



THETA

シータ西塔

Tech eases the fly

SINCE 2018

HELI

ACRO ^x


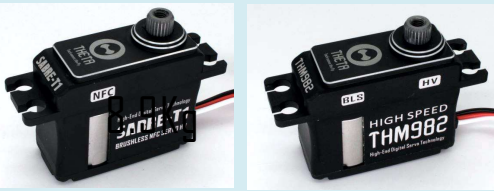
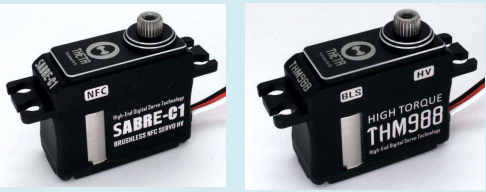








BUGGY ^x

DRIFT ^x

SERVOS SELECTION GUIDE



Helicopter SERVO application table

Main Blade	Swashplate	Main Blade	Tail (BRUSHLESS)
325		325	
↓		↓	
380		380	
↓		↓	
430		430	
↓		↓	
520		520	
↓		↓	
550		550	
↓		↓	
600		600	
↓		↓	
700		700	
↓		↓	
800		800	

Tips for using THETA servo:

The servo will wear out during use, and wear near the midpoint is more serious. The THETA NFC SERVO has a midpoint adjustment function. After a period of use, changing a gear position can greatly increase the life of the servo.

THETA servo is high-voltage servo. A higher BEC voltage can increase the torque and speed.

2023
NEW & HOT

THETA

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Kenji



THL788/782

METAL BRUSHLESS NFC HV MINI SERVO

ULTRA QUIET
SUPER DUTY
ENERGY SAVING

Neutral Pulse Width: 1520us/760us (Wide band/Narrow) Frequency Range: 50~400Hz

Limit angle: 180±10°(500-2500μsec)

Connector wire length: 300 ± 5 mm

Operating travel: 90°(1000-2000μsec)

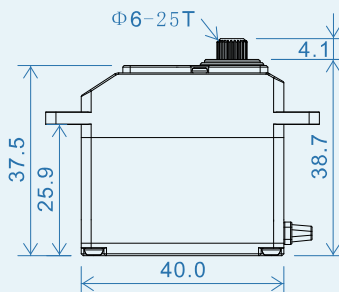
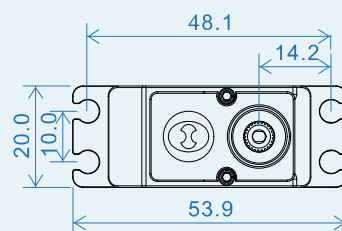
Connector wire gauge: #26PVC

Rotating direction: adjustable

Dead band width: 2-4μsec

VOLTAGE	CURRENT	C1 SPEED	C1 TORQUE	T1 SPEED	T1 TORQUE
5.0V	4.0A	0.11s/60°	20Kgf.cm	0.065s/60°	10Kgf.cm
6.0V	4.0A	0.10s/60°	23Kgf.cm	0.057s/60°	12Kgf.cm
7.4V	4.0A	0.09s/60°	28Kgf.cm	0.050s/60°	14Kgf.cm
8.4V	4.0A	0.08s/60°	48Kgf.cm	0.045s/60°	16Kgf.cm

76g



M3X12X4Pcs

M3X5X4Pcs

28X16mmX1Pcs

7X9X6X4Pcs

M3X6X1Pcs

45X10mmX1Pcs

2019
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RAZOR -C1/T1

METAL BRUSHLESS NFC HV MINI SERVO

ULTRA QUIET
SUPER DUTY
ENERGY SAVING

Neutral Pulse Width: 1520us/760us (Wide band/Narrow) Frequency Range: 50~400Hz

Limit angle: $180 \pm 10^\circ$ (500-2500μsec)

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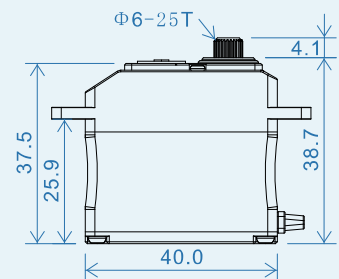
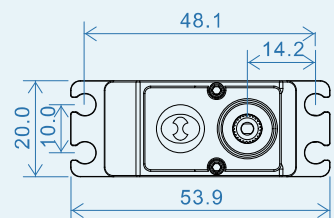
Connector wire gauge: #26PVC


Rotating direction: adjustable


Dead band width: 2-4μsec


VOLTAGE	CURRENT	C1 SPEED	C1 TORQUE	T1 SPEED	T1 TORQUE
5.0V	5.0A	0.102s/60°	32Kgf.cm	0.058s/60°	20Kgf.cm
6.0V	5.0A	0.079s/60°	37Kgf.cm	0.051s/60°	24Kgf.cm
7.4V	5.0A	0.067s/60°	44Kgf.cm	0.044s/60°	27Kgf.cm
8.4V	5.0A	0.056s/60°	48Kgf.cm	0.039s/60°	30Kgf.cm


73g





 M3X12X4Pcs

 M3X5X4Pcs

 28X16mmX1Pcs

 7X9X6X4Pcs

 M3X6X1Pcs

 45X10mmX1Pcs

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RAZOR-DH1/TH1

NFC FULL METAL BRUSHLESS LOW PROFILE SERVO

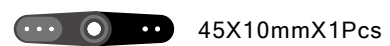
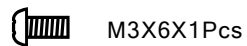
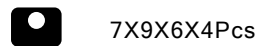
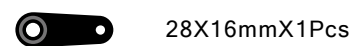
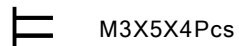
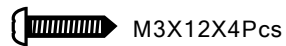
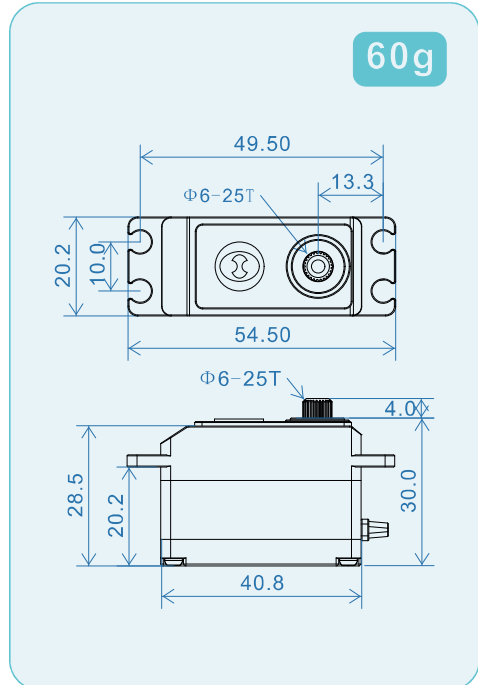
ULTRA QUIET
SUPER DUTY
ENERGY SAVING

Neutral Pulse Width: 1520us/760us (Wide band/Narrow) Frequency Range: 50~400Hz

Limit angle: 180±10° (500-2500μsec) Connector wire length: 200 ± 5 mm
 Operating travel: 90° (1000-2000μsec) Connector wire gauge: #22PVC
 Rotating direction: adjustable Dead band width: 1-4μsec

VOLTAGE	CURRENT	DH1 SPEED	DH1 TORQUE	TH1 SPEED	TH1 TORQUE
5.0V	3.0A	0.108s/60°	24Kgf.cm	0.087s/60°	19Kgf.cm
6.0V	3.0A	0.09s/60°	26Kgf.cm	0.072s/60°	21Kgf.cm
7.4V	3.0A	0.08s/60°	28Kgf.cm	0.064s/60°	23Kgf.cm
8.4V	3.0A	0.07s/60°	30Kgf.cm	0.056s/60°	24Kgf.cm

60g



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BRUSHLESS
NFC HV
Low Profile

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RAZOR-D1/DT1

NFC FULL METAL BRUSHLESS LOW PROFILE SERVO

Neutral Pulse Width: 1520us/760us (Wide band/Narrow) Frequency Range: 50~400Hz

Limit angle: $180 \pm 10^\circ$ (500-2500μsec)

Connector wire length: 200 ± 5 mm

Operating travel: 90° (1000-2000μsec)

Connector wire gauge: #22PVC

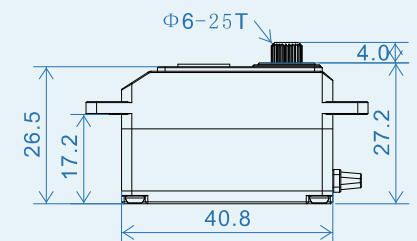
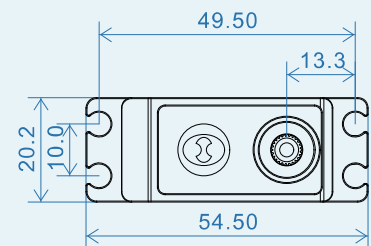
Rotating direction: adjustable


