



ARCTURUS
— TACTICAL —

ARCTURUS V3 FE ETU USER MANUAL

Please read the instructions carefully before use!

BATTERY DETECTION

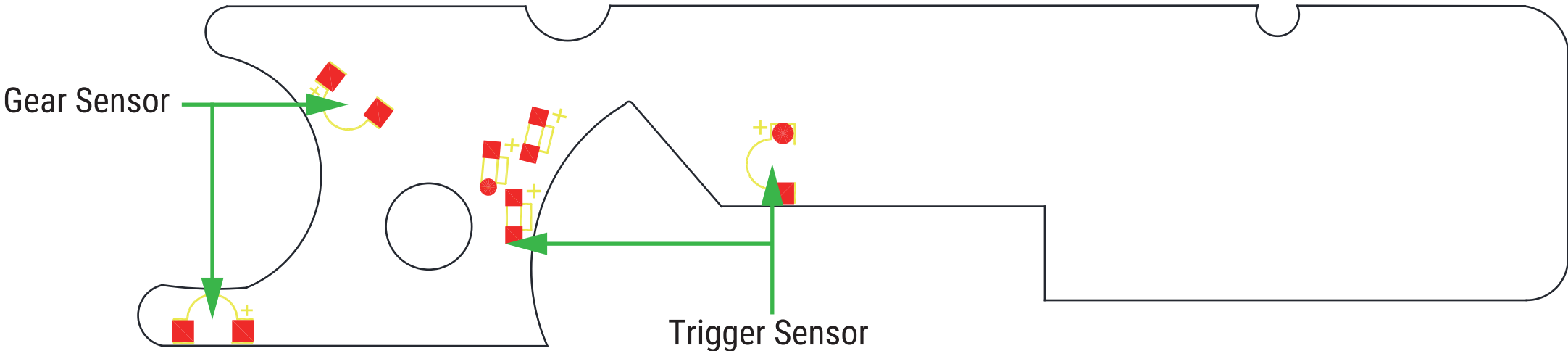
Li-Po Detection:

When the battery is connected, the ETU will beep a specific number of times corresponding to the number of cells for a Li-Po battery. For example, when a 11.1v Li-Po battery is connected, the ETU will beep 3 times.

Attention: The FE ETU enables Li-Po low voltage protection by default. Battery voltage below the default value will not function properly.



PRODUCT OVERVIEW

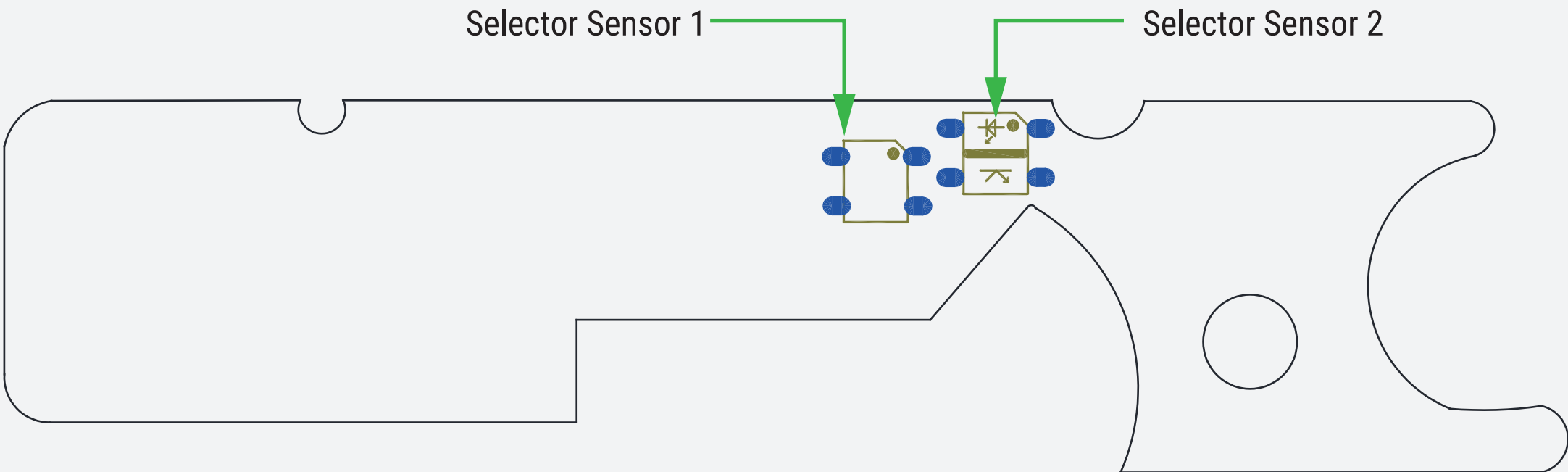


Gear Sensor

Precise monitoring of gear movement is achieved by 2 sets of infrared units to detect the gear teeth and gear condition.

Trigger Sensor

Detection array consisting of 4 infrared sensors for high-precision detection of trigger movement



Selector Sensor

Selector sensing by two infrared sensors for precise and stable selector mode switching

PROGRAMING

Entering the Programing Mode

Rapidly move the fire selector from SEMI to AUTO to SEMI to AUTO and finally to SEMI.
(from semi position, move selector up and down twice)

When Programing mode is activated, the ETU will beep once, and green LED light will be visible inside the gearbox through the slits around the trigger.

