



GATE Control Station v0.9 beta
Manual

Version: v2.1

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1. Introduction

The **GATE Control Station App** works in tandem with the USB-Link module giving you easy access to TITAN's functions and allows you to update the firmware of the drop-in module, the Tactical Programming Card and the USB-Link.

Thanks to the App you can also read the trouble codes stored in the TITAN Drop-in Module in order to find out reasons of problems.

2. Update

2.1 Gate Control Station

Using the most recent software versions ensures stable functioning of the device and allows for taking advantage from all its features.

Thanks to the GATE Control Station App you can easily check availability of the newest software versions and send it to your device.

Check availability of the newest software versions for the GCS App choosing **Check update**.

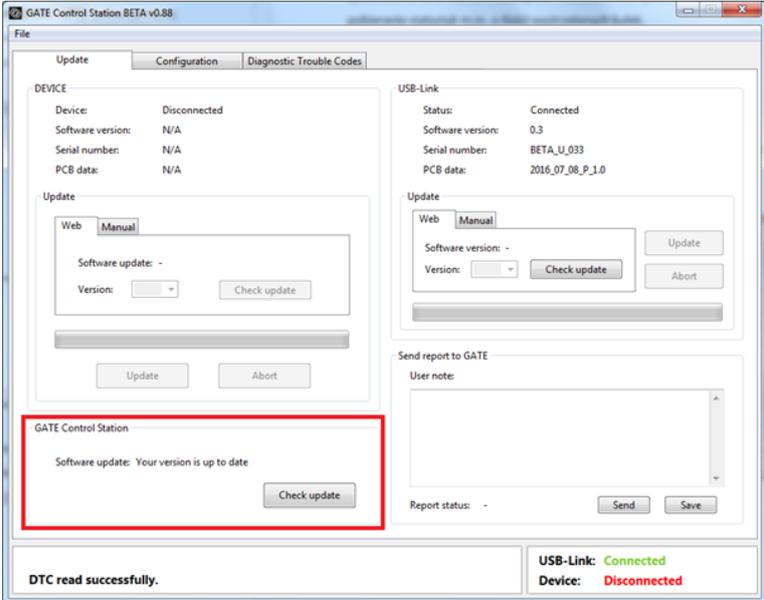


Fig.1

If the new software version is available, you will see an appropriate statement. Choose **Download** to start downloading.

When the downloading is done, open the ZIP file. The newest software version is ready to use.

The available updates are also being checked automatically when you are running the App.

2.2 USB-Link

To make the update of your device please follow the steps below:

- Install the USB-Link module.
- Run the GATE Control Station App.
- The information **USB-Link: Connected** should appear in the bottom right corner

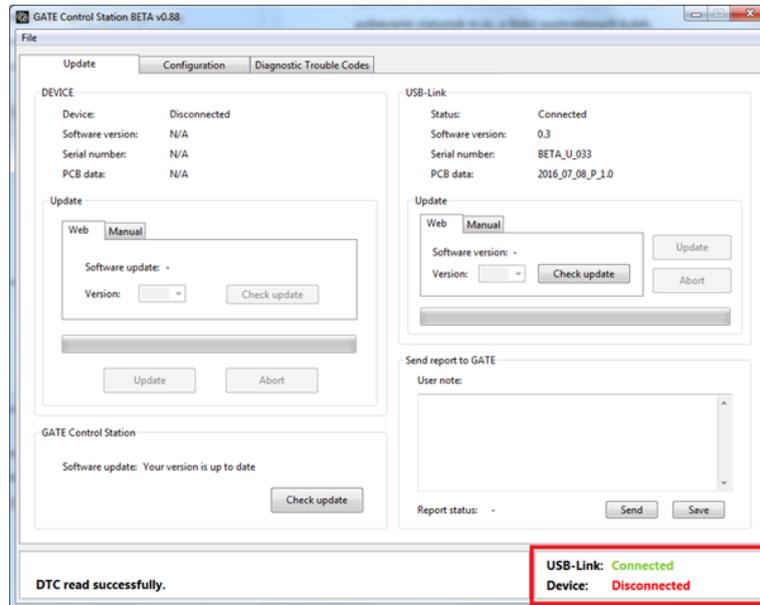


Fig.2

- Check availability of the newest software versions for the USB-Link choosing **Check update**. If the USB-Link software version is outdated, click **Update** to start updating the firmware.