Dead band width: 1-4μsec


VOLTAGE	CURRENT	D1 SPEED	D1 TORQUE	DT1 SPEED	DT1 TORQUE
5.0V	5.0A	0.092s/60°	14Kgf.cm	0.079s/60°	12Kgf.cm
6.0V	5.0A	0.081s/60°	15.5Kgf.cm	0.065s/60°	13.5Kgf.cm
7.4V	5.0A	0.072s/60°	18Kgf.cm	0.058s/60°	15Kgf.cm
8.4V	5.0A	0.063s/60°	20Kgf.cm	0.051s/60°	16Kgf.cm


ULTRA QUIET
SUPER DUTY
ENERGY SAVING


53g





 M3X12X4Pcs

 M3X5X4Pcs

 28X16mmX1Pcs

 7X9X6X4Pcs

 M3X6X1Pcs

 45X10mmX1Pcs

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BRUSHLESS
NFC
HV MINI

THETA
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SABRE -C1/T1

METAL BRUSHLESS NFC HV MINI SERVO

ULTRA QUIET
SUPER DUTY
ENERGY SAVING

Neutral Pulse Width: 1520us/760us (Wide band/Narrow) Frequency Range: 50~400Hz

Limit angle: $180 \pm 10^\circ$ (500-2500μsec)

Connector wire length: 300 ± 5 mm

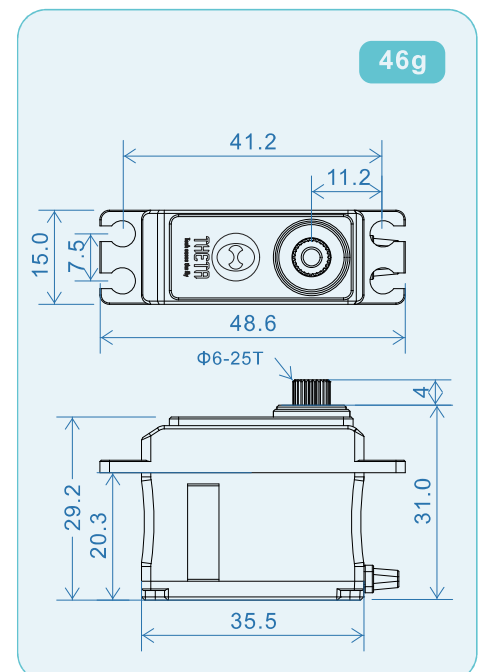
Operating travel: 90° (1000-2000μsec)

Connector wire gauge: #26PVC

Rotating direction: adjustable

Dead band width: 2-4μsec

VOLTAGE	CURRENT	C1 SPEED	C1 TORQUE	T1 SPEED	T1 TORQUE
5.0V	2.0A	0.10s/60°	10Kgf.cm	0.08s/60°	6Kgf.cm
6.0V	2.0A	0.09s/60°	12Kgf.cm	0.07s/60°	7Kgf.cm
7.4V	2.1A	0.08s/60°	14Kgf.cm	0.06s/60°	8Kgf.cm
8.4V	2.3A	0.07s/60°	15Kgf.cm	0.05s/60°	9Kgf.cm



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BRUSHLESS
HV MINI

THETA
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THM988/982

METAL BRUSHLESS HV MINI SERVO

Neutral Pulse Width: 1520us/760us (Wide band/Narrow) Frequency Range: 50~400Hz

Limit angle: $180 \pm 10^\circ$ (500-2500μsec)

Connector wire length: 300 ± 5 mm

Operating travel: 90° (1000-2000μsec)

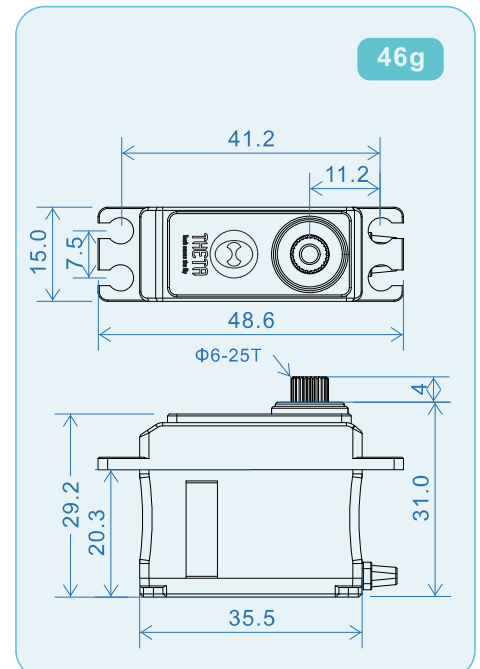
Connector wire gauge: #26PVC

Rotating direction: adjustable

Dead band width: 2-4μsec

VOLTAGE	CURRENT	988 SPEED	988 TORQUE	982 SPEED	982 TORQUE
5.0V	2.0A	0.10s/60°	10Kgf.cm	0.08s/60°	6Kgf.cm
6.0V	2.0A	0.09s/60°	12Kgf.cm	0.07s/60°	7Kgf.cm
7.4V	2.1A	0.08s/60°	14Kgf.cm	0.06s/60°	8Kgf.cm
8.4V	2.3A	0.07s/60°	15Kgf.cm	0.05s/60°	9Kgf.cm

ULTRA QUIET
SUPER DUTY
ENERGY SAVING



2023
NEW & HOT

CORELESS
HV MICRO

THETA
シータ西塔
Tech eases the fly



THS921A

METAL CORELESS HV MICRO SERVO

Neutral Pulse Width: 1520us (Wide)

Frequency Range: 50~400Hz

Limit angle: $140 \pm 10^\circ$ (750-2250 μ sec)

Connector wire length: 190 ± 5 mm

Operating travel: 90° (1000-2000 μ sec)

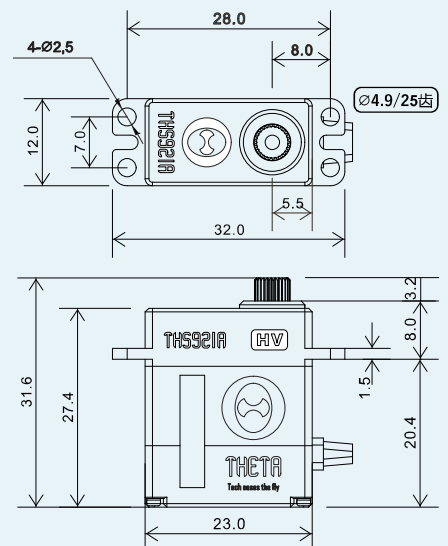
Connector wire gauge: #26PVC

Rotating direction: CCW

Dead band width: μ sec

Speed	Torque
0.12sec/60° @ 6.0V	6.6kg-cm @ 6.0V
0.10ec/60° @ 7.4V	7.8 kg-cm @ 7.4V
0.09ec/60° @ 8.4V	8.6 kg-cm @ 8.4V

21g



2023
NEW & HOT

BLS HV MICRO

THETA
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Tech eases the fly



THS9218

METAL BLS HV MICRO SERVO

Neutral Pulse Width: 1520us (Wide)

Frequency Range: 50~400Hz

Limit angle: $140 \pm 10^\circ$ (750-2250μsec)

Connector wire length: 190 ± 5 mm

Operating travel: 90° (1000-2000μsec)

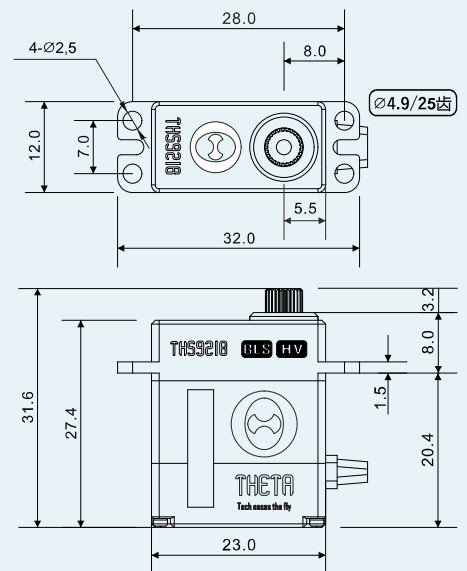
Connector wire gauge: #26PVC

Rotating direction: CCW

Dead band width: μsec

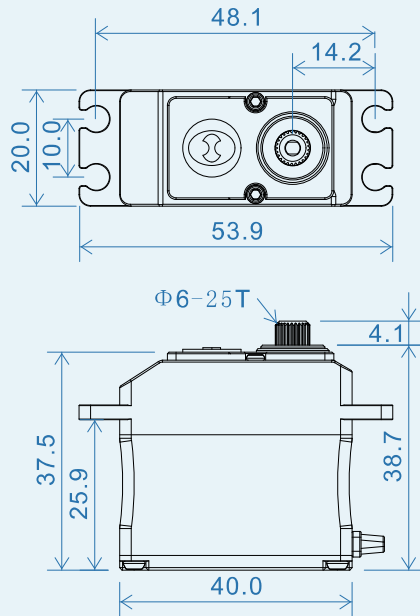
Speed	Torque
0.10sec/60° @ 6.0V	7.7kg-cm @ 6.0V
0.09sec/60° @ 7.4V	8.9 kg-cm @ 7.4V
0.08sec/60° @ 8.4V	9.8 kg-cm @ 8.4V

21g



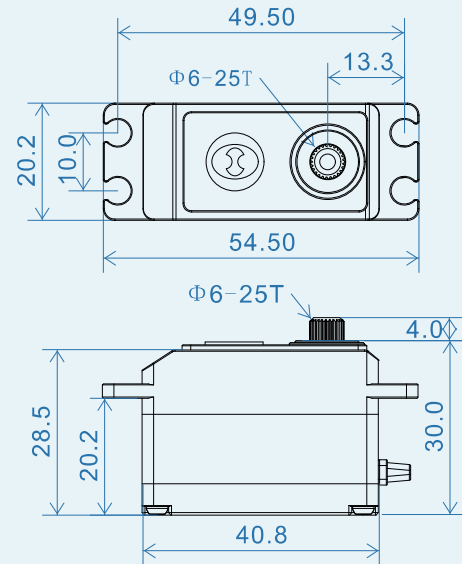
RAZOR-C1/T1

73g



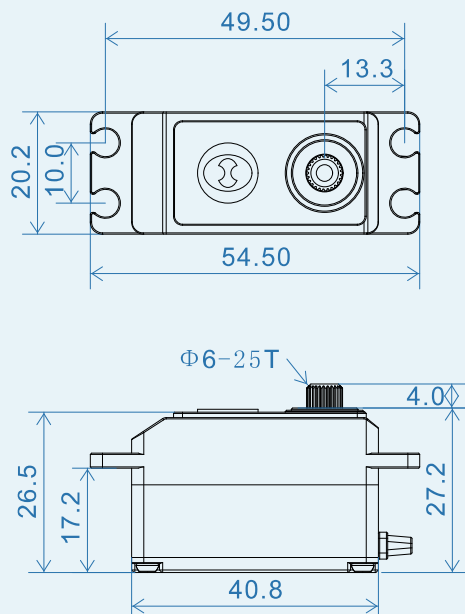
RAZOR-DH1/TH1

60g



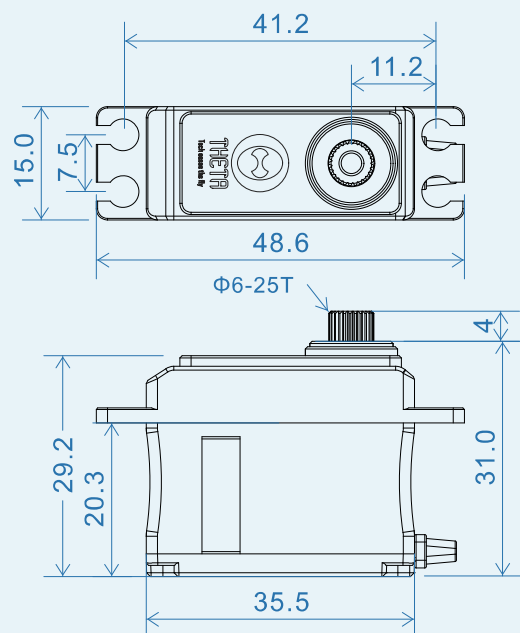
RAZOR-D1/DT1

53g



SABRE-C1/T1 THM988/982

46g



Theta Servo takes the lead in launching NFC tunable Servo

Tuning tool:

An Android phone with NFC function.

APP download:

fastech.cc

Registered:

The international area code (86139...) should be added before the mobile phone number, We are using an international SMS platform.

Recommendation code:

Please use the recommendation code of the friend who recommended this product to you, "My Homepage" in the APP.

