

TITAN

QUICKSTART GUIDE

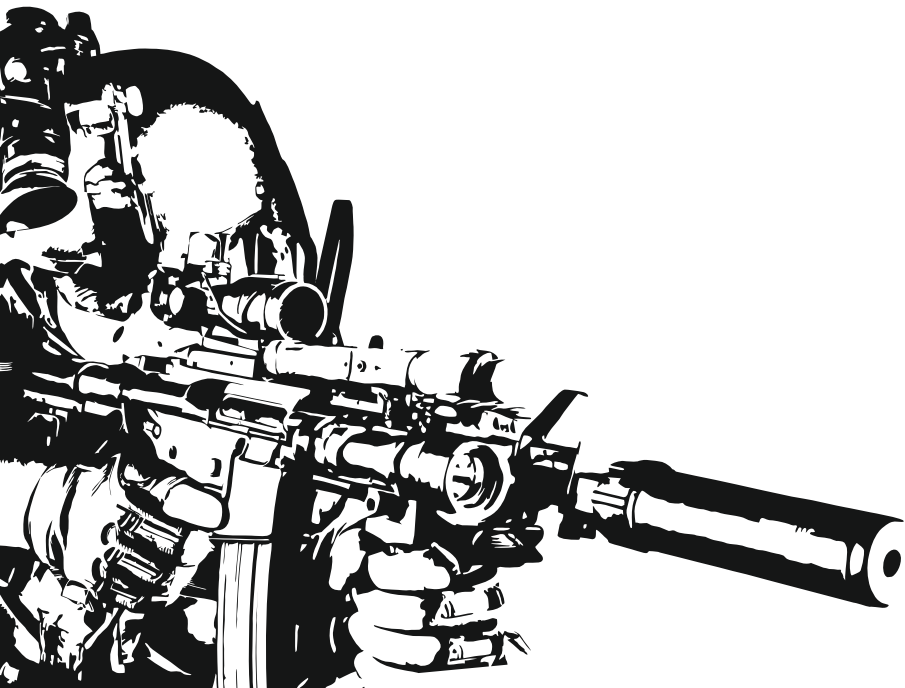
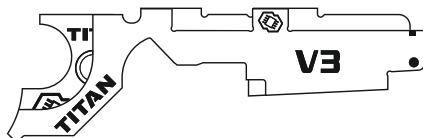
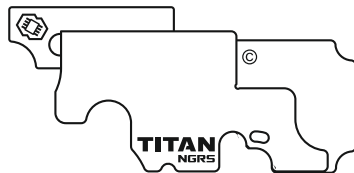
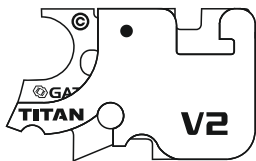


Table of Contents

1. Introduction	03
2. Firmware Editions.....	05
3. Safety Summary	10
4. Installation	13
4.1. TITAN V2	18
4.2. TITAN V3	24
4.3. TITAN V2 NGRS.....	28
5. Quick Access Menu	33
6. Programming via Trigger	37
7. Programming via USB-Link.....	45
8. USB-Link Troubleshooting.....	49
9. Restoring Factory Settings	52
10. TITAN Troubleshooting	55
11. Legal Notice	67



TITAN

Congratulations on your new TITAN, an AEG Control System which will transform your airsoft gun into an advanced training weapon. Designed for enthusiastic airsoft players, the TITAN with its multiple functions encourages you to push your boundaries and play at your best.

Firmware Editions

By upgrading the firmware, you directly support GATE R&D works and contribute to the development of innovations in airsoft. Thank you.

TITAN is available in 3 firmware editions: BASIC, ADVANCED and EXPERT.

BASIC

The best for those who prefer simplicity but require highest quality. Economic version with limited number of functions.

ADVANCED

The best for those who like complex solutions. Advanced version with wide variety of functions. It gives access to the Statistics and ASTER World Rankings.

EXPERT

The best for experienced airsofters. Vast diversity of settings and options combined with maximum configuration capabilities allow you to prepare for the most demanding mission.

Function	Configurable via trigger	Configurable via GATE Control Station		
		BASIC edition	ADVANCED edition	EXPERT edition
Trigger sensitivity adjustment	✗	✓	✓	✓
Fire selector modes	Safe - Semi - Auto Safe - Semi - Semi Safe - Binary - Auto Safe - Semi - Burst GCS setting*	Safe - Semi - Auto Safe - Semi - Semi Safe - Binary - Auto Safe - Semi - Burst	216 modes. All variations of: Safe Semi Binary Burst Burst / Auto Auto	343 modes. All variations of: Safe Semi Binary Burst Burst / Auto Auto Semi Ramping
Burst	3 rd / 5 rd / GCS setting	3 rd / 5 rd	2 rd / 3 rd / 4 rd / 5 rd / 8 rd / 10 rd	2-99 rd
Burst mode	Full / Interruptible	Full / Interruptible	Full / Interruptible	Full / Interruptible
Pre-cocking boost	Needs to be preset via GCS	• Auto: Mid • Manual: Off / 1-250 ms	• Auto: Low / Mid / High • Manual: Off / 1-250 ms	• Auto: Low / Mid / High • Manual: Off / 1-250 ms
Pre-cocking mode	Off / On	Off / On	Off / On	Off / On
Magazine capacity	✗	Off / 30 BBs	Off / 30 BBs / 45 BBs / 115 BBs / 145 BBs / 185 BBs	Off / 1-250 BBs
Reload time	✗	3 s / Bolt catch ¹	0.5 s / 1 s / 1.5 s / 2 s / 2.5 s / 3 s / Bolt catch ¹	0-10 s / Bolt catch ¹
Low ammo warning	✗	✗	Off / 10 BBs	Off / 1-250 BBs