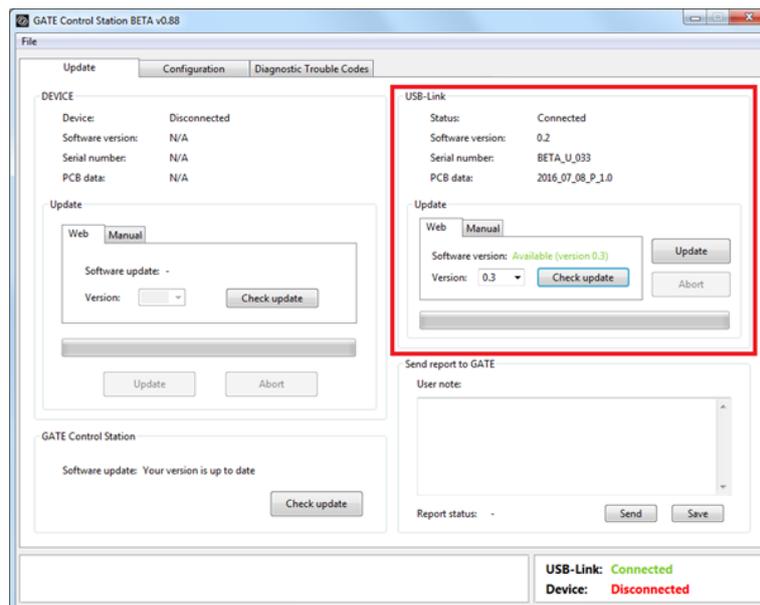


Fig.3

There is an option to update the USB-Link's firmware to the most recent version saved on your computer disc. Choose **Manual**, select file with the program saved on your computer disc and click **Update**.

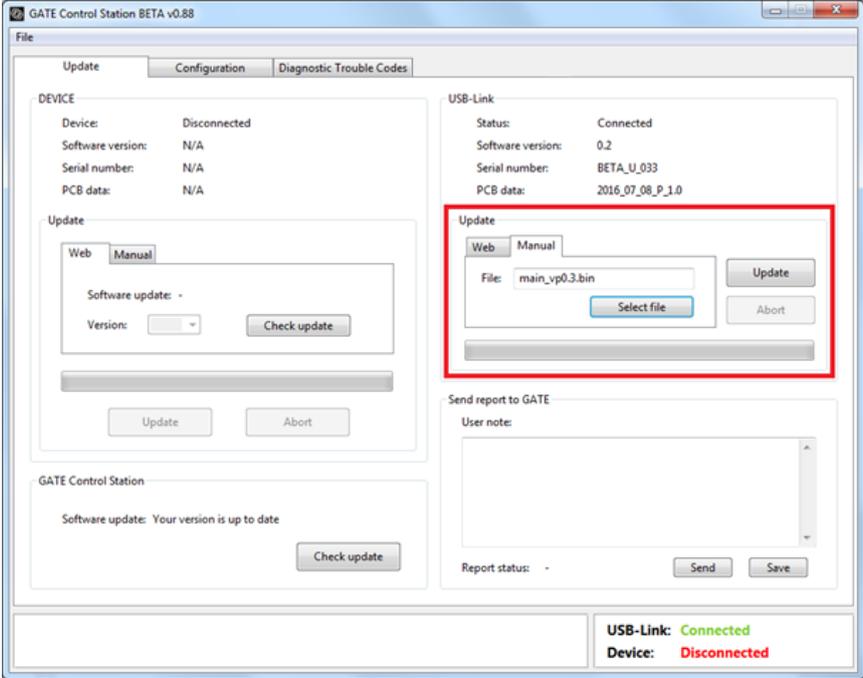


Fig.4

2.3 Drop-In Module

To make the update of your device please follow the steps below:

- Connect the TITAN Drop-in Module to the USB-Link.

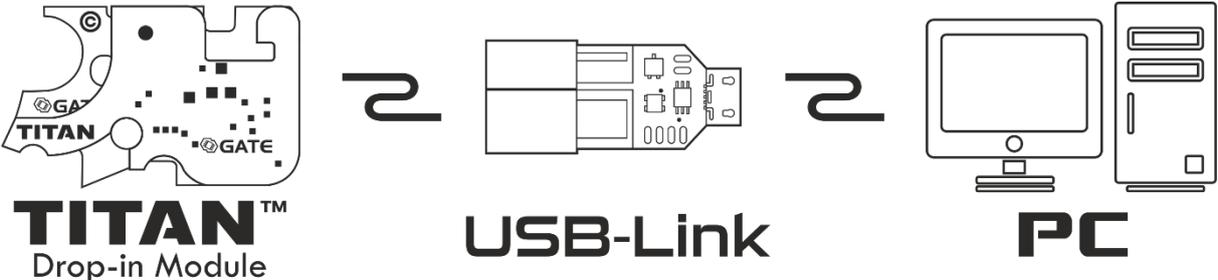


Fig.5

- In the bottom right corner the information **Device: TITAN** should appear. It confirms connection to the device.

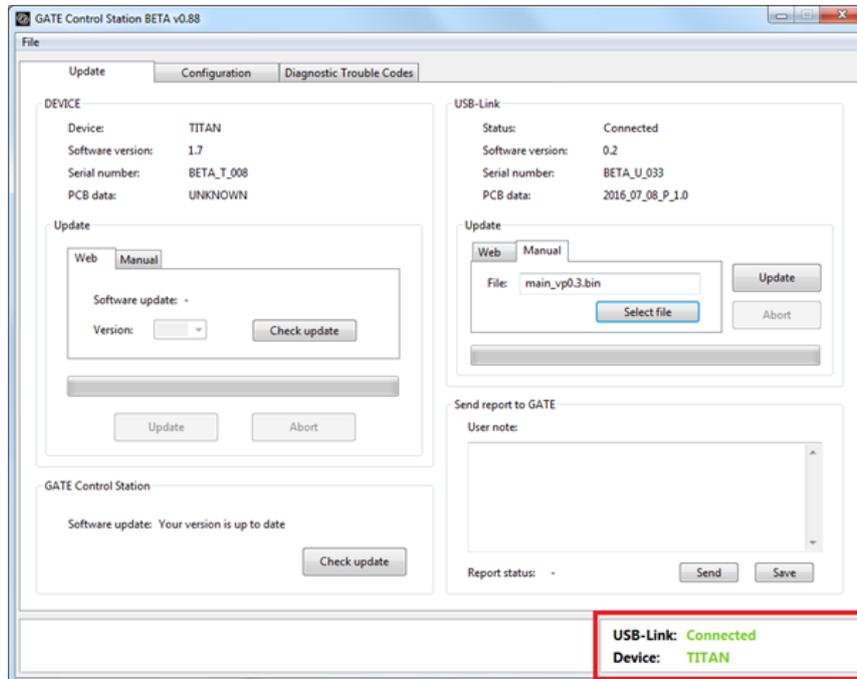


Fig.6

Cascade connection is forbidden (USB-Link->Tactical Programming Card->TITAN) (Fig.7).

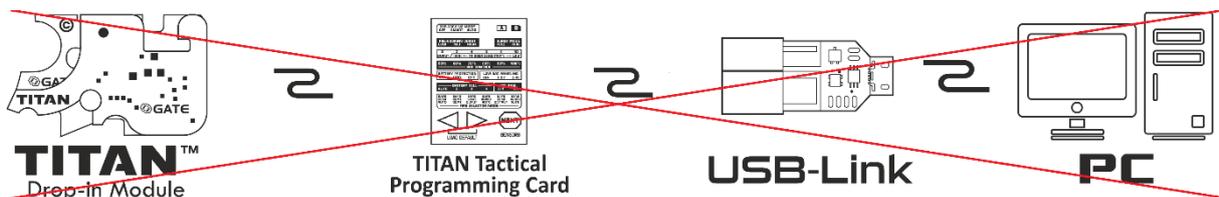


Fig.7

- Check availability of the newest software versions for the USB-Link choosing **Check update**. If an update is available, click **Update** to start updating the firmware.

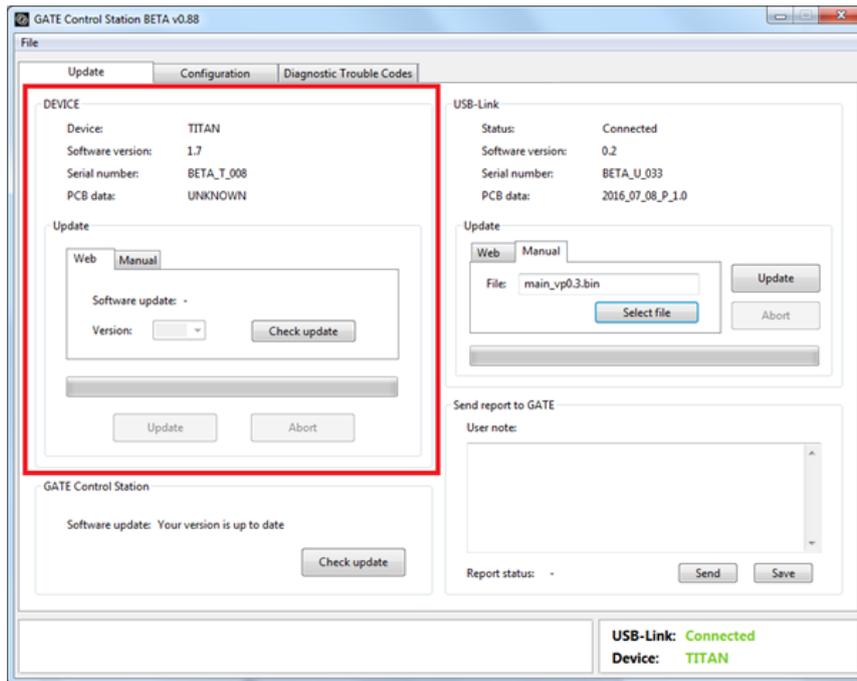


Fig.8

There is an option to update the Drop-In's firmware to the most recent version saved on your computer disc. Choose **Manual**, select file with the program saved on your computer disc and click **Update**.

2.4 Tactical Programming Card

To make the update of your device please follow the steps below:

- Connect the Tactical Programming Card.

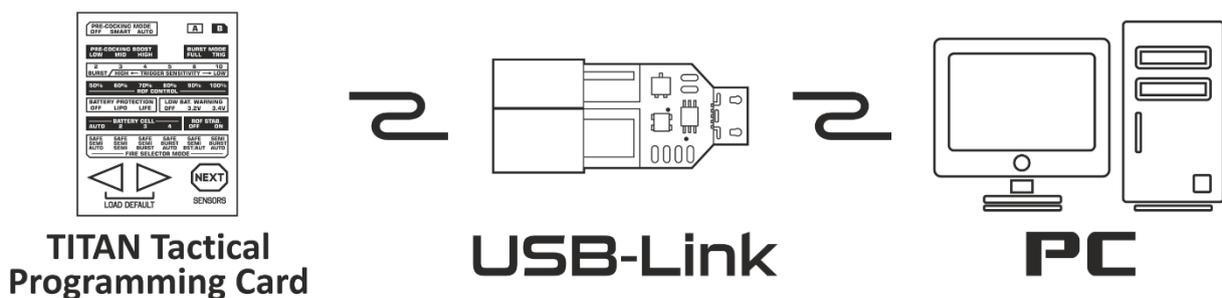


Fig.9

- The information **Device: PROGRAMMING CARD** should appear. It confirms connection to the device.
- Cascade connection is forbidden (USB-Link->Tactical Programming Card->TITAN) (Fig.7).**
- Check availability of the newest firmware versions for the Tactical Programming Card choosing **Check update**. If an update is available, click **Update** to start updating the firmware.

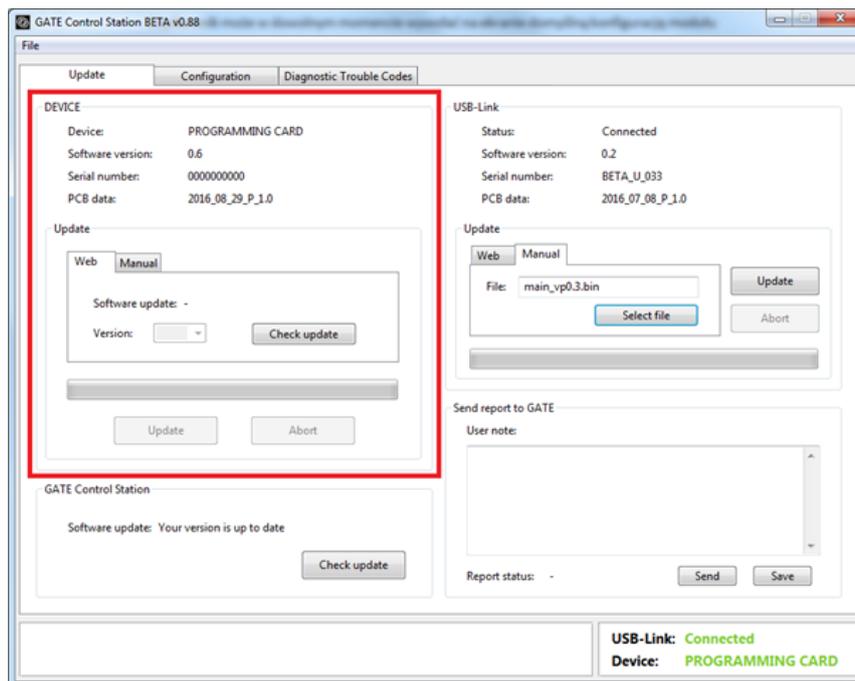


Fig.10

There is an option to update the TPC's firmware to the most recent version saved on your computer disc. Choose **Manual**, select file with the program saved on your computer disc and click **Update**.

3. Configuration

Every TITAN Drop-in Module can be configured in such a way that it exactly adjusts to your individual preferences. The very convenient method of the device's configuration is the GATE Control Station App. It has all the available features, some of which are not even in the Tactical Programming Card.

ATTENTION: Each time you run the GATE Control Station App, the default configuration appears. The real configuration saved in the TITAN Drop-in Module may differ.

After ticking the preferred options and clicking **Save**, the chosen configuration will be saved in the TITAN Drop-in Module. If you want to modify the already saved configuration, you should click **Read**.

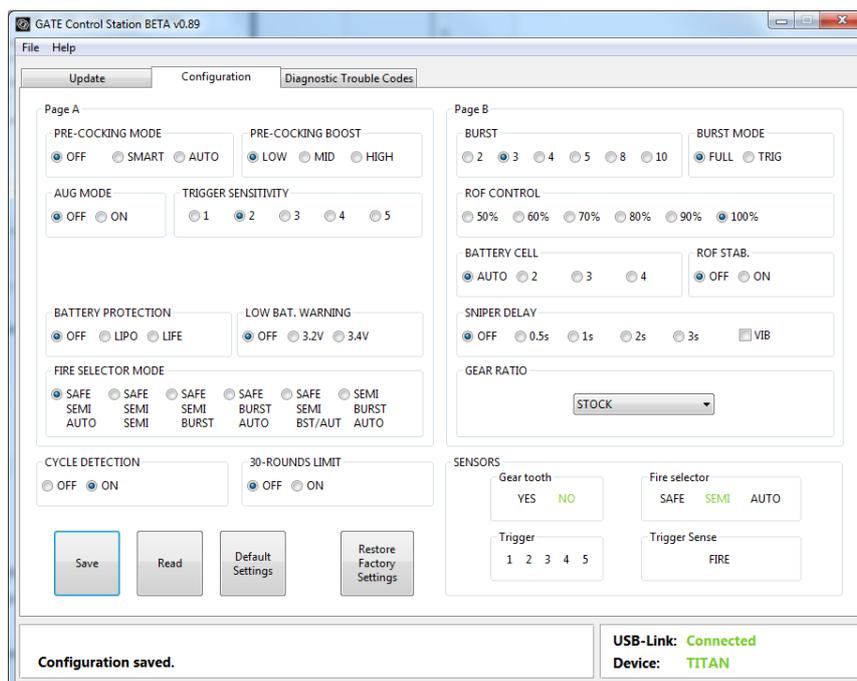


Fig.11

You can set the default settings at any time clicking **Default Settings**. Only after choosing **Save**, the default settings will be saved in the TITAN Drop-In Module.

Choosing **Restore Factory Settings** results not only in restoring the factory settings, but also in deleting adaptation and **GEARS RATIO** configuration is set to **STOCK**. You are required to re-set the **GEAR RATIO**.

Please note that the information about sensors is very useful during the TITAN Drop-in Module installation or trigger sensitivity adjustment.

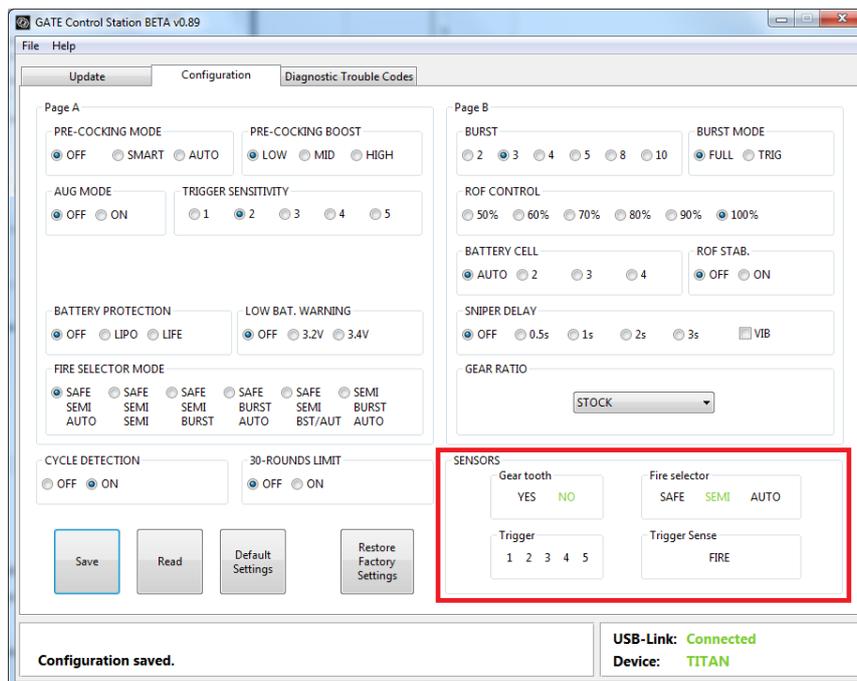


Fig.12

Gear tooth – shows the gear sensor’s functioning. In case of the teeth detection, YES goes green. Contrary, rotating the tooth results in NO going green.

Fire Selector – shows the current selector position.

Trigger – pulling the trigger results in activating subsequent sensors (1-5). Some sensors may activate even if the trigger is released (depending on the trigger).

Trigger sense – FIRE goes green in the moment when the trigger will reach the specified position of the required sensitivity (firing a shot).

Below you can find the description of additional functions.

PRE-COCKING MODE – thanks to this function, you gain a trigger reaction similar to a real gun. It allows for initial spring compression, which speeds up the trigger response significantly. There are three modes:

- **OFF** – PRE-COCKING is turned off.
- **SMART** – slow trigger action compresses the spring, and fast trigger action fires the shot. If the spring is compressed, the slow trigger action does not produce any result.
- **AUTO** – the spring is automatically compressed after each shot.

PRE-COCKING mode can be adjusted also without GATE Control Station. To do so, you must switch the selector to **SEMI** position and fire a shot. Do not release the trigger until you will have set the Pre-cocking and the vibration will have started.

The **SMART** mode is activated when you are switching the selector to **SEMI** while the trigger is held down.

The **AUTO** mode is activated when you are switching the selector to **AUTO** while the trigger is held down.

You turn the **PRE-COCKING** off if you switch the selector to **SAFE** while trigger is held down.

Each change is signaled by long motor vibration.

PRE-COCKING BOOST – if the PRE-COCKING function is turned on, it enables to determine the strength of spring compression.

BURST – enables you to shoot a pre-determined number of BBs, which is very useful in MILSLIM and when using low-caps. The BURST mode is available after adjusting the proper selector function.

BURST MODE – enables two BURST operating modes:

- **FULL** – pulling the trigger results in shooting a pre-determined number of BBs,
- **TRIG** – pulling the trigger results in starting shooting a pre-determined number of BBs, whereas releasing the trigger stops the sequence.

TRIGGER SENSITIVITY – it allows you to adjust the trigger to your preferences and level of skills. All trigger's sensors which are covered (eg. by trigger) when you connect the Drop-In Module to the TPC,

are not available for the trigger sensitivity. The TRIGGER SENSITIVITY is also the first trigger stage (AUG1), if the AUG MODE is enabled.

ROF CONTROL - enables a reduction in a gun's rate of fire in the range from 50% to 100%.

ROF STABILIZATION – allows you to change the way the ROF Control works:

ON - ROF Control uses PWM to decrease ROF. Thanks to this, gearbox works smoothly what decreases wear and tear of AEG internal parts.

OFF - ROF Control adds breaks between shots to decrease ROF. It gives you more realistic experience.

BATTERY CELL – the TITAN drop-in Module detects the number of cells automatically. There is no need to reprogram TITAN every time you replace the battery. If you are not sure how many cells your battery has, just choose AUTO.

Please note that the AUTO option works well only when the battery is fully charged.

BATTERY PROTECTION – protection against over-discharge of the battery. You should specify your battery type and the TITAN Drop-in Module will automatically adjust the minimum voltage level for this kind of battery.

LOW BATTERY WARNING – when the battery voltage drops to a specified level (in relation to one cell), the motor will vibrate at regular intervals.

In case of LIPO batteries, the function can be activated for the voltage level **3.2V** or **3.4V**.

In case of LIFE batteries, the function can be activated for the voltage level **2.7V** or **2.9V**.

FIRE SELECTOR MODE – enables determining a firing mode for different selector positions.

CYCLE DETECTION – Thanks to the gear sensor, TITAN precisely detects in which position the cycle should finish. Therefore, even the shortest trigger action produces at least one full cycle.

Thanks to the cycle detection function you get:

- **Automatic BURST** – there is no need to set the burst time. You can set the burst between two and 10 shots;

- **Automatic PRE-COCKING** – Pre-cocking is fully operational in SEMI, BURST and AUTO modes and there is no need to set the pre-cocking boost manually. You can simply set the pre-cocking as **HIGH, MID** or **LOW**;
- **FULL CYCLE** - when the pre-cocking is off, TITAN ensures that the gearbox completes a full cycle. You gain a higher reliability.

Disabling the CYCLE DETECTION allows you to fire a shot even if the gear sensor is damaged. The drop-in module works well in safe mode.

30-ROUNDS LIMIT – when the trigger is jammed in AUTO mode, an AEG can fire max. 30 shots. To fire more shots, you should release the trigger. You can check the current state of the function on the sensors' display.

GEAR RATIO – it allows you to define the type of gear in AEG. Available types: **STOCK, TORQUE, SPEED DSG**.

SNIPER DELAY – it lets you to set delay between each SEMI shots to simulate the delay from reload or recoil. You can set **0.5s, 1s, 2s** or **3s** delay.

AUG MODE – it allows you to set two different trigger sensitivities. Pulling the trigger slightly produces SEMI or BURST fire and pulling the trigger further produces BURST or AUTO fire (depending on the fire selector mode). The first trigger stage is set as the TRIGGER SENSITIVITY.

4. Diagnostic Trouble Codes

In the Diagnostic Trouble Codes window you can check if there are some errors or problems concerning the TITAN Drop-in Module. Each error or warning is automatically highlighted in red as in the screenshot below.

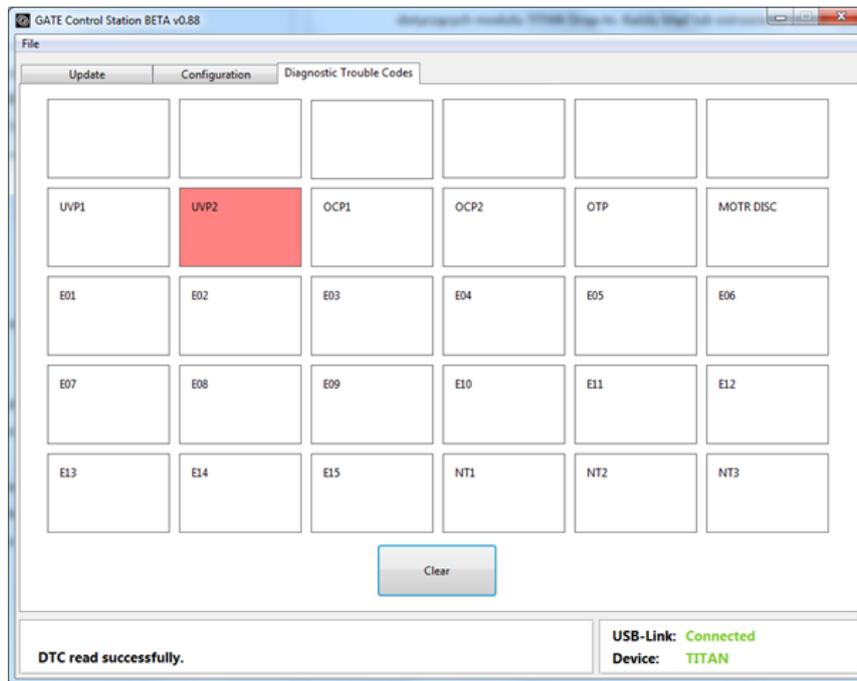


Fig.13

All the possible Trouble Codes are described below:

UVP1 – your battery is discharged

UVP2 – the voltage is lower than 3.8V

OCP1 – overcurrent protection

OCP2 – the motor power supply circuit is shorted

OTP – the drop-in module temperature is too high

MOTOR DISC – you pulled the trigger but the motor did not move

If you need to know how to interpret other trouble codes, please contact us at: support@gatee.eu.