolation: Auto / RC Interpolation

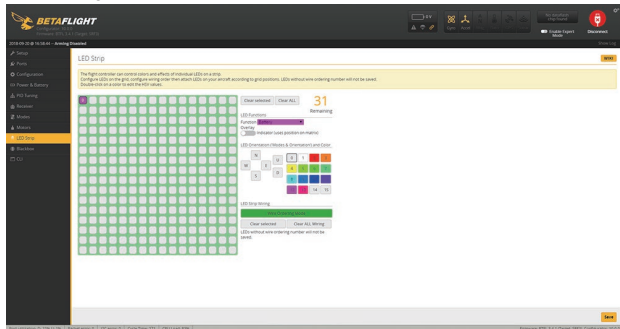
Receiver: [Dropdown Menu]

Receiver: [Button]

7.Default angle mode,setting of receiver is 5th channel ARM(AUX1)



8.LED setting,then saved



When the drone is not flying properly, try to load FC firmware,then restore factory settings

1.Open  , then click  Firmware Flasher , select firmware

SPRACINGF3

3.4.1-SPRACINGF3-02-08-2018 17:39(stable)

☐ No reboot sequence

☐ Flash on connect

☐ Full chip erase

☐ Manual baud rate 256000

☐ Show unstable releases

2.Click  , then click  to download FW to FC , click  after FW updating finish into setting menu

After Sale Service

1. Provide free reparation service when find the product defect after purchase.
2. Provide pay-needed reparation service when product damage because improper operation.
3. China customers please contact with the after-sales service, overseas client please contact the dealer.

PNP/RTF Test report ID :

Flight test

- ☐ Flying in good condition
- ☐ Camera OK
- ☐ VTX OK

QC: _____

Package check

- ☐ PNP
- ☐ Frame
- ☐ All parts of the installation
- ☐ Insulating sleeves have been installed manual
- ☐ Complete accessories, total ____ packages

QC: _____