Function	Configurable via trigger	Configurable via GATE Control Station		
		BASIC edition	ADVANCED edition	EXPERT edition
Series safety limit	✘	Off / 30 BBs	Off / 30 BBs / 60 BBs	Off / 1–250 BBs
Sniper delay	✘	✘	0.2 s / 0.5 s / 1 s / 2 s / 3 s	0.01–5 s
ROF control	✘	<ul style="list-style-type: none"> • Off • Power: 100% / 90% / 90% / 80% / 70% / 60% / 50% 	<ul style="list-style-type: none"> • Off • Power: 100% / 90% / 80% / 70% / 60% / 50% • Delay: 25 ms / 30 ms / 40 ms / 50 ms / 60 ms / 70 ms • Delay + Power 	<ul style="list-style-type: none"> • Off • Power: 100% / 99% / 98% / ...1% • Delay: 5 ms / 10 ms / 15 ms / ...1000 ms • Delay + Power • Adaptive: 1 RPS / 2 RPS / 3 RPS / ...100 RPS
Battery protection	Off / LiPo / LiFe	Off / LiPo / LiFe	Off / LiPo / LiFe	Off / LiPo / LiFe / Manual 3–17.0 V
Low battery warning	Off / 3.2 V / GCS setting	<ul style="list-style-type: none"> • LiPo: Off / 3.2 V / 3.4 V • LiFe: Off / 2.7 V / 2.9 V 	<ul style="list-style-type: none"> • LiPo: Off / 3.1 V / 3.2 V / 3.3 V / 3.4 V • LiFe: Off / 2.6 V / 2.7 V / 2.8 V / 2.9 V 	<ul style="list-style-type: none"> • LiPo: Off / 3.1 V / 3.2 V / 3.3 V / 3.4 V / Manual 3–17.0 V • LiFe: Off / 2.6 V / 2.7 V / 2.8 V / 2.9 V / Manual 3–17.0 V
Active brake	Adaptive / Off / GCS setting	Adaptive / 0% / 20% / 40% / 60% / 80% / 100%	Adaptive / 0% / 20% / 40% / 60% / 80% / 100%	Adaptive / 0–100%
Equalizer	✘	✘	Off / 2 LVL / 1 LVL	Off / 2 LVL / 1 LVL / Manual 1–100% ²

Function	Configurable via trigger	Configurable via GATE Control Station		
		BASIC edition	ADVANCED edition	EXPERT edition
2-stage trigger	✘	✓	✓	✓
BB counter	N/A	LAST / BB1 / BB2 / FACTORY	LAST / BB1 / BB2 / FACTORY	LAST / BB1 / BB2 / FACTORY
Measurements	N/A	✘	Rate of fire, Trigger response, MOSFET temperature, Voltage, Current	Rate of fire, Trigger response, MOSFET temperature, Voltage, Current, RMS power, Work, Efficiency, Battery drain per shot, ROF achieved on Semi
Diagnostics	Vibrations	✓	✓	✓
Cycle detection	✘ (set to On by default)	On / Off	On / Off	On / Off / Manual
Custom vibrations	✘	✘	✘	✓
Alerts	✘	✓	✓	✓
Profiles of settings	N/A	✘	✘	✓
Settings packages	N/A	✓	✓	✓
Firmware update	N/A	✓	✓	✓
Firmware upgrade	N/A	One-time payment	One-time payment	N/A
TITAN application	As firmware edition	Up to extremely tuned	Up to extremely tuned	Up to extremely tuned



Notice

In order to upgrade your TITAN firmware, you need to purchase an upgrade. To do so, follow the steps on our website:

www.gatee.eu/editions



Notice

You need USB-Link or Blu-Link to connect TITAN with GATE Control Station for Android and Windows/macOS. To connect TITAN with GCS iOS, you must use Blu-Link.

* GCS setting is a setting previously defined in GCS app, which value is not available for selection in this programming mode. Once you change such setting to a different option during programming via trigger and then exit this programming mode, it is no longer possible to set that setting from this level (it can be still specified via GCS).

¹ Available only for TITAN V2 NGRS

² N/A for TITAN V2

Safety Summary

For your safety, we recommend this product to be installed by an experienced airsoft service. Read the safety information below carefully before installing the device.



Warning

Situations that could cause injury to yourself and others.



Caution

Situations that could cause damage to your device or other equipment.



Notice

Notes, usage tips, or additional information.

**Warning**

Before starting the installation process, make sure that your AEG is empty and there are no BBs inside.

**Warning**

Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the device, its parts or accessories.

**Warning**

Incorrectly connecting positive and negative battery terminals will cause immediate damage to the device, which is not covered by the warranty, and can lead to fire.

**Warning**

Stay careful to prevent short circuiting the battery as the consequences may be very dangerous.



Warning

Too high trigger sensitivity may cause accidental shooting.



Warning

When an airsoft gun is not in use, its battery must be disconnected and hop-up chamber must be empty.



Notice

You should use an additional fuse between the battery and the device.



Notice

Avoid using the device around strong electromagnetic fields or when electrostatic discharges, such as lightening, occur in the atmosphere.



Notice

The product Warranty Form is available on our website:
www.gatee.eu/warranty



Installation



Notice

Regardless of your previous experience, check all the cautions to avoid TITAN damage.



Notice

TITAN installation requires deep technical knowledge of gearbox internals. To avoid TITAN damage, we recommend it to be installed by an experienced airsoft service.



Notice

Do not attempt to mount the device before watching the installation video and checking the full-length PDF manual: www.gatee.eu/manuals



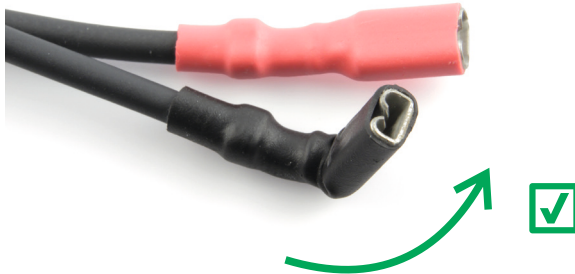
Caution

Incorrect installation may result in sensors' damage, which is not covered by the warranty.



Caution

Connectors should be bent according to the photo below. Bending connectors in the opposite direction may cause them to break. If this happens, spare terminals are included in the installation kit.





Notice

TITAN V2 and TITAN V3 do not support Infinite torque-up gears.



V2

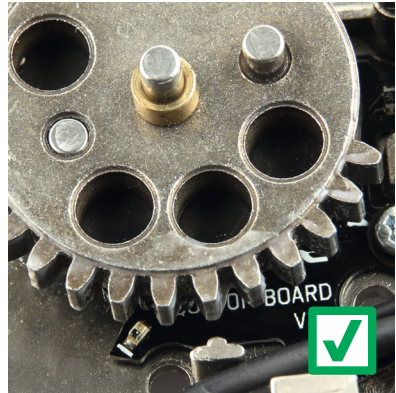
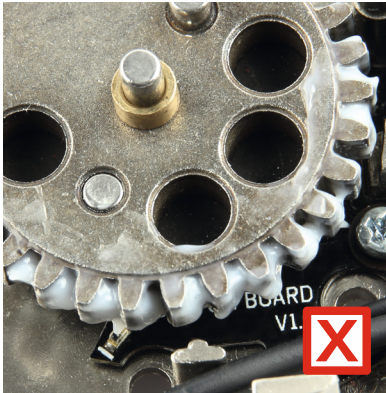
V3

V2 NGRS

i

Notice

Do not use too much grease. Excessive grease may cover sensors or gaps between teeth, which will cause cycle detection issues.





Notice

After connecting the device for the first time:

- 1) download the most updated version of GATE Control Station
- 2) update the firmware
- 3) configure the gear type (if your gears are not stock)



Notice

TITAN V3 and TITAN V2 NGRS require first-time calibration of sensors, what can be performed with USB-Link or Blu-Link and GCS app.



Notice

In case you have any difficulties while installing or using this product:

- a) email us at titan@gatee.eu
- b) contact us via Facebook: www.facebook.com/gatee
- c) call (+48) 122-100-523

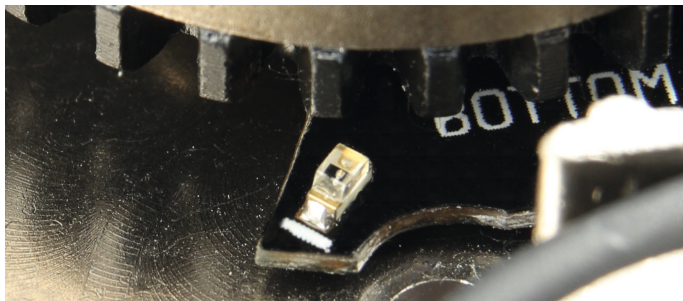
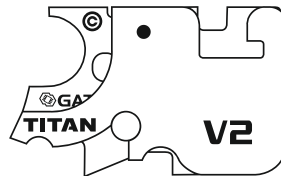


TITAN V2



Caution

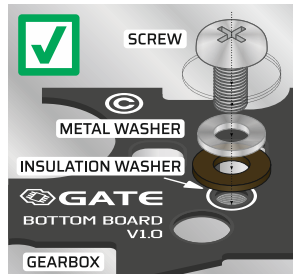
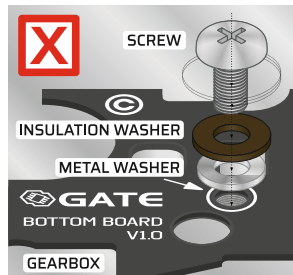
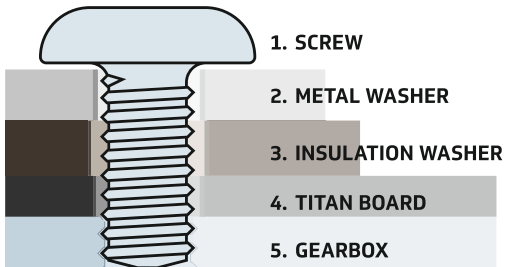
A sector gear can damage a gear sensor during installation. Stay careful to avoid this damage.





Caution

Placing washers in the wrong order will cause a short circuit and permanent damage to TITAN, which is not covered by the warranty.





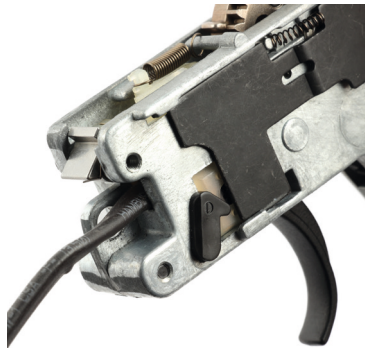
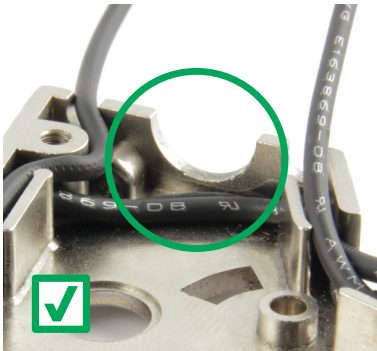
Caution

Improper placement of wiring under the motor gear may cause insulation damage and a short circuit, which is not covered by the warranty.



Caution

ICS gearboxes require modification to avoid TITAN damage.





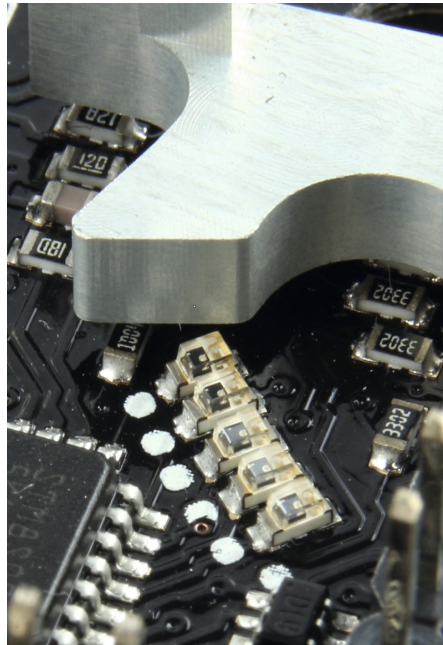
Caution

Do not pull the trigger when gearbox is open. This may result in trigger sensor damage.



Notice

In case of some triggers (e.g., speed or CNC triggers), first trigger sensors may be covered even when the trigger is not pulled.





Notice

Fire selector sensor does not detect the black surface. If your fire selector does not have a metal connector, you must use an appropriate sticker from the kit.

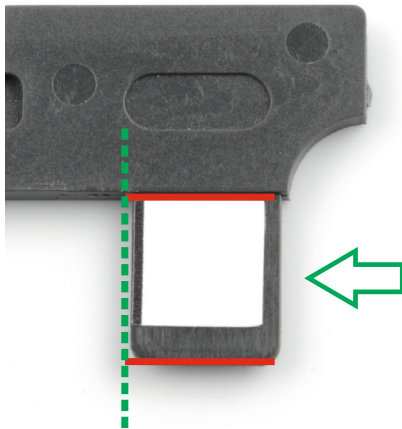




Notice

Position of the sticker is very important. Pay attention to place it very close to the left edge and the top red line.

The set contains 3 different types of stickers. At first, use a sticker with the narrower black line. If you are not able to calibrate selector well, you should try other sticker types.



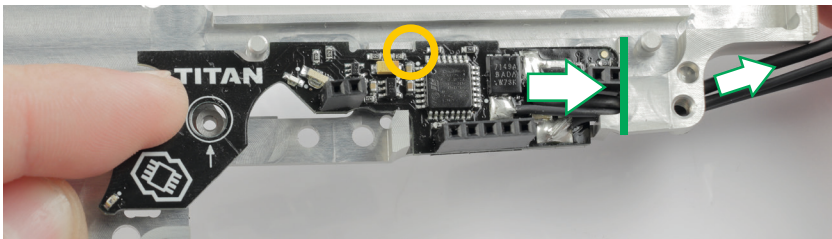
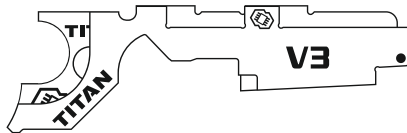
TITAN V3

i

Notice

TITAN V3 fits CNC gearboxes with very small backlash.

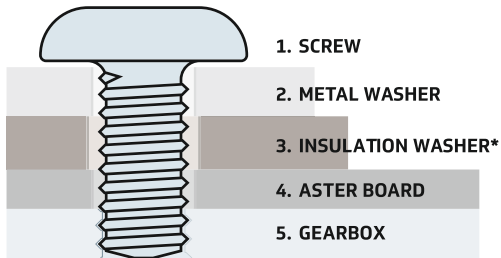
While fitting the TITAN, pull the cables and at the same time, push the board into the right place. Pay attention to the area marked in yellow to fit the board correctly.





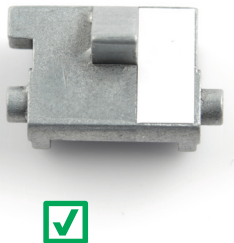
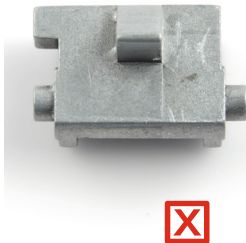
Caution

Use metal washer with max. 8 mm [0.31 in] diameter to avoid TITAN damage.



Notice

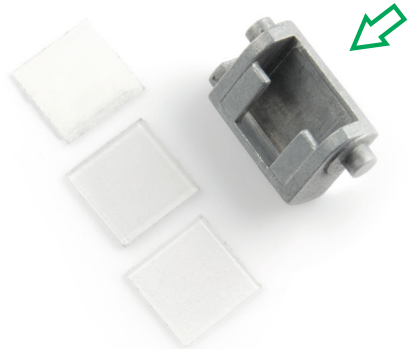
Use the trigger sticker to make it visible for trigger sensor.





Notice

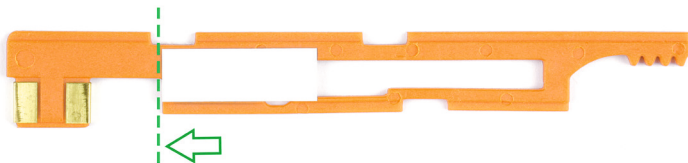
TITAN detects trigger position very precisely. In order to use it, you need to eliminate trigger backlash. The set contains 3 trigger anti-backlash stickers of different thickness. Try each of them and choose the most proper one.





Notice

The selector plate requires modification. Place the selector sticker according to the photos below. Its position is very important.

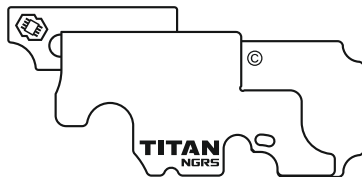


TITAN V2 NGRS



Warning

If you use recoil system and set too high trigger sensitivity, it may cause accidental shooting even without pressing the trigger.



Warning

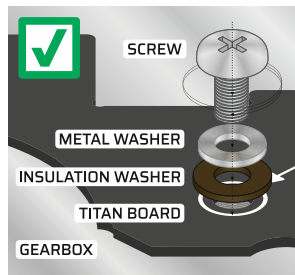
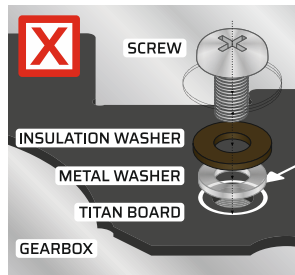
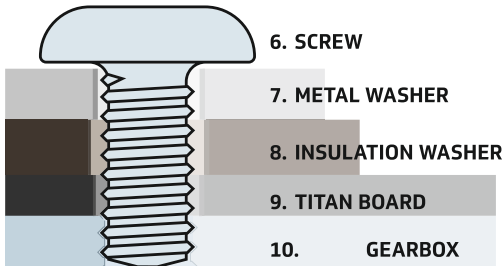
Pay attention to correctly solder positive and negative TITAN wires to the connector. Incorrectly connecting positive and negative battery terminals will cause immediate damage to the device, what is not covered by the warranty, and can lead to fire.





Caution

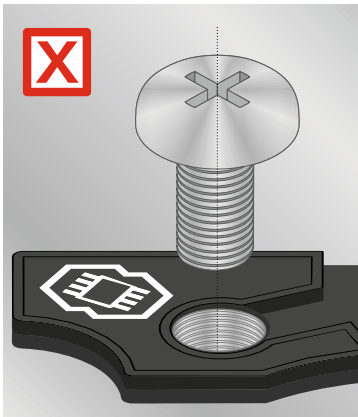
Placing washers in the wrong order will cause a short circuit and permanent damage to TITAN, what is not covered by the warranty.





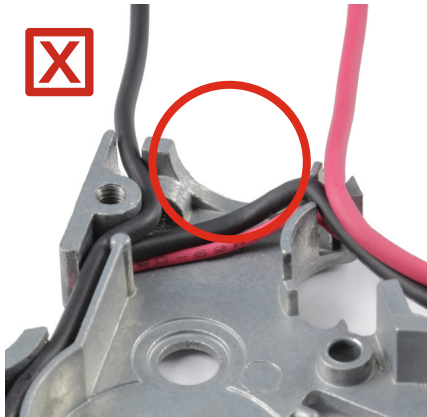
Caution

Do not use cut-off lever screw to secure the TITAN board.



Caution

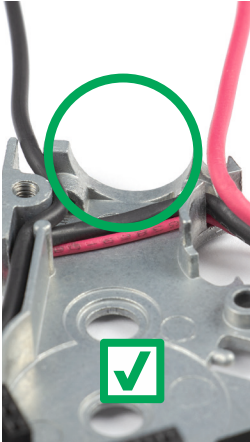
Improper placement of wiring under the motor gear may cause insulation damage and a short circuit.





Caution

In order to secure the wires properly, modify the gearbox as shown in the photos below.



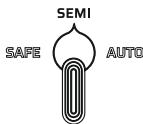


Notice

The selector plate requires modification. Place the selector sticker according to the photos below. Its position is very important.



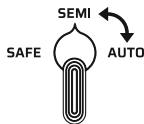
Quick Access Menu



Fire a shot, burst
or when in Safe mode



Hold the trigger
and wait specific time



Switch selector right
number of times to choose
option of a function

You can set Pre-cocking mode, Profile of settings or go to programming via trigger mode by using a shortcut. After firing a shot, burst or while in Safe mode* (if safety lever is removed), hold the trigger and switch fire selector in appropriate time (see table). To change options of given function, switch fire selector. Each switch means going to the next option. Options are indicated by relevant vibrations.

By releasing the trigger, you exit the function and now your device operates according to the selected Pre-cocking mode or profile.

* You can enter programming via trigger mode only when fire selector is on SEMI position and Auto mode is not assigned to that position.

Function	Pre-cocking mode		Profiles of settings		Programming via trigger
To enter the function, hold the trigger	and switch fire selector in < 2 s		and switch fire selector within 2-7 s		for > 7 s
Available options	Option	Low vibrations	Option	High vibrations	See full description page 55
	Off	1	P1	1	
	On	2	P2	2	
			P3	3	

Selecting Pre-cocking mode

Turn on 'Switch mode via fire selector' parameter for Pre-cocking in GCS to be able to use this function.

1. Fire a shot, burst or pull the trigger while in Safe mode*
2. Keep the trigger held
3. Switch fire selector within 2 s. You should hear 1 low vibration.

* If safety lever is removed.

4. Now each fire selector switch means the next option:
 - a. 1 low vibration – Pre-cocking off
 - b. 2 low vibrations – Pre-cocking Auto
 - c. 3 low vibrations – Pre-cocking Manual

5. Release the trigger to save selected mode

Selecting Profiles of settings

Profiles are sets of particular settings of configurable TITAN functions*. There are 3 profiles possible to select at a time and one of them is set as currently active. Turn on 'Allow profile change via selector' in GCS to be able to use this function. If you want to change the active Profile of settings:

1. Fire a shot, burst or pull the trigger while in Safe mode**

* Profiles of settings are defined in GCS and are available only in EXPERT firmware edition.

** If safety lever is removed.

2. Keep the trigger held
3. Switch fire selector within 2–7 s. You should hear 1 high vibration.
4. Now each fire selector switch means the next option:
 - a. 1 high vibration – Profile 1
 - b. 2 high vibrations – Profile 2
 - c. 3 high vibrations – Profile 3
5. Release the trigger to save selected profile

Programming via Trigger

This programming mode allows you to set options of TITAN basic functions.



Notice

Particular options in the programming via trigger mode may be different in custom/OEM versions of TITAN.



Notice

To run programming via trigger and fire selector, your AEG must have a physical 3-stage fire selector.

Turning on the programming mode*

1. Switch fire selector position to SEMI
2. Fire a shot or burst
3. Keep the trigger pulled for 7 seconds
 - until you hear a vibration



Turning on the programming mode – the second ‘backup’ method

1. Disconnect the battery
2. Pull the trigger
3. While the trigger is pulled, connect the battery (ignore warning vibrations)
4. Hold the trigger for 3 seconds – until you hear a vibration

* Not possible if Auto mode is assigned to SEMI position.

You can easily change menu level by switching fire selector. You navigate given menu very quickly by pulling the trigger. Each time you pull the trigger, number of accompanying vibrations changes. The table presents functions and their options programmable via trigger as well as how they are indicated by vibrations.

SEMI POSITION	FUNCTION WITH CORRESPONDING NUMBER OF VIBRATIONS AND LED COLOR					
	1	2	3	4	5	6
	Fire mode	Burst mode	Battery protection	Active brake	Gear ratio	Advanced*

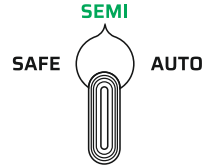
AUTO POSITION	OPTION WITH CORRESPONDING NUMBER OF VIBRATIONS AND LED COLOR																							
	1	2	3	4	5	1	2	3	4	5	1	2	3	1	2	3	4	5	1	2	3			
	SAFE-SEMI-AUTO	SAFE-BINARY-AUTO	SAFE-SEMI-SEMI	SAFE-SEMI-BURST	GCS setting**	3 x Full	3 x Interruptible	5 x Full	5 x Interruptible	GCS setting**	Off	LiPo	LiPo 3.2 V warning	GCS setting**	Adaptive	Off	GCS setting**	Low speed	Normal speed	High speed	DSG	19-tooth	Read DTC	Clear DTC

* To evoke options of Advanced function, hold the trigger down for more than 3 seconds.

** GCS setting is a setting previously defined in GCS app, which value is not available for selection in this programming mode. Once you change such setting to a different option during programming via trigger and then disconnect the battery, it is no longer possible to set that setting from this level (it can be still specified via GCS).

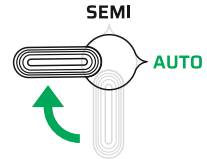
Selecting a function

1. Switch fire selector to SEMI
2. To get to a given function, pull the trigger right number of times (according to the table on page 40)



Selecting option of a function

1. Switch fire selector to AUTO
2. To get to a given option of a selected function, pull the trigger right number of times (according to the table on page 40)



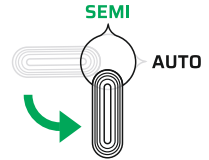
Evoking options of Advanced function

1. Select a given option of Advanced function
2. Pull and hold the trigger for more than 3 seconds



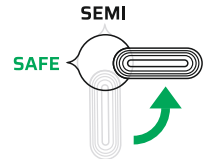
Saving an option

1. To save a given option, switch fire selector to SEMI
2. Then, the setting is saved, and you are back in the functions menu
3. If you want to, set options for other basic functions in the same way



Exiting the programming mode

1. Switch fire selector to SAFE
2. Enjoy TITAN functions you've just set



Activating Safe mode if not assigned

If Safe mode is not assigned in the GCS app, it is possible to activate it via selector*:

1. Switch selector fast in sequence: SAFE → SEMI → SAFE
(SAFE → AUTO → SAFE for AK-47 selector type)
2. Now Safe mode is activated – switch to SEMI or AUTO to deactivate it
3. Switching to SAFE again evokes fire mode assigned to SAFE position in GCS app



watch the video

* Safe mode also applies when selector is on SAFE while connecting the battery – switching to SEMI or AUTO deactivates it.



Notice

Number of vibrations reflects position of given option or function in the menu, for example: if option 5x Full is selected for function Burst mode, you will hear 3 vibrations.



Notice

TITAN remembers your settings, so you always know which option is presently set. Therefore, if you already defined TITAN functions, their programming starts from option currently specified for a given function.

Programming via USB-Link



Notice

You need USB-Link or Blu-Link to connect TITAN with GATE Control Station for Android and Windows/macOS. To connect TITAN with GCS iOS, you must use Blu-Link.



Notice

You can find how to program your device using Blu-Link in the manual included in the Blu-Link kit.



Caution

Prevent the USB-Link and the ends of USB cable from contact with conductive materials, such as dust, liquid or metal powder.



Caution

Do not remove the device protective foil.

1. Download and install GATE Control Station:
www.gatee.eu/gcs



Notice

Your Android device must support OTG technology to run GATE Control Station app.

2. Connect the USB-Link via its Micro-USB plug to PC, Mac or smartphone using one of the dedicated USB cables:
 - USB-A cable for PC/Mac
 - Micro-USB or USB-C cable for smartphones





Notice

Micro-USB cable has the same connectors on both sides. However, it is very important to connect the USB-Link and smartphone to appropriate ends of the cable. Otherwise, it will not work.



Notice

If your USB-Link cannot be detected, follow the instructions displayed on GATE Control Station screen.



3. Connect TITAN to the USB-Link



Notice

If your USB-Link cannot detect TITAN, check if the same happens for another PC, Mac or smartphone. If the problem still occurs:

- a. email us at *titan@gatee.eu*
- b. contact us via Facebook: *www.facebook.com/gatee*
- c. call (+48) 122-100-523

4. Now you can control TITAN via GATE Control Station.

USB-Link Troubleshooting

USB-Link has a 4-color LED indicator.



BLUE (glowing)

The USB-Link is connected to PC, Mac or smartphone. TITAN is not connected or PC/Mac driver is not installed.

You can download the driver here:

www.gatee.eu/drivers



BLUE (blinking)

The USB-Link does not have firmware installed. Please install the firmware.

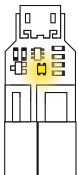


GREEN (glowing)

The USB-Link is connected to TITAN and PC, Mac or smartphone.

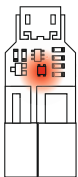
GREEN (blinking)

The USB-Link is connected to TITAN and PC, Mac or smartphone, but TITAN does not have firmware installed. Please install the TITAN firmware.



YELLOW (glowing)

The USB-Link is transmitting data.



RED (glowing)

Communication with TITAN was interrupted while saving settings. TITAN settings may have been transmitted incorrectly. Please check the connection between the USB-Link and TITAN.

Restoring Factory Settings



Notice

Restoring the factory settings results in resetting the default settings, erasing adaptations and statistical data.



Notice

Restoring the factory settings of TITAN V3 or TITAN NGRS requires its re-calibration in the GCS app.

You can restore the factory settings in 3 ways:

1. Through GATE Control Station app
 - a. Go to settings
 - b. Open menu in the upper right corner and select option 'Restore factory settings'
 - c. Confirm your selection

2. While in programming mode (only for TITAN V2)
 - a. Turn on the programming mode as described in chapter Programming via Trigger
 - b. Switch fire selector to SEMI
 - c. Pull the trigger 5 times to select function Advanced (6 vibrations)
 - d. Switch fire selector to AUTO
 - e. Pull the trigger to get to option 'Restore factory settings' (4 vibrations)
 - f. Evoke 'Restore factory settings' option by pulling the trigger for more than 3 seconds

3. While connecting the battery (only for TITAN V2)
 - a. Disconnect the battery
 - b. Pull the trigger

- c. While the trigger is pulled, connect the battery (ignore warning vibrations)
- d. Hold the trigger for 10 seconds until you hear 2 vibrations confirming the reset (ignore vibrations occurring in the meantime, informing about entering the programming mode)
- e. Release the trigger



Notice

The trigger must be held down throughout entire operation – from plugging the battery until you hear the vibrations.







TITAN Troubleshooting

Low battery warnings

When activated, you are warned 5 times before the battery is discharged. Each warning is communicated by 3 vibrations: **High – Mid – High**.

Vibrations after connecting the battery

TITAN can detect number of battery cells automatically. If you activate this function, vibrations start once the battery is connected. Remember to always check if TITAN detected correct number of battery cells.

Vibrations after connecting the battery	Explanation
1 short high frequency 	Cell detection error.
2 short high frequency 	Two cells detected.
3 short high frequency 	Three cells detected.
4 short high, 1 long low frequency 	Four cells detected. The voltage is too high.
3 short low frequency 	Lack of trigger or selector calibration.
4 short low frequency 	Trigger error. After connecting the battery, TITAN detected trigger position in which a shot may be fired.

Diagnostic Trouble Codes

Diagnostic Trouble Codes (DTC) enable detecting basic malfunctions and problems with your AEG or TITAN. You are notified of the main errors with motor vibrations. DTC can be later read and cleared in DTC menu in GCS app as well as in the programming mode from the level of Advanced function settings.

If DTC are read while in the programming mode:

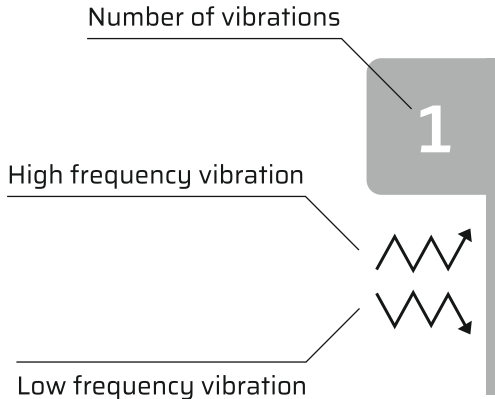
1. Vibration type indicates problem type
 - a. High vibrations mean warning
 - b. Low vibrations mean problem
 - c. Low-High vibrations mean that the device failed on self-test
 - d. High-Low vibrations mean other error
2. Number of vibrations determines what exactly the problem is (for reference, read DTC explanations presented later in this guide)



Notice

It is a good practice to clear the DTC in GCS before each skirmish.

How to read DTC explanations



No errors

No errors detected. Enjoy airsofting.

1

Under Voltage Protection 1 (UVP1)

Protection against over-discharge of the battery.

Battery protection was activated.

What happened:

The battery is discharged

What to do:

Charge the battery

2

Under Voltage Protection 2 (UVP2)

The voltage dropped below 1.9 V which is critical for TITAN to work properly.

What happened:

1. The battery is discharged

2. The battery is worn out and has too high internal resistance
3. Inadequate battery type for given AEG configuration
4. Too much electrical resistance between TITAN and the battery
5. Motor too strong for the connected battery
6. Motor connections' short circuit
7. Motor is jammed
8. Motor is damaged

What to do:

1. Charge the battery
2. Replace the battery
3. Use a battery with more capacity or more voltage
4. Do not use any adapters
5. Use standard or high-torque motors instead of high-speed
6. Check and fix the motor wires insulation
7. Unjam the motor
8. Replace the motor

3

Under Voltage Protection 3 (UVP3)

Protection against over-discharge of the battery. Battery protection was activated immediately after connecting the battery.



What happened:

1. Number of cells is different than their number set in GCS
2. The battery is discharged

What to do:

1. Set the same number of cells in GCS as in the battery
2. Charge the battery

4

Motor Disc (MOTOR DISC)

TITAN did not detect the motor.



What happened:

1. Motor is not connected
2. Brushes are worn out
3. Motor is damaged

What to do:

1. Check wiring and motor connectors
2. Connect the motor
3. Replace brushes
4. Replace the motor

1

Gear Not Detected (GND)

TITAN did not detect the sector gear.



What happened:

1. Too high sector gear shimming
2. Sector gear sensor is dirty
3. Sector gear sensor is damaged
4. Sector gear is jammed
5. Motor is damaged

What to do:

1. Remove shims under the sector gear

2. Clean sector gear sensor
3. Contact titan@gatee.eu
4. Inspect the sensors using GCS
5. Replace the motor
6. In case of dirty or damaged gear sensor, you may set Cycle detection to Off

2

Overload (OVL)

Too high load. The load limit was exceeded.

What happened:

TITAN with BASIC and ADVANCED firmware edition is dedicated for up to mid-tuned guns

What to do:

1. Use high-torque motor and gears
2. Upgrade firmware to EXPERT

3



Over Current Protection (OCP)

TITAN detected too high current. Over current protection was activated.

What happened:

1. Motor is damaged
2. Motor or gearbox is jammed
3. Motor connections' short circuit

What to do:

1. Replace the motor
2. Unjam the motor or gearbox
3. Check and fix the motor wires insulation

4

Short Circuit Protection (SCP)

TITAN detected current over 220 A. Short circuit protection was activated.

What happened:

1. Motor is damaged
2. Motor or gearbox is jammed
3. Motor connections short circuit

What to do:

1. Replace the motor
2. Unjam the motor or gearbox
3. Check and fix the motor wires insulation

5

Over Temperature Protection (OTP)

TITAN temperature is too high. Over temperature protection was activated.

What happened:

1. Outside temperature is too high in correlation with the demanding AEG
2. Frequent short circuits and TITAN electrical overloads

What to do:

Wait until the temperature drops

2

Self-test Failure (STF)

The device failed on self-test.

What happened:

Internal error of the device

What to do:

Contact titan@gatee.eu



2

Other error

What to do:

Connect TITAN with GCS and check DTC



Legal Notice

Please read this Legal Notice before operating your device and keep it for future reference.

This document contains important terms and conditions with respect to your device. By using this device, you accept those terms and conditions.

EXCLUSION OF LIABILITY

GATE Enterprise sp. z o.o. sp. k. is not liable for any damages, injuries or accidents of any kind resulting from the use of this product or airsoft gun with the product installed, including (but not limited to) incidental or intentional damages to airsoft gun, airsoft gun parts, batteries and gearbox internals.

DISCLAIMER

GATE Enterprise sp. z o.o. sp. k. takes no responsibility regarding compliance of the product with the requirements of any law, rule or airsoft restrictions pertaining thereto.

INTELLECTUAL PROPERTY

Intellectual Property owned by GATE Enterprise sp. z o.o. sp. k., including (but not limited to) devices, accessories, parts, software, documentation, is proprietary to GATE Enterprise sp. z o.o. sp. k. and is protected under Polish laws, EU laws and international treaty provisions. You may not violate the rights of the Intellectual Property and you will not prepare derivative works of or reverse engineer the device or software. No ownership in the Intellectual Property is transferred to you.

GATE LIMITED WARRANTY POLICY

GATE Enterprise sp. z o.o. sp. k. warrants that its product is free from manufacturing and material defects at the date of purchase and for a nonextendable period of two (2) years from the date of purchase. This Limited Warranty is conditioned upon proper use of the product by Purchaser.

1. This Limited Warranty is valid provided that the owner provides a proof of purchase and a properly completed warranty form.
2. This Limited Warranty does not cover: (a) defects or damage (e.g., mechanical, thermal or chemical) resulting from accident, misuse (misinterpretation of the instructions), abuse, neglect, unusual physical, electrical or electromechanical stress, water immersion, repairs or structural modification of any part of the product, or (b) the product that has its serial number removed or made illegible; (c) defects or damage from improper operation, maintenance or installation, (d) installation of the products.
3. Requests for warranty are processed as soon as possible, not exceeding seven (7) working days. The company's obligation under this Limited Warranty shall be limited to providing replacement of part(s) only.



PRODUCT DISPOSAL INSTRUCTIONS

The symbol shown here means that the product is classified as Electrical or Electronic Equipment and should not be disposed with other household and commercial waste at the end of its working life. The Waste of Electrical and Electronic Equipment (WEEE Directive 2012/19/EU) has been put in place to recycle products using best available recovery and recycling techniques to minimize the impact on the environment. Purchasers shall take any old electrical equipment to waste recycling public centers or points of sale.



CERTIFICATE OF CONFORMITY

GATE Enterprise sp. z o.o. sp. k. hereby declares under our sole responsibility that the products GATE TITAN V2, TITAN V3 and TITAN V2 NGRS are in conformity with essential requirements of the following Directives: EC DIRECTIVE 2011/65/EU. The products are certified as RoHS Compliant.



GATE Enterprise Sp. z o.o. Sp. k.

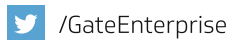
Torowa 3H

PL-30435 KRAKÓW

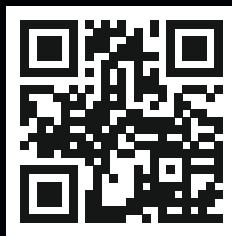
Email: office@gatee.eu

Tel: (+48) 122-100-523

www.gatee.eu



Read the full manual:



gatee.eu/manuals