If not recommended by a friend, the recommendation code can be used: WCFPV7

Operating:

1. Enable the NFC function of the mobile phone;
2. Open the APP and click to enter the parameter setting;
3. Use the mobile phone's NFC sensing area, close to the bottom cover of the servo (the servo should be Power off) until the reading is successful;
4. New servos need to be registered before they can be rewritten. The registered servos, Other users cannot rewrite.

Adjustable parameters:

See the picture on the right;

Recommended adjustment parameters:

Stretching: the value is small, the servo turns more softly, the value is large, and it follows the hand;

Brake: the value is large, the servo turns more slowly, the value is small, follow the hand
Too small, overshoot;

Output angle: It is recommended to adjust the remote control EPA to the maximum, while use the zero adjustment function of the servo to adjust the zero position, and then adjust this parameter is used to obtain the required output range of the servo; Can get the most delicate remote control feel;

Maximum current:

Adjust the maximum power of the servo ;
The maximum current is not recommended to exceed 5A for helicopter.

The screenshot shows the Theta Servo app interface on an Android phone. The top status bar displays "China Telecom China Mobile", "22.6 K/s", signal strength, 2G/4G/LTE indicators, and 100% battery at 11:26. The app header shows "MODEL Razor-C1" and "SN. A0000006". Below the header, there are two rows of buttons: "HELIX", "ACRO", "BUGGY", "DRIFT" and "Reverse", "Narrow Band", "Accurate", "Smooth", "SANWA SSR". The main area contains 14 adjustable parameters, each with a slider and a numerical value: Neutral (0.0), P (32), D (14), Dead Zone (25), Input PWM (801 to 2215), Output Angle (-70.0 to 70.0), Soft Start (16), Max Current (3.0), Startup Power (128.0), Over-load Current (0.5, 1.3, 2.8), Over-load Time (4.0, 10.0, 18.0), and SSR INPUT PWM. At the bottom, there are two buttons: "Restore Factory Settings" and "Restore Factory Settings & Log Off".

Servo Program box (For all Theta Servos)



```

EXIT
905 1511.- 2096
8.35V 380Hz
    
```

Signal detection and goes straight to the servo

```

EXIT
Read File [ ] Read Servo
FASTECH.CC
    
```

Servo Program

```

[I+-] [S+-]
From To
REC or FBL SERVO
SPB-1 V1.1
    
```

Connection method

```

EXIT
1020 1520 2020
PARA
    
```

Using internal signals to test servo

Servo Program box (For all Theta Servos)

PROM

```

EXIT
Read  [ ] Read
File  [ ] Servo
FASTECH.CS
    
```

L-Key

R-Key

```

EXIT
1 2 3 4 5 6 7 8
PN:THS921A
    
```

L-Key

M-Key

```

EXIT
Write [ ] Write
File  [ ] Servo
    
```

R-Key

```

EXIT
Write [ ] Write
File  [ ] Servo
--Write OK--
    
```

```

--THETA SERVO--
PN:Razor-DT1
SN:G250
UP: 0 Use: 9

Heli  Acro
Buggy Drift
Reverse NarrowB
Acc Smooth SANWA

P 48
D 48

Dead Zone 16
InPWM+(uS) 2267
InPWM-(uS) 759
Max(A) 3.0
Startup 128
OutAngle+ 75.1
OutAngle- 75.1
Soft Start 8
Ovload1(A) 2.7
Ovload2(A) 1.3
Ovload3(A) 0.4
Ovload1(S) 4.0
Ovload2(S) 10.0
Ovload3(S) 18.0
SSRPWM+ 582
SSRPWM- 20
Neutral 0.0
    
```

Servo Information

Applied labels

Reverse NarrowB
Accurate Smooth Sanwa

P

D

Dead Zone

Pulse Input Range

Maximum current

Starting Force

Output angle range

Soft Start

Three levels of current triggering protection

Three levels of time triggering protection

SSR Pulse Input Range

Neutral

PARA

```

ModeNOR Min 1020
Hz 333 Mid 1520
Step 1 Max 2020

ModeSR Min 510
Hz 833 Mid 760
Step 1 Max 1010

ModeSHR Min 1000
Hz 100 Mid 1500
Step 1 Max 2000

ModeSSR Min 100
Hz 384 Mid 300
Step 1 Max 500

ModeSUR Min 100
Hz 769 Mid 300
Step 1 Max 500
    
```

TEST

Three point test

```

EXIT
1020 1520 2020
PARA
    
```

M-Key long press

sweep test

```

EXIT
1020 ( 1 ) 2020
PARA
    
```