Selecting the Program

In programing mode, switching the fire selector between Semi and Auto will sequentially access the next available program setting in the order listed in the following:

Program Setting Directory

1. Selector Mode
2. Trigger Break Position
3. Trigger Reset Distance
4. Active Braking
5. Low Battery Warning
6. Pre-cocking
7. Reset to Default Settings
8. Exit Programing Mode

Default Settings

1. Selector Mode:	SAFE-AUTO-SEMI (For 3 position selector, AK&K9 series) SAFE-AUTO-2RD BURST-SEMI (For 4 position selector, AK12 series)
2. Trigger Break Position:	level 3
3. Trigger Reset Distance:	level 5
4. Active Braking:	level 5
5. Li-Po Alarm:	on
6. Pre-cocking:	off

Exit Programing Mode

Moving the fire selector between Semi and Auto will sequentially access the next available Programing setting until exiting the programing mode. All directories are accessed sequentially.

PROGRAMING SETTING

1.Selector Mode:

Green LED light indicates the program setting is in Selector Mode, each trigger pull activates the next Selector Mode. For example, pull the trigger 2 times will activates the Selector Mode 3

AK/AK12/K9 Selector

NO.	Safe	Auto	2rd Burst (AK12 with 4 position selectors only)	Semi
Mode 1	SAFE	AUTO	2RD BURST	SEMI
Mode 2	SAFE	AUTO	BINARY(i-Ramping)	SEMI
Mode 3	SAFE	3RD BURST	BINARY(i-Ramping)	SEMI
Mode 4	SAFE	BINARY(i-Ramping)	2RD BURST	SEMI
Mode 5	SAFE	SEMI	SEMI	SEMI

PPK20M1/AK12M1 Ambi-Selector

NO.	Safe	Semi	Auto
Mode 1	SAFE	SEMI	AUTO
Mode 2*	SAFE	SEMI	AUTO
Mode 3	SAFE	SEMI	3RD BURST
Mode 4	SAFE	SEMI	BINARY(i-Ramping)
Mode 5	SAFE	SEMI	SEMI

Attention: Mode 1 is the default mode.

Binary trigger allows AEG to shoot 1 shot upon pulling the trigger and shoot 1 shot upon releasing the trigger.

* This mode is designed for FE ETU compatible AK12 selector mode, please ignore this mode when using three position selector.

In binary mode, when the firing speed exceeds 10rps, it will enter i-Ramping mode to protect the motor and ETU.Continuing to pull the trigger after entering i-Ramping mode, the replica will autofire at 10rps and reset after you stop pulling the trigger.



2.Active Braking:

When LED is purple, you can switch to the next active braking mode with each trigger pull.

Mode1	Active Breaking Off
Mode2-9	Brake Level from 2 to 9 (from weakest to the strongest)

Attention: The default setting is Level 5



3.Trigger Break Position:

When LED is green, you can switch to the next trigger break position level with each trigger pull.

Level 1	Trigger Position 1: At the beginning of the trigger travel
Level 2	Trigger Position 2: Between beginning and middle of trigger travel
Level 3	Trigger Position 3: In the middle of the trigger travel
Level 4	Trigger Position 4: Between middle and end of trigger travel
Level 5	Trigger Position 5: In the end of the trigger travel

Attention: The default mode is mode 3.



4.Trigger Reset Distance Setting:

When LED is yellow, you can switch to the next trigger reset distance level with each trigger pull.

Level 1	Trigger reset distance 1: Requires the trigger to be released at least 90% of the travel before the trigger can be pulled again
Level 2	Trigger reset distance 2: Requires releasing 75% of the travel.
Level 3	Trigger reset distance 3: Requires releasing 50% of the travel.
Level 4	Trigger reset distance 4: Requires releasing 25% of the travel.
Level 5	Trigger reset distance 5: Just requires releasing 10% of the travel.

Attention: The default setting is Level 5. The total reset travel depends on the Trigger position setting.



5.Low Battery Warning:

When LED is white, you can turn on/off the battery warning with each trigger pulled.

Mode1	Low Battery Warring On: Stage1: Low Voltage Alert When the voltage is reduced to 7.2V for 2S Li-Po or 10.8V for 3S Li-Po Stage2: Low Voltage Protection When the battery voltage is below 6.8V for 2S Li-Po or 10.2V for 3S Li-Po
Mode2	Low Battery Warring Off

Attention: The default mode is mode 1. Battery reconnection is required after changing the low voltage protection function to have the setting take into effect.



6.Pre-cocking:

When LED is pink, you can switch to the pre-cocking level with each trigger pulled.

Mode1	OFF
Mode2	Pre-cocking Level from 2 to 9

Attention: The default mode is mode 1.Pre-cocking level from 2(weakest) to 9(strongest).



7.Reset to Default Settings:

When LED is red, pulling the trigger until a long beep, and then release the trigger. This will reset the ETU back to factory settings.

Attention: 1.It is recommended to restore to factory settings when changing the main spring
2.Please restore to factory settings if the trigger is abnormal at the first time of use.



ABNORMAL ALERTS

Tell-tale LED/ motor vibration/Times	Issue
RED LED /1	Over-current Protection
RED LED /2	Motor is disconnected
RED LED /2	Gear Not Detected
RED LED /4	Over Temperature Protection
Motor vibrate/3	Low Voltage Protection
Motor vibrate /2	Over Temperature Protection

SPECIFICATIONS

Supply Voltage Range	6V-13V
Rated Current	25A
Max Current	50A
Dimensions (Length x Width x Height)	65.9mm*15.6mm*4.8mm