ALPHATAG

OPERATING INSTRUCTIONS

LASERWAR

Thank you for choosing the Alphatag
generation laser tag equipment.
We hope you have fun and safe games!

www.laserwar.ru

8-800-551-88-02

LASERWAR is the domestic market leader and one of the top three laser tag manufacturers in the world. For over 12 years, we've been designing and selling high-tech equipment.

We create and distribute cross-platform software, including a CRM system, for free.

Every year, we release a new generation of laser tag equipment.

We don't charge a percent royalty or a lump sum to design laser tag arenas, playgrounds, or promote LASERWAR franchises.

We export to 80+ countries worldwide.

The equipment complies with GOST ISO 9001-2011, Eurasian «ES» standards and European «CE» standards.

Market leaders in domestic laser tag in terms of sales and foreign export.
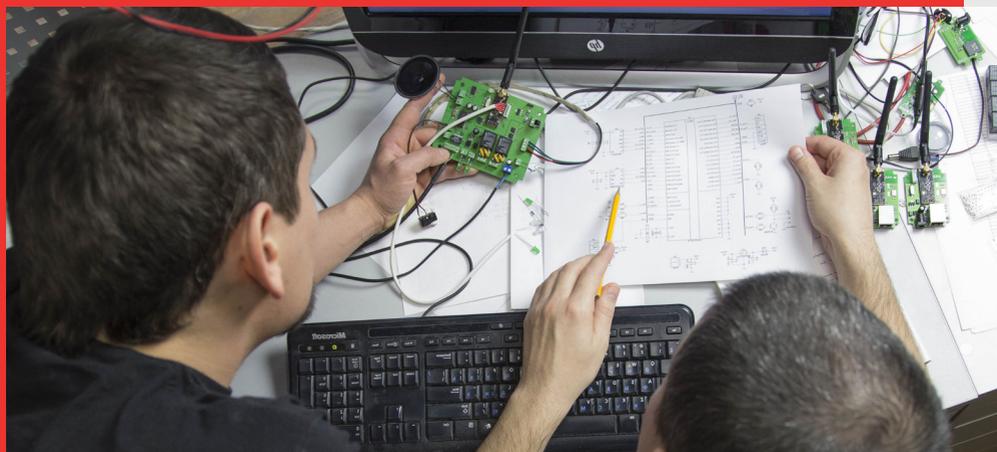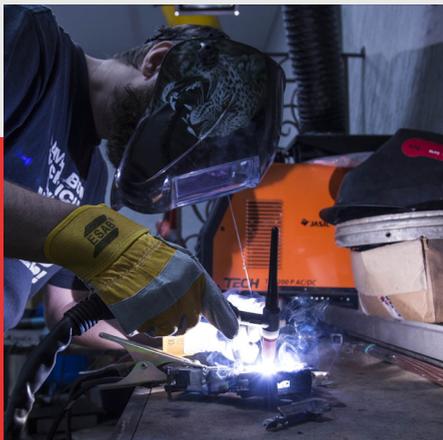
Alphatag is the latest generation of premium outdoor laser tag equipment from LASERWAR.

You will need the following game set to equip an Alphatag player:

- tagger - 1 or 2 devices;

- hit sensor (headband, helmet or vest) - 1 or 2 devices;

- Download the Alphatag configurator software on you PC or tablet, and the Alphatag Player programme on your mobile.

Optional extras: mobile phone, Medic, Engineer, etc.

Business game sets (includes a min. of 10 sets):

- «Startup»

- «Best choice»

- «Military-arena»

- «More drive»

- «Special forces of the world»

- «Superhero sets

See more: alphatag.com.

Laser tag weapon compatible with the Alphatag generation

We recommend the «Unique» range of impact resistant plastic taggers. By default, laser taggers are supplied with a Prism optical system. Additional options: Feedback system, underbarrel grenade launcher, shoulder straps, weights, sights etc.

Alphatag flagships

AR-15 Ranger

Length: **72 cm**

Height: **26 cm**

Weight: **1 300 g**

Effective firing range: **250*/500 m****

Battery type: **Li+ (3 Ah, 7,4V)**

AK-15 Warrior

Length: **74 cm**

Height: **25 cm**

Weight: **1 140 g**

Effective firing range: **250*/500 m****

Battery type: **Li+ (Li+ (3 Ah, 7,4V))**

* Prism optics
** Parallax optics

Headband

Anatomically shaped: no pressure on the ears. It feels good on the head even after hours of play. Replaceable cuff with 3-layer breathable Air Mash fabric. Replaceable for washing, easy to change to a clean one. 5 hit sensors.

Operating time: **12 h**

Battery: **Li+(2 900 mAh; 3.7 V)**

Time to full charge: **4 h**

Helmet

5 hit sensors. Comfortable fasteners are adjustable in length and won't chafe the skin. The helmet locks securely into place without squeezing the head.

Operating time: **12 ч**

Battery: **Li+ (2900 mAh; 3.7 V**

Time to full charge: **4 h**

Body armour	All vests come complete with a load bearing system and are colored in A-TACS (military camouflage color). 8 hit sensors. A replacement lining in the same color scheme as the vest, made of 3 layers of breathable Air Mesh fabric that is easily removable for washing Operating time: **36 h** Battery: **Li+ (10 000 mAh; 3.7 V)** Time to full charge: **12 h**
Vest	All vests come complete with a load bearing system and are colored in A-TACS (military camouflage color). 8 hit sensors. A replacement lining in the same color scheme as the vest, made of 3 layers of breathable Air Mesh fabric that is easily removable for washing Operating time:**36 h** Battery: **Li+ (10,000 mAh; 3.7 V)** Time to full charge: **12 h**

Include a processor and communication module. When playing with more than 1 sensor at the same time, the central device will be the one with Master Mode turned on (see part 5 for more information on settings)

Alphatag Player allows you to get real-time statistics. The player keeps track of his own results while analyzing his opponents' wins and losses. Available on App Store, Google Play and Huawei App Gallery.
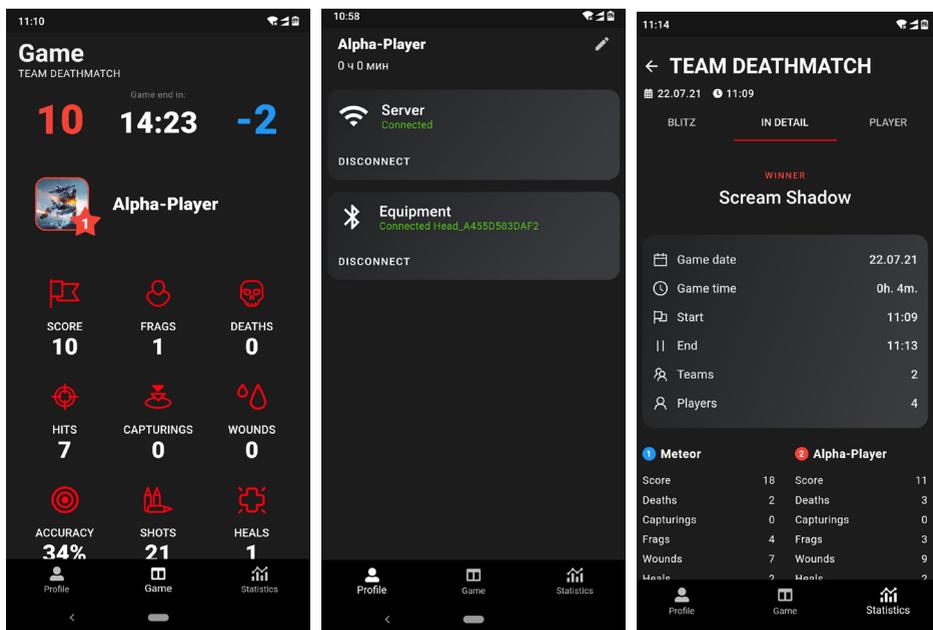
The installation file is available at laserwar.ru and alphatag.ru.
The programme is available for download on Android and from May 2021 on iOS.
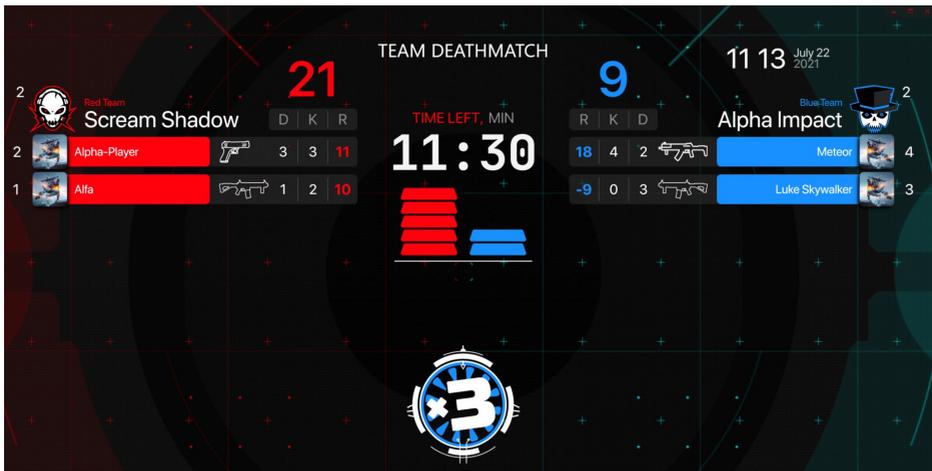
Additional game devices

You can also link the sensors to the following devices:

- Mobile phone
- Medic's box
- The «Engineer»

«Alphatag» box interfaces with all game devices produced by LASERWAR. See a complete list of devices on our online store:laserwar.com/equipments.
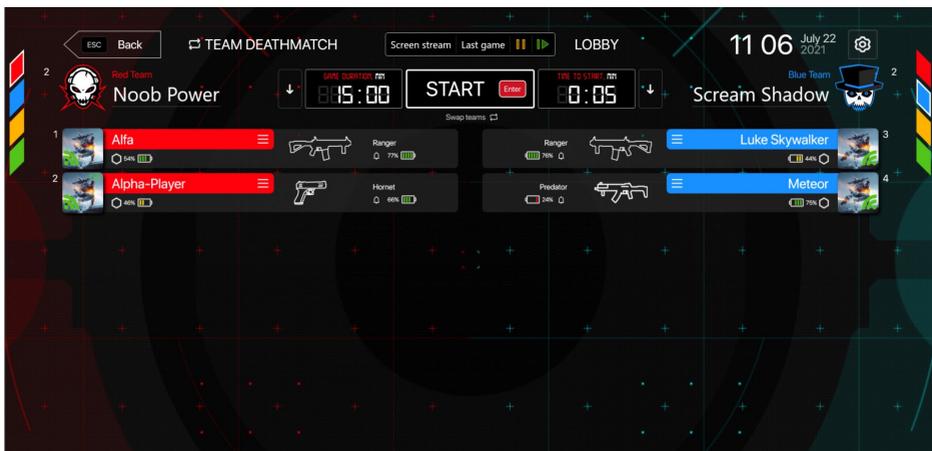
The game complex consists of a central and subordinate devices.

The subordinate devices are:

- up to 2 taggers,
- additional hit sensor,
- an additional game device.

Game complex modes:

- turning on,
- full connection
- game-ready,
- standby,
- game.

The central device — a device receiving commands in the Alphatag generation - is the hit sensor:

- vest,
- headband,
- helmet.

Game set indication (light, sound, displays)

Sound. 120 unique sounds (game start, reloading, shots, hits, events, etc.) have been recorded for the Alphatag generation using a Pro-signal sound speaker installed in weapons.

It is possible to change to your own sounds and voice commands.

Polyphonic sounds are used in the weapon (accompaniment of events and commands). The central unit has a monophonic sound.

Light indication. The hit sensors have a True color light indication.

Vibration. The vibration alarm is triggered when the complex accepts commands and events.

The monochrome OLED display in the Alphatag generation is installed on weapons (1.3 inches) and hit sensors (0.98 inches).

Complex charge time

	WEAPON	HEADBAND, HELMET	VEST
BATTERY CAPACITY	3000 mAh; 3.7 V	2900 mAh; 3.7 V	10 000 mAh; 3.7 V
CHARGING TIME	4 hours	4 hours	12 hours
AVERAGE ACTIVE PLAYING TIME	12 hours	12 hours	36 hours
MAXIMUM USAGE TIME *	24 hours	24 hours	74 hours

*   *Maximum usage time, incl. switching off.*

Display charging indication

The charge level is shown on the OLED display in all modes.

SENSOR DEVICE	To turn the hit sensor (headband, helmet, vest) on, press and hold the button above the display for 5 seconds. You'll hear a short beep when the hit sensor is turned on. The sensors on the hit sensor will flash in different colors. At the top of the display you will see the device name, charge percentage. The main display will then show: ● HW — hardware version ● FW — firmware version ● SN — serial number
LASERTAG WEAPON	Insert the key into the connector on the body and turn it 90 degrees clockwise to turn the tagger on. At the top of the display you will see the device name, charge percentage. The main display will then show: ● HW — hardware version ● FW — firmware version ● SN — serial number The gun's loudspeaker emits an audible salute. If the weapon is made without a display, you will only hear an audible greeting at start-up.
ADDITIONAL DEVICE	The mobile phone connects via «Alphatag Player» when the Bluetooth function is activated, and the Wi-Fi network connection is established. Other game devices are turned on according to the product data sheet.

1 Take an activated hit sensor (headband, helmet or vest). Press the power button 3 times to enter the settings mode.

2 You can change the position of the cursor and thus select one of the menu options by briefly pressing the button while changing the settings.

3 To change the value of the selected setting, hold the button down for 3 seconds.

4 Going to "Exit" and holding the button for 3 seconds will exit the settings mode, the unit will apply the set parameters.

Complex setup menu

PLEASE NOTE!

When entering the settings mode, communication with the connected equipment will be lost.
It will be restored after you quit the mode.

ALPHATAG

PARAMETER NAME	PURPOSE	OPERATION MODES	DEFAULT SETTING
MASTER MODE	Using the hit sensor as a primary or secondary sensor	On/Off	On
COMMUNICATION MODULE	Turning on the communication module*	On/Off	On
WEAPON COUNT (TAGGER COUNT)	Possible number of weapons to be connected	0 / 1 / 2	1
SLAVE SENSORS (SUBORDINATE HIT SENSORS)	Additional hit sensor	On/Off	Off
AUX DEVICES (ADDITIONAL DEVICES)	Additional game device	On/Off	Off
EXIT	Exiting the settings mode		

* *We recommend switching it off in local games to save energy.*

Setting options

An online game with 2 weapons and additional sensors:

- Master Mode and Slave Sensors are on
- Aux device is off,
- Weapon Count parameter is set to 2.

A local game with 1 weapon and hit sensors:

- Master Mode is on;
- Comm is on, Aux device and Slave Sensors are off;
- Weapon Count parameter is set to 1.

CENTRAL DEVICE

Hit sensor with the turned on Master Mode.

1 The display will flash sequence numbers for connecting slave devices a few seconds after turning on and showing device data.

2 When the slave device is connected, the central unit (CU) display will show the slave device's name. The serial number will stop flashing. There is a visual and audible indication of the connection.

3 When the entire complex has been connected, the following CU sign will appear.

4 When the entire complex has been connected, the following CU sign will appear ✅

5 The hit sensors start flashing the color of the team the player belongs t.

ADDITIONAL SENSOR DEFEAT

Device with Master Mode off in the settings

1. Additional hit sensors are connected to the central unit automatically

2. Once connected, the hit sensors start flashing the color of the team the player belongs to.

LASER TAG WEAPON

1. After turning on, the central unit (CU) is searched for. At this point, a Bluetooth icon will appear on the weapon screen

2. Bring the gun to CU; the connection will be made automatically.

3. If the connection to the central unit fails, the equipment will continue to make connection attempts.

4. If communication is lost, the gun will emit a corresponding sound and repeat it every 10 seconds. A similar sound and indication will appear if communication is lost for any reason during the game.

5. When the weapon is connected to the sensors, a short beep sounds. The screen of the weapon and sensors will show the following sign

6. The OLED display of the tagger will then show the name of the CU to which the weapon is connected. This will help to change equipment settings when many game sets are connected at the same time.

7

Once all the paired devices are connected, the CU will beep and go into game-ready mode. If no slave unit is specified in the settings, the player's CU will come into game-ready mode immediately, bypassing the connection of the entire complex.

In game-ready mode, the gun and hit sensors display a sign — ☑

In the event of a delayed round start, an ⧗X indicator and a countdown timer will appear on the displays of CU and the tagger.

Game sets are activated. They will only come into play when the timer reaches zero.

This function is used to ensure that players have time to take up positions on the playground.

When the game starts, a Play symbol (▶) appears on CU

The tagger will give the «Move out» command

TAGGER STATUS ICONS WITH HIT SENSOR	
	Waiting for connection on the slave device
	Ready to play
	Waiting to start
	At play
	Weapon breakage
	«Pause» mode - activated from the administrator's remote with the round time continuing to run
	The game has been stopped by the administrator
	«Game end» - the command is transmitted from the remote control
	Ending the game
	Player killed

TEAM ICONS	
	Wi-Fi on
	Wi-Fi off
	Ammunition/magazines added
	Hp restored
	Wound
	«Friendly fire mode» on
	«Friendly fire mode» off
	Bandage
	«Vampire mode» on
	«Vampire mode» off
	Anomaly
	X-ray
	Increased hp
	Increased shooting speed

TEAM ICONS	
	Increased damage
	Capturing a control point
	Changing a team
	IGB (Explosive Device Simulator) activated
	IGB deactivated
	Respawn (player revival)
	Disarm player
	Shock
	Flag captured
	Flag set

Example of a weapon indication during the game

Weapon_6B7C4F5E	Device name
100%⬜	Charge percentage
/ 08	Number of weapons stores
AUTO	Shooting mode
♥100	Health amount
▮030	The number of cartridges in the loaded magazine
⟦:38	Player Damage
FF	«Friendly fire mode»
👾	«Vampire mode»

Example of a weapon indication during a pause

00.0	Fire speed
00.0	Weapon reload time
iR 000	IR shot power
MILES2	IR protocol
0000	Number of clips/magazines
000	Magazine/clip capacity
000	Amount of damage inflicted on the enemy
FF	«Friendly fire» and «Vampire modes» on
⏸	«Pause» mode

SETTING PERFORMANCE CHARACTERISTICS OF HIT SENSORS

PARAMETER	DESCRIPTION	PERMISSIBLE VALUES	DEFAULT VALUE
SERIAL NUMBER	Serial number of the connected hit sensor	—	—
DEVICE NAME	Name of the connected hit sensor	—	—
LOCAL GAME DURATION	Round duration when playing without software	∞ - 4 h. 47 min.	∞
DELAYED START OF THE LOCAL GAME	If 0 is specified, there is no game start delay.	0-255 sec.	25 sec.
SHOT VOLUME	If 0 is specified, then the sound is muted.	0-100%	50%
EVENTS VOLUME		0-100%	50%
IR POWER	Recommend value: from 15%	1-100%	100%
VIBRATION MODE	Operation condition of the - vibration motor installed in the tagger	Off/Shot, hit, event	Shot, hit, event
SWITCHING OFF THE SCREEN DURING A GAME	Switching off device screens to ensure masking	On/Off	Off

PARAMETER	DESCRIPTION	PERMISSIBLE VALUES	DEFAULT VALUE
INTERFACE LANGUAGE	By default the alternative language is English, but you can set the language of your choice via the service centre	Russian, an alternative language	Russian
AUTO RELOADING	When the magazine runs out of ammunition, the tagger will be automatically reloaded	On/Off	Off
COMMAND MASK	Possibility of selecting the teams taking part in the game. In this game, players in teams that are excluded from the mask will be ignored.	Red, blue, yellow, green	Red, blue, yellow, green
BACKGROUND BRIGHTNESS	Illumination of the sensors during the game	0-100%	0
IR PROTOCOL	Data transmission protocol used	Miles II / Alpha Link	Miles II
HIT COLOR	Color of the hit sensors after hitting the player	Team color Red Blue Yellow Green Crimso	Team color
VAMPIRE MODE	When a player dies, he or she is reassigned to the team whose fighter made the fatal shot	On/Off	Off
FRIENDLY FIRE	Dealing damage to the players of your team	On/Off	Off
RESPAWN AMMO REPLENISHMEN	Replenishing the player's ammunition during respawn	On/Off	Off

PARAMETER	DESCRIPTION	PERMISSIBLE VALUES	ЗНАЧЕНИЕ ПО УМОЛЧАНИЮ
WEAPON IR SENSOR MODE	Tagger reaction when its sensor is hit	Off/ Breakdown /Wound	Выкл.
RECHARGING TYPE	Actions taken when the tagger is reloaded if there are still cartridges left in the magazine	Replenishment /Loss	Replenishment
PLAYER ID	Unique player's identification number	1 - 65535	1
TEAM COLOR	Player's affiliation to a particular team	Red Blue Yellow Green Crimson Blue	Red
NUMBER OF LIVES	Number of possible player's revivals during the round. The revival option is available to the players until a specified number is reached.	0 - 99	0
MAXIMUM HP	Maximum health points (hp)that a player can have during the round. At zero, the parameter is determined by the value of the «hp» parameter	0 - 999	999
HP	Number of hp at the start of the round	1 - 999	100
TIME OF AUTORESURRECTION	Time after which a killed player will regain hp without the use of first aid kits. 00 min. 00 sec. = off autoresurrection	00 min. 00 sec. - 04 min. 15 sec.	00 min. 00 sec.
REGENERATION TIME	Time after which the wounded player's hp will be restored to maximum. 00 min. 00 sec. = regeneration off	00 мин. 00 сек. – 04 мин. 15 сек.	00 мин. 00 сек.
BLEEDING INTERVAL	For a detailed description, see «Particular game parameters».	00 min. 00 sec. - 04 min. 1	00 min. 03 sec.

PARAMETER	DESCRIPTION	PERMISSIBLE VALUES	DEFAULT VALUE
INVULNERABILITY TIME	Time during which a player cannot be hit again	00.00 sec. - 25.50 sec.	00.07 sec
SHOCK TIME	Time during which an injured player is unable to fire	00.00 sec. - 25.50 sec.	00.08 sec.
MAXIMUM NUMBER OF CARTRIDGES	Maximum cartridges that a player can have during the round.	1 - 65534	300
MAXIMUM NUMBER OF GRENADES	Player's maximum number of grenades for an underbarrel grenade launcher during a round	1 - 255	10
INFECTION	Game mode in which players lose hp at random intervals from the start of a round.	On/Off	Off
INFECTION DAMAGE	Number of hp that players will lose	1 - 255	1
INFECTION FREQUENCY	Frequency of triggering an infection	00 min. 01 sec. - 04 min. 15 sec.	00 min. 01 sec.
LIVING WITH VIRUS TIME	Indicates how long the player will be affected by the infection settings.	Uneditable parameter	
HP BONUS	Possibility of boosting or lowering the player's hp. (determined by the «hp» parameter)	0,1 – 25,6	0,1
DAMAGE BONUS	Increase or decrease player damage (depends on «Damage» parameter)	-9 – 246	0
AMMO BONUS	Increase or decrease the player's ammunition (depends on the«Number of cartridges» parameter)	0,1 – 25,6	0,1
RELOAD BONUS	Increase or decrease the time it - takes for the tagger to reload (depends on the «Reload time» parameter)	0,1 – 25,6	0,1

ADJUSTING THE TAGGER'S PERFORMANCE CHARACTERISTICS

PARAMETER	DESCRIPTION	PERMISSIBLE VALUES	DEFAULT VALUE
SERIAL NUMBER	Serial number of the connected - hit sensor	—	—
DEVICE NAME	Name of the connected hit sensor	—	—
FIRE SWITCH MODE	Operation mode of the fire mode button	Position/ Trigger/Double reload	Position
CARTRIDGES IN THE MAGAZINE	Magazine capacity	1 - 999	30
SILENCER MODE	«Muted» gunshot sound	On/Off	Off.
DAMAGE	Damage inflicted by the player	1 - 100	25
FIRE SPEED	Number of shots per minute	20 - 1250	550
BURST	Burst length when the trigger is pulled	1 - 255	3
RECHARGING TIME	Time to replenish the cartridges in the loaded magazine	00. min. 01 sec. - 04. min. 15 sec.	00. min. 03 sec.
OVERHEATING COEFFICIENT	For a detailed description, see «Particular game parameters».	0 – 255	0

PARAMETER	DESCRIPTION	PERMISSIBLE VALUES	DEFAULT VALUE
BREAKDOWN TIME	After the tagger's barrel sensor is damaged, there is a time interval during which the tagger is unable to fire (if the «Weapon IR sensor mode» parameter is set to «-Broken»)	Off. - 04 min. 15 sec.	00. min. 03 sec.
UNDERBARREL GRENADE LAUNCHER MODE	Using an underbarrel grenade launcher during the game	On/Off	Off
GRENADE DAMAGE	Damage inflicted by the underbarrel grenade launcher	1 - 100	100
GRENADE FLIGHT TIME	Time interval after the underbarrel grenade launcher is fired producing an explosion will occur	00 min. 01 sec. - 04 min. 15 sec.	00. min. 02 sec.
GRENADE DAMAGE	Time required to restore a grenade in the underbarrel grenade launcher	00 min. 01 sec. - 04 min. 15 sec.	00. min. 10 sec.

Overheating

The «barrel temperature,» which starts at zero, rises by 1° with each shot but falls by 1° every 333 milliseconds. The gun will fire a blank shot that does no damage to the opponent after reaching the set level specified in the «Barrel overheating coefficient» parameter.

After 4 such shots, the tagger will imitate a breakdown if the player continues to fire. The higher the rate of fire of the gun, the faster it will overheat.

Bleeding

Bleeding starts when a player - who is invulnerable after being injured - has been hit by at least 2 players from the opposing team. No damage will be counted due to the invulnerability, but the affected player will soon start losing hp. The intensity of bleeding varies. It will initially be 10% of the damage taken while the player is invulnerable. The damage dealt by each subsequent triggering will be reduced by 1.

For example: a player has received 50 damage during the invulnerability period. Consequently, the initial bleeding value will be 5 hp, the next will be 4 hp, then 3 hp and so on. Bleeding stops in 3 cases:

- player's virtual death;
- reduction of bleeding damage to zero;
- treating bleeding with the «First aid kit» and «bandage» commands.

The «Bleeding Interval» parameter determines how frequently a player will lose hp

Vampire

When the option is activated, a player who has run out of hp changes color and is reborn in the opposing team that managed to «kill» him.

Friendly fire

This option will allow you to hit your team's players on the battlefield. «Friendly fire» is switched off by default. If you want the most realistic laser tag combat possible, turn it on.

Armour

The parameter is only available if the vest is used as a hit sensor. The range of values is 0 to 999.

Features:

● The player's hp will not be depleted until his armour is destroyed;

● As long as the armour is not destroyed, it can be regenerated. The «Regeneration time» parameter (value range: off - 12 min., 15 sec.) determines the regenerationи rate.

● If the player's hp arena's below 100%, the armour stops regenerating.

Checking the firmware version

- Before launching the devices into the game, we recommend that you check that the firmware is up to date.

- For the most recent version, go to alphatag.com and look under «Firmware».

- Turn on the tagger and hit sensor to find out more about the version of your game set. The firmware version, denoted by the letters FW, will be shown on the displays. You can also view the firmware version of your weapon in the Configurator software.

Firmware Update

If you have an older firmware version installed:

- turn on the configurator;

- connect the devices via a Wi-Fi router to the configurator;

- download the latest firmware from the «Firmware» section of the alphatag.com website;

- Select «Firmware» from the «Performance characteristics» section of the configurator. Select the downloaded firmware file and click «Update firmware» after clicking on the folder icon.

- check the firmware version before rebooting the equipment

Please note! Modifications may be made to the Alphatag software to improve the product. You can download the current version of the operating instructions from alphatag.com in the «Software» section or request it from one of the LASERWAR Service Centres.

For recharging taggers and sensors from the «Alphatag» generation, we recommend the «Firefly» (6 charging sockets) or «Smart Li+» (1 charging socket) type devices.

	The battery is completely discharged
	Battery half charged
	Battery fully charged

While the charger is in operation

	Flashing lightning - the battery is charging
	Static lightning - the battery is fully charged

14.1 Programme functions

Alphatag is LASERWAR's software for configuring the settings of laser tag equipment and game scenarios, collecting and maintaining statistics. It is available for installation on desktop computers, tablets and mobile devices.

The programme has the following functions:

● edit weapon presets - a set of pre-defined settings of performance characteristics;

● deciding on game scenarios with pre-determined roles and settings; modifying the game characters' parameters;

● allocating of players to teams either manually or randomly;

● recording the set parameters in the laser tag equipment;

● generating of game parameters for additional devices, writing them into laser tag equipment;

● broadcasting of rankings, achievements and statistics during the game;

● storing and filtering game statistics for all game times according to selected parameters;

● generating and saving game statistics in pdf format;

● generating and saving game statistics in pdf format;

● generating and publishing game statistics on the social networks VKontakte and - Facebook.

14.2 Technical requirements

Before starting the software installation, check that your device meets the following requirements:

- **OC: Windows 10 (x86, x64).**
- **Bluetooth adapter with BLE support and Wi-Fi adapter.**
- **Processor: from 1 GHz.**
- **Hard disk space: from 50 MB.**
- **RAM: from 512 MB.**
- **Tool for viewing pdf documents.**

14.3 Installing the programme

Alphatag software and updates are free of charge and publicly available. The installer file can be found in the «Software» on the following website alphatag.com.

Run the AlphaTag.exe installation file and follow the installation instructions. At the end of the installation, the programme's shortcut will appear on the desktop.

14.4 Programme launch

Click on the Alphatag shortcut created on the desktop. The launch will be completed in seconds, after which you will be prompted to create a new account or log in to an existing one.

During the account creation, you will need to give your name, phone number and enter thepassword 2 times. After clicking on the «Register» button, you will be taken to the main screen. If you already have an existing account, click on the «Log in» link under the «Register» button. You will then be taken to the authorisation window.
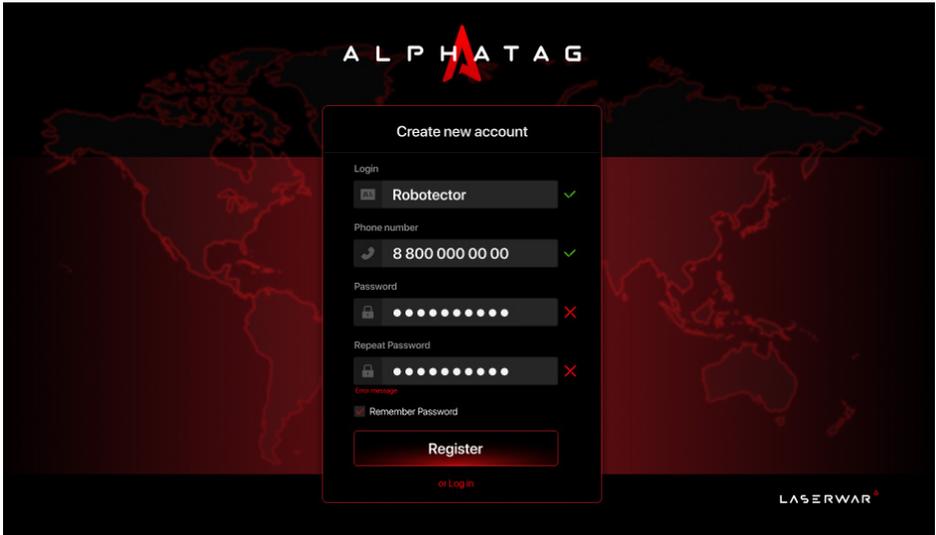
Creating an account

Login to the account
(authorisation

Enter your username and password to switch to your existing account. After successful authorisation, the main window of the programme will open in Russian or English. The time and date in the software are the same as on your Windows software. For a detailed description of the fields in the first screen, see p. 14.6.
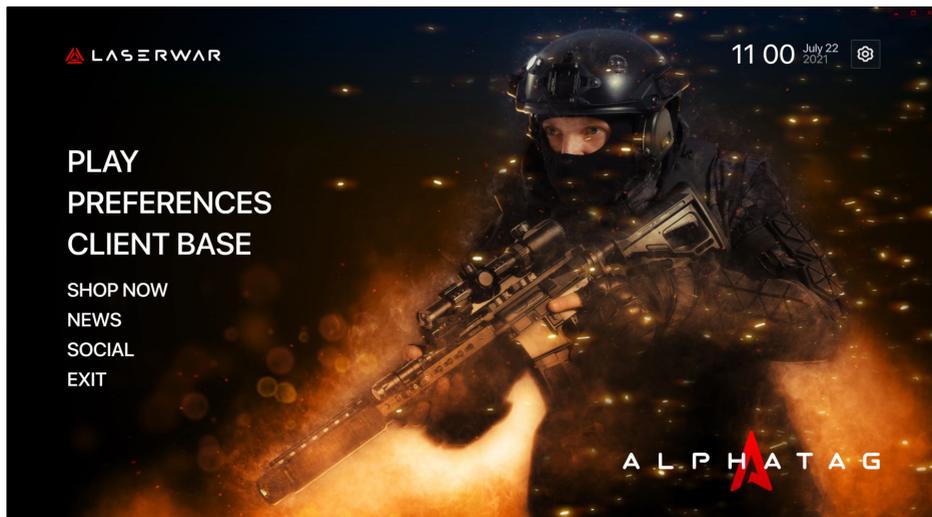
14.5   Language setting

The software supports 2 languages by default: Russian (Russia) and English (United States). During installation, the language is automatically determined (based on the one currently installed on Windows 10).
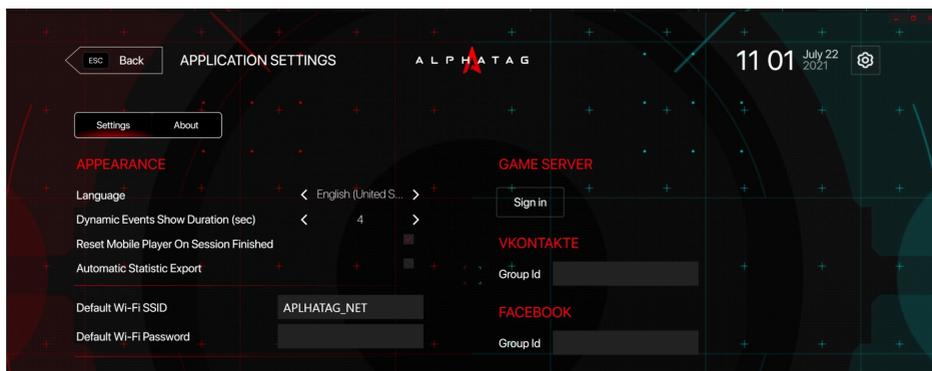
To change the language, click on the gear icon in the top right corner. Select the «Settings»/»Appearance». Click on the language name and it will automatically switch to the other option.

Please contact LASERWAR service and technical support if you require translation into another language. You'll be given an English-language programme and files with fields to fill in for similar phrases in another language.

14.6 First programme screen

The following are the functions of the menu items on the programme's first screen:

- **«Game»** — choose a scenario, begin the game, and view statistics on previously completed games;
- **«Settings»** —Connecting the game complexes to the software in order to fine-tune weapon presets;
- **«Customer data base»** — contact information for game participants over the operation course;
- **«Online store»** — - go to the LASERWAR online store;
- **«News»** — go to the alphatag.com website's news feed;
- **«Social media»** — go to the following group vk.com/lasertag;
- **«Exit»** — switching off the programme.

To get to the menu item you want, click on it. Press the **«ESC Back»** button in the top left corner of your screen to return to the main programme window

14.7   Compatibility with laser tag equipment

The following equipment is compatible with the Alphatag software:

● taggers from the Alphatag generation;

● hit sensors (headbands, helmets, vests) of the Alphatag generation;

● «Medic», «Engineer» boxes;

● «Explosive device simulator»;

● underbarrel grenade launcher.

14.8   Connecting the game sets

Launch the Alphatag software, log in and turn on the game sets. Connect the game complexes together (for more information, see «Full game complex connection»). To continue, go to «Settings» in the programme.

Here you can see all devices that are available via a Wi-Fi connection. The color indication of the connected game sets has the following meaning:

● **green** - the device is ready to play (● Ready),

● **yellow** - indicates that the command was not processed, that we did not receive a response, or that the response contained an error (● Pending),

● **red** - the connection has been lost
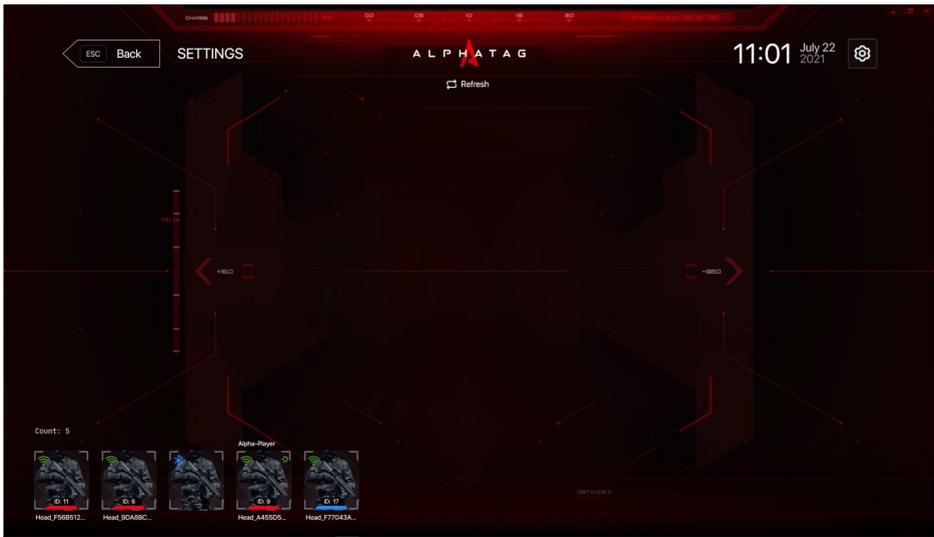
In the performance characteristics settings, you can see which game sets and additional devices are connected.

Click the player icon to change the weapon's default performance characteristics settings. The composition of the game complex is shown on the left.
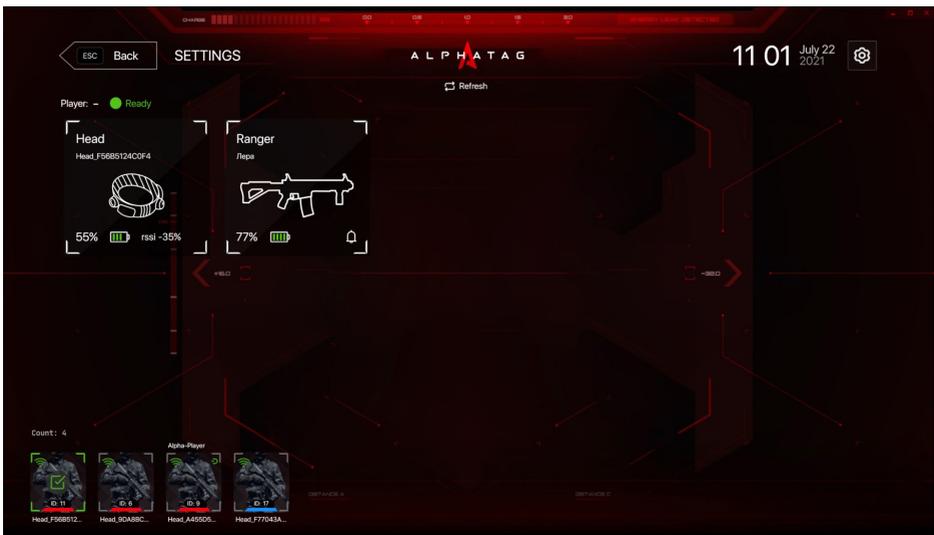
Displaying the player's game set

The screen of the specific complex displays the following:

- user name;
- a signal that the complex is ready for action;
- types of connected devices (e.g. a headband, vest, 2 assault rifles);
- the charge level of each device;
- device names (Device Name No.);
- the power of the Wi-Fi signal received (RSSI 90%)

14.9   Changing parameters in the preset

14.9.1. Changing the TTS settings

Click on the user and select the specific device to change the performance characteristics settings set in the complex's devices. The icon for this device will be indicated by red borders.

The right-hand side of the screen displays:

- **for hit sensors** — «Settings» and «Firmware»;
- **for laser tag weapons** — «Settings», «Sounds» and «Firmware».
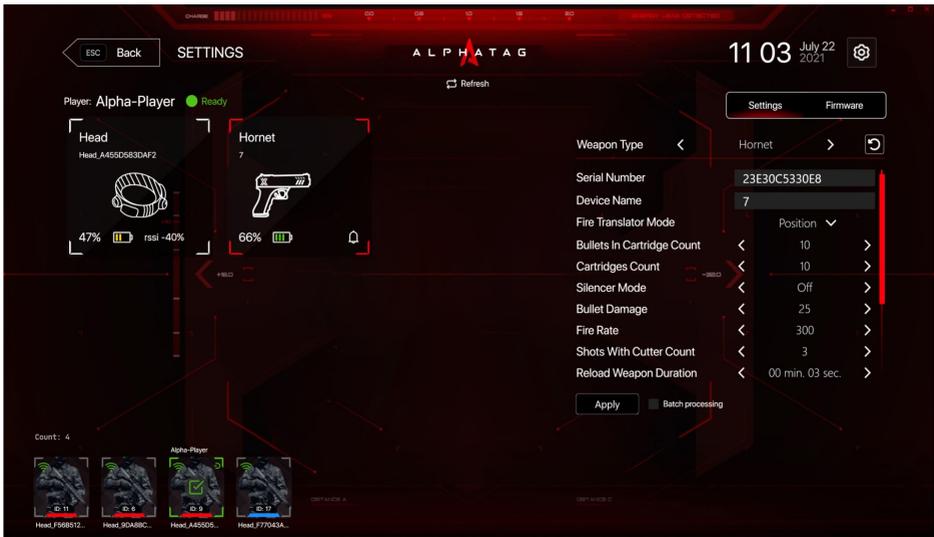
Hit sensor settings screen
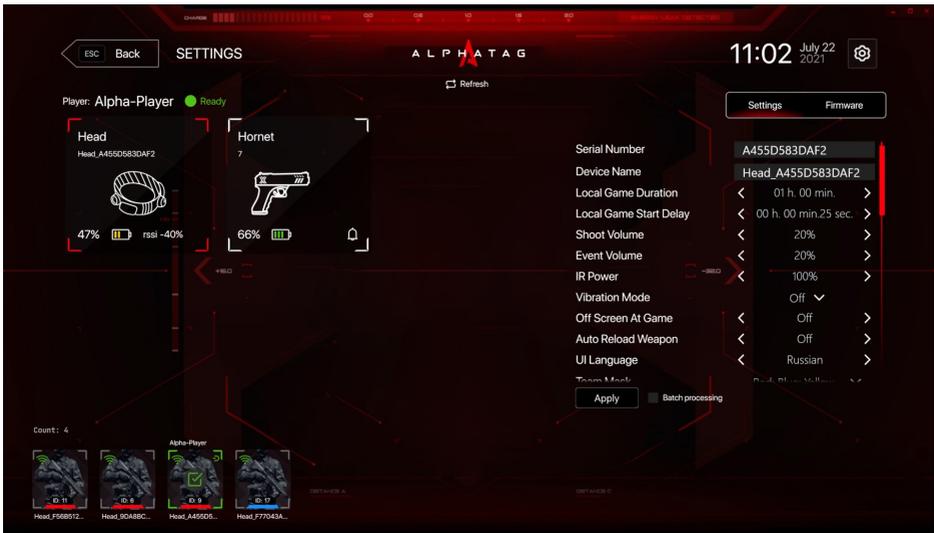
Weapon settings screen

14.9.2. «Sounds» menu

The sound indication is only available in weapon parameters. It has speakers with polyphonic sound.

Не синхр-ан ▶ 040 Здоровье уменьшено_эффе ⓘ 🗁 🔄 00:00.04
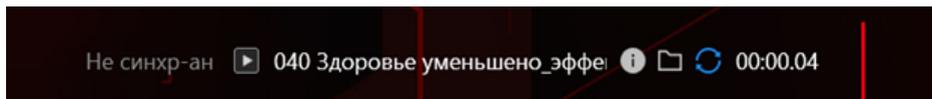
In the sound settings (from left to right):

1 Information on the sound availability is displayed, possible values: «Ok», «Not defined», «Not found», «Not synchronized».

- **ок** – - the file is found in both the folder on the drive and on the device. Their sizes are the same.

- **not found** – - the file is in the folder on the drive, but not on the device

- **not defined** – - the file is on the device, but not in the folder on the drive

- **not synchronized** – - there are both, but the size or CRC is different.

2 Audio playback option (▶),

3 The name of the sound with an ordinal number.

4 Sound size information C ⓘ,

5 A folder where the sound file can be replaced when you click on it,

6 Audio track status: sync 🔄 - - information about audio availability will be displayed after clicking on this icon (see cl. 1 of this list)

7 Audio track duration.

Mandatory requirements when uploading new files:

- WAV format in IMA ADPCM encoding,

- the total size of the files must not exceed 8 MB.

For setting the sounds:

- click on the weapon icon and go to the «Sounds» menu,

- If «Not found» appears to the left of the sound, click on the blue arrow icon next to the not found sound or click on the «Sync All» button.
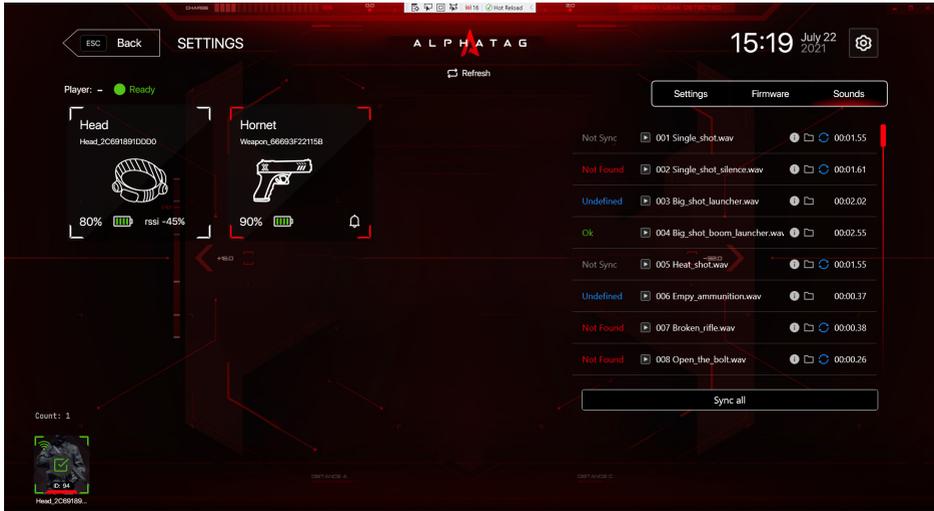
The sound files are located in the directory:

%UserProfile%\AppData\Local\Laserwar\Alphatag\Sounds

There are a total of 153 general sounds and a further 57 model-specific sounds (3 for each model).

Weapon models

AssaultRifleEu	Phoenix	SniperMedium
AssaultRifleRu	Pistol	SubmachineGunRu
AssaultRifleUsa	Predator	SubmachineGunWo
GrenadeLauncher	Ranger	Terminator
Hornet	Shotgun	Warrior
MachineGunRu	SniperLarge	
MachineGunWo	SniperLight	

14.9.3. Firmware Update

We recommend you check the current firmware version before launching the devices.

- Check your game set's firmware version: turn on the weapon with the key; hold down the button (over the display) for 5 seconds on the headband or vest.

- The firmware version, denoted by the letters FW, will be displayed once the file has been downloaded. Alternatively, go to the «Firmware» tab in the software and look for the firmware version of your device above the «Update» button

- Request the most recent firmware version from the manufacturer. For the most recent version, go to alphatag.com and look at the «Firmware» section. Compare it with the one installed in your game set.

To update the firmware via the Configurator, go to the «Settings» menu, select a player and click on the connected devices - weapons or sensors. The current firmware version, a folder icon, and an «Update» button can all be found here.

Regardless of whether your device has been updated to the latest version or not, the «Update» button appears.

UPDATING THE FIRMWARE:

Download the most recent version from the alphatag.com website's,
the «Firmware» section.

⌄

To open the download folder on your PC, click the folder icon
to the left of the «Update» button.

⌄

Select and download the file with the latest firmware.

⌄

Press «Update».

⌄

After updating, reboot the game set.

14.10 Starting the game via the Configurator

Local and online games are the 2 types of available games.

- The local game does not require an internet connection. To begin, simply put together the game complex and, once the devices are connected, give the command to start the game using the remote control

- The online game requires an internet connection and is launched using the Configurator (from a PC or tablet).

FUNCTIONS	LOCAL GAME	ONLINE GAME
Selecting a Scenario	From the remote control	Using the Configurator
Editing performance characteristics	From the remote control and using the Configurator	From the remote control and using the Configurator
Changing the team color	From the remote control and using the Configurator	From the remote control and using the Configurator
Starting the game	From the remote control	Using the Configurator
Game pause and stop	From the remote control	From the remote control and the configurator

		Visible in real time, collected and available for upload to pdf
Statistics	Not collected	

1 **Select «Game»**
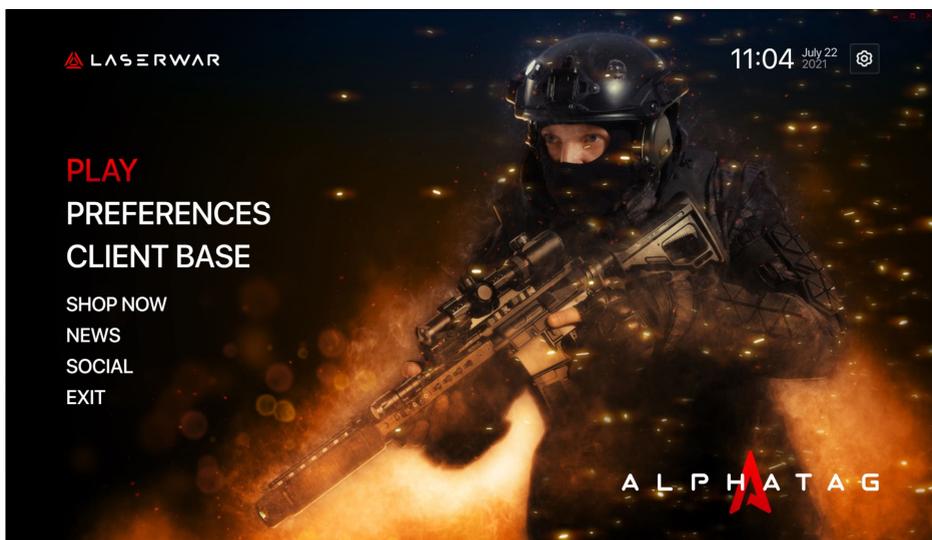
2 **Select a scenario**

On the right-hand side of the screen you will see the default startup scenario. To the right of it there is information on the duration of the round and the last start. The scenario customization is possible.
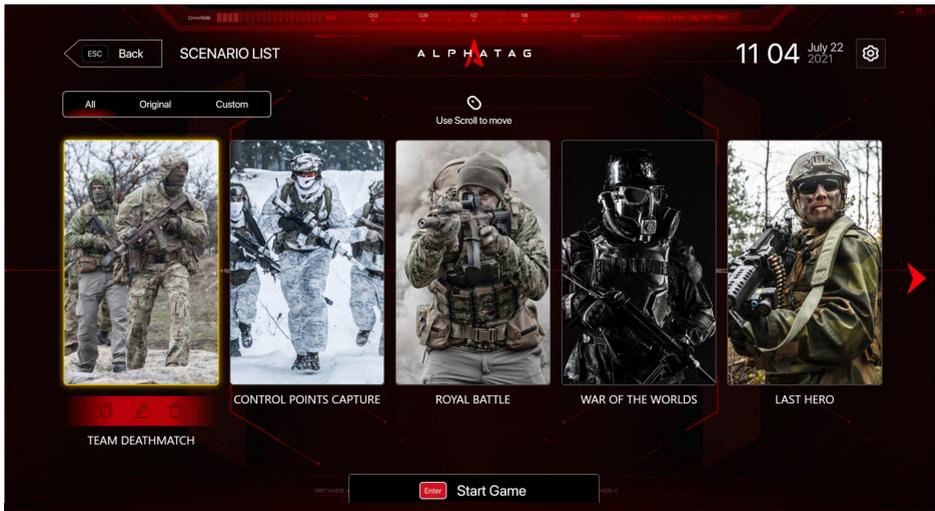
3 If required, edit the scenario

To change the scenario, click on «Select scenario» on the left-hand side of the screen. You'll be directed to a screen that contains both system and user scenarios. The former are available by default, the latter are user-created programmes. Use the mouse wheel or swipe to view all available scenarios. Having selected a scenario, you can adjust the game settings or go straight to the start of the game by pressing Enter/clicking on the «Start game» button.
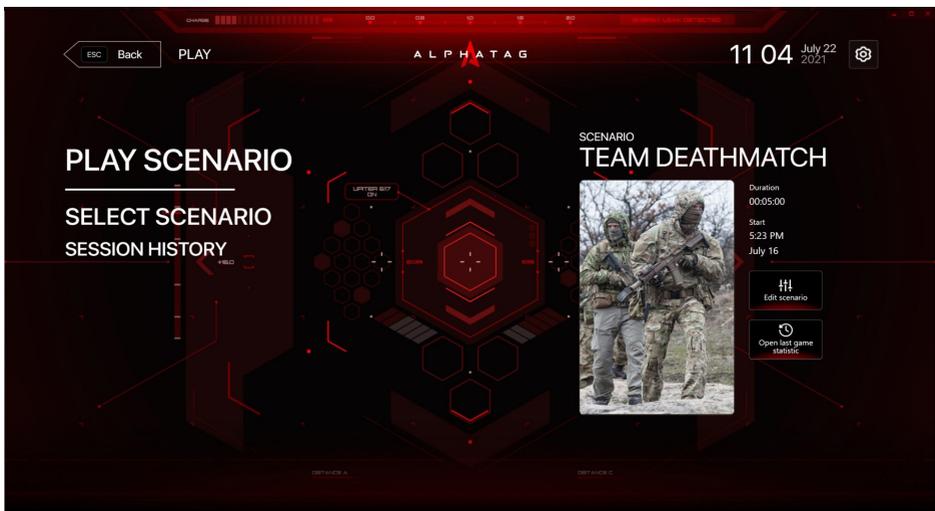
Alphatag comes with 9 default scenarios:

- «Team battle»
- «Capturing control points»
- «Royal battle»
- «Warrior of the worlds»
- • «Last hero»

- «Vampires vs. zombies»
- «Vampires versus werewolves»
- «Confrontation» Sport Mode
- «Hunger games»

3 icons will appear above the name when a specific scenario is selected: «Copy», «Edit», «Delete».

- «Copy» ▣ will be required in order to create a custom scenario with altered game settings.
- By selecting «Delete» 🗑 , the scenario will be removed from the list of options. User scripts are the only ones that can be deleted.
- Selecting «Edit» ✎ will bring up a screen describing the scenario and its settings.

In the settings, you can edit the following parameters:

- Friendly fire
- Weapon IR sensor mode
- The background brightness
- Hit color

- Respawn ammo replenishment
- Vampire mode
- Stats update frequency
- Death points

- Kill points
- Ally killing points
- Hit points
- Revival points
- Number of teams

- Points for setting up the flag
- Points for capturing the device
- Points for destruction
- End of game condition
- Points for 1 minute of holding
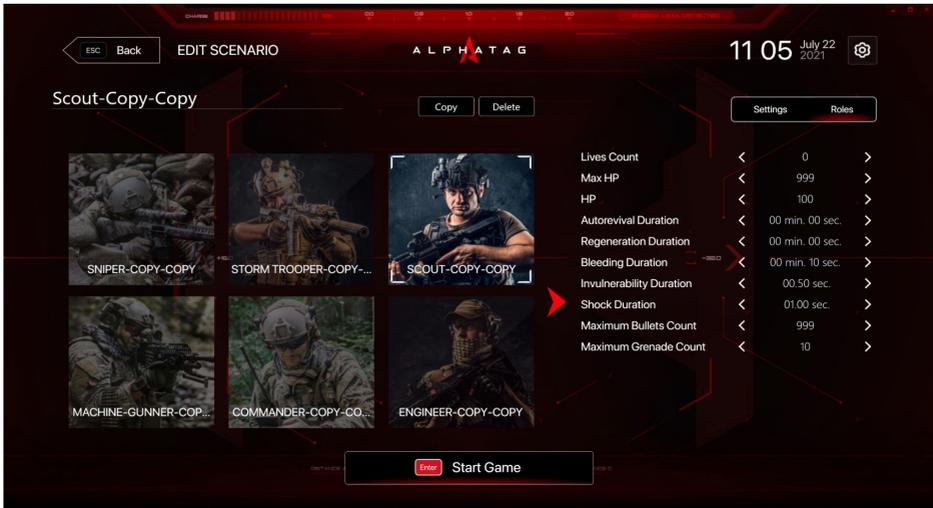
Scenario settings

When you've finished setting up all of the items, go to the bottom of the screen and click the «Start game» button.

You can set the same settings for all players and run the game. To configure player roles (e.g. a sniper, assaulter, medic, etc.), click on the «Roles» tab and configure the roles for game participants.

4 Assign the players to teams

You'll be taken to the game lobby once you've chosen a scenario and set it up. In this section you can manually or randomly assign players to teams. Edit round times, team names, and open the broadcast on the screen if necessary.
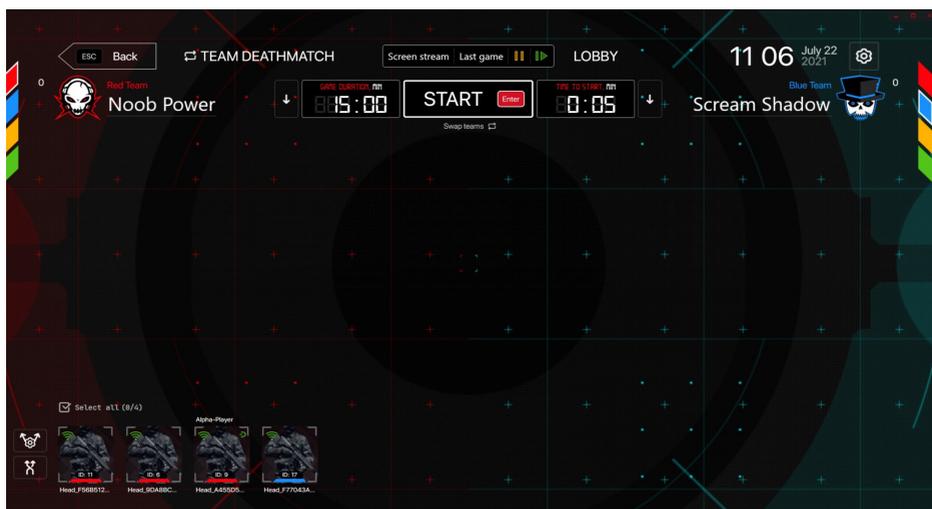
The player allocation icons are located at the bottom of the screen:

according to the set colors;

in random order.

You can also assign players to teams manually. To transfer a player from one team to another, left-click and hold down the left mouse button while dragging the player to the desired field. To begin the game, press the «Start» button once all of the players and additional devices have been assigned.
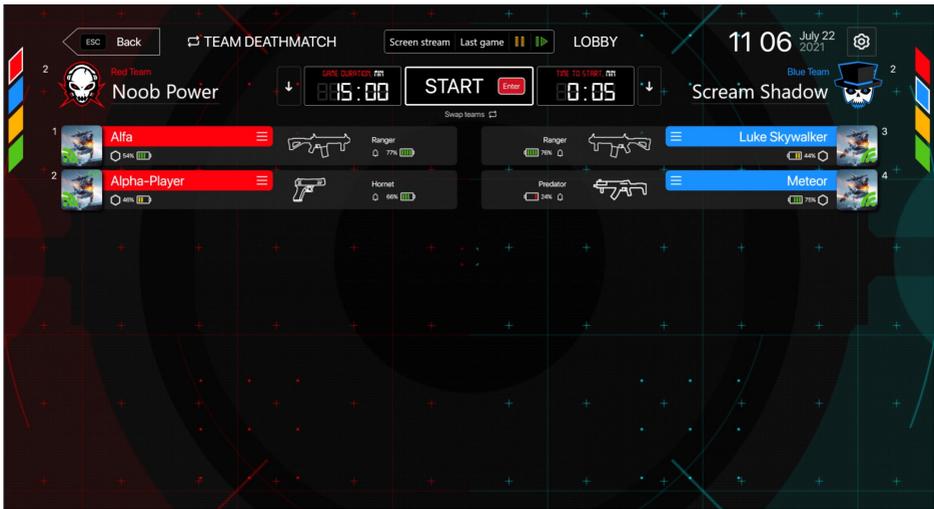
Assigning the players to teams

⑤ Displaying the game on the big screen

Once the round has begun, go to the lobby and click the «Broadcast» button to view the game events on the monitor. The information on the number of virtual kills and deaths, as well as the team's overall rating, is displayed in the new window. When a player gets an achievement, it will be displayed on the screen.
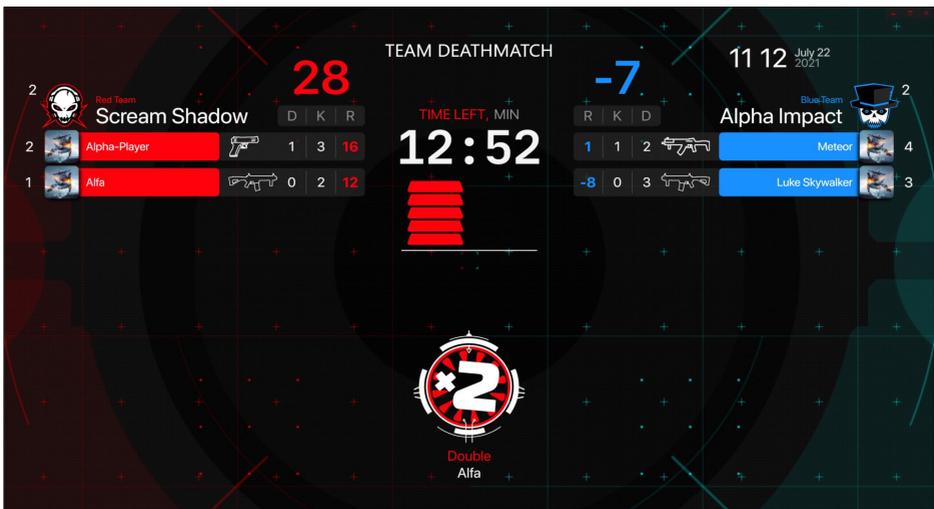
Example of a screen showing game events

Example of icons with achievements

6 Obtaining statistics

During the game, you can press the «Stop» button to end the round, wait for the time to expire, or when one of the team's game conditions is met.
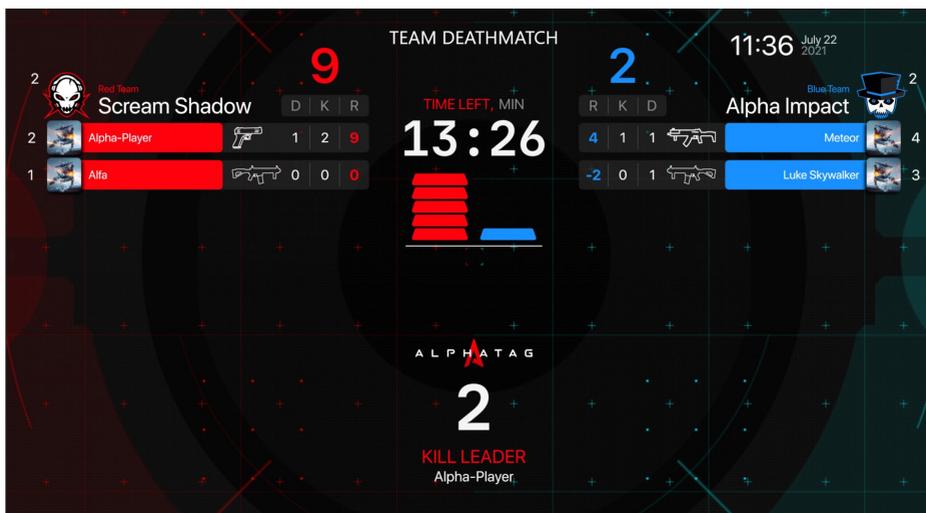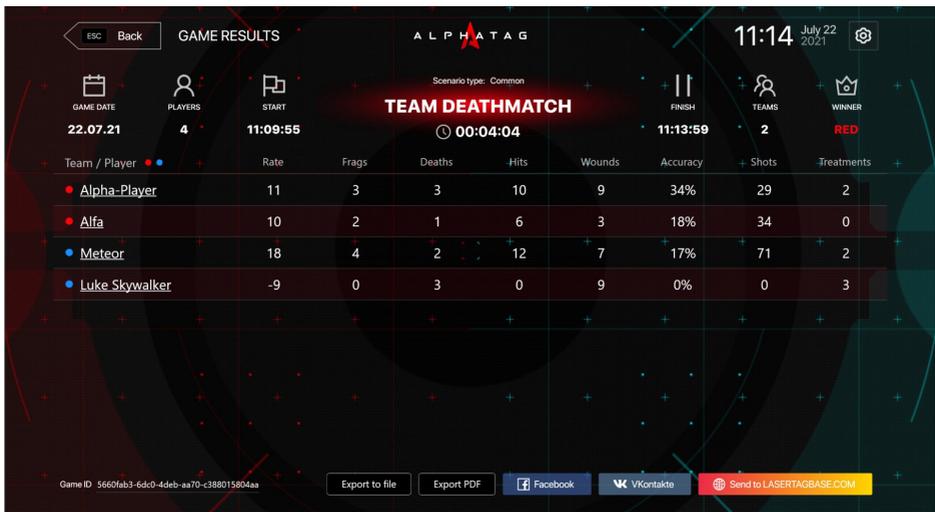
The «Finish» button appears in the lobby at the end of the game,
with player statistics beneath it.

Click on the «Finish» button to get the statistics. Data on each player's scores, frags, deaths, hits, wounds, accuracy, shots, and healing will be displayed on the screen.
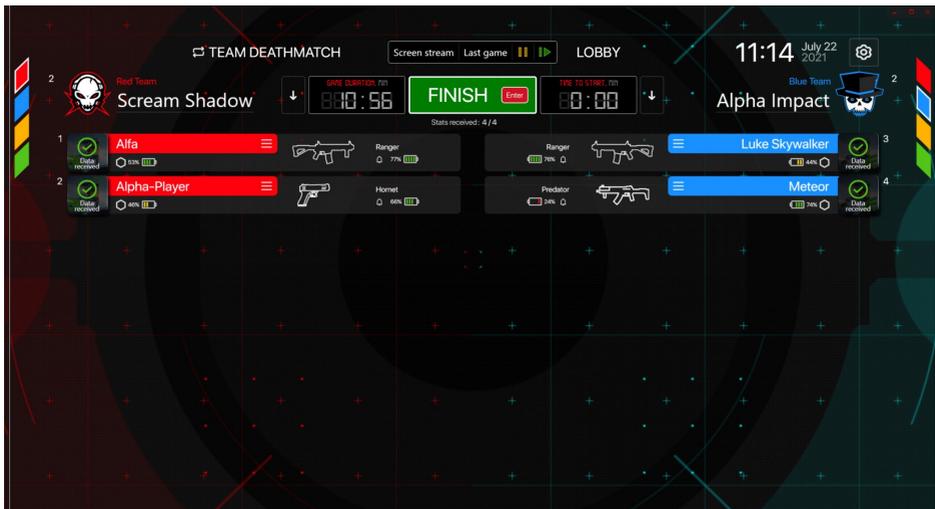
Statistics can be exported to Facebook, VKontakte, or Twitter or sent to the global player data base. To export the results to the global player data base, you must be a registered user. Press the button, in the new window, enter the login and password for your Base account, then press «Login». The game stats will be published on the server.
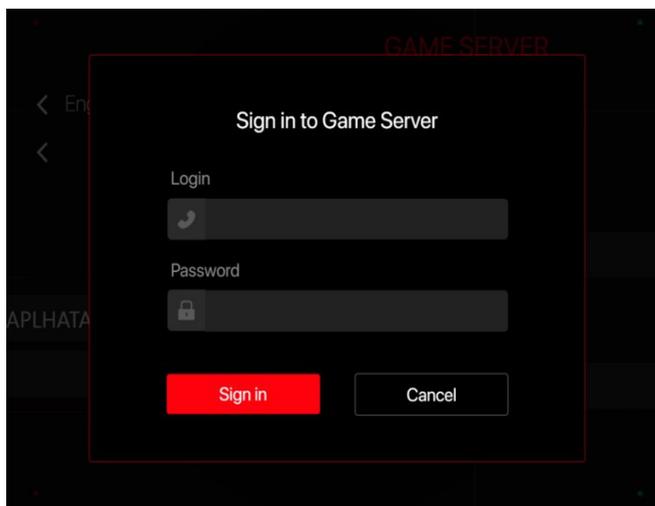
Visit https://lasertagbase.com/ to learn more about the «Global Player Database» project
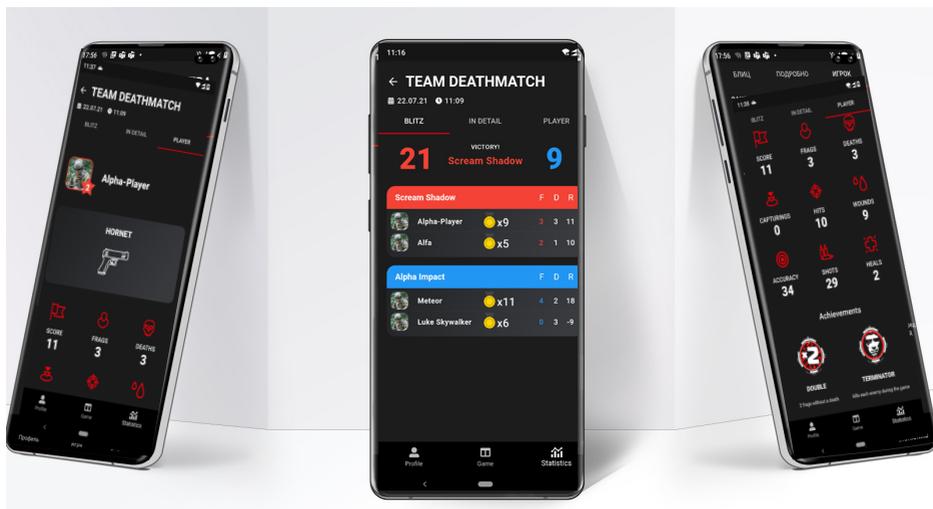
Alphatag, a mobile programme for games with premium laser tag equipment, was developed by our company. The Alphatag Player functions similarly to a scanner, reading and storing data about a fighter's actions.

In laser tag battles, it's the ideal companion. Alphatag Player allows you to get real-time statistics. The player keeps track of his own results while analyzing his opponents' wins and losses.

And how does it work?

The data is received by the mobile programme from the PC where the Alphatag Configurator is installed. The phone and the server must share the same Wi-Fi network. Both iPhone and Android users will enjoy Alphatag Player.

How to use?

All statistics are entered into the Alphatag Player once the equipment is connected and selected. The profile keeps track of wins, losses, kills, and deaths, as well as the number of rounds and playing time.

The «Game» tab provides information about the current online laser tag battle. A list of all the games in which you have participated can be found in the «Statistics» section.

The scenario name is shown at the top of the phone screen. During the game,nthe points scored and the table with the participants' results are updated. The final result will be available in the end.

Programme working principles

The mobile programme receives data from the game server - the PC on which the Windows Alphatag programme is installed to control the game.

The Alphatag Player works only in conjunction with the server; without it, there are no statistics. That is, if you play the game using the remote control, you won't be able to use the mobile programme because the data isn't available.

1 Connect to the server.

2 Open the programme.

3 Press the «Connect» button next to «Server». The smartphone must be connected to the same Wi-Fi network as the server.

4 When you connect, if the programme detects that your smartphone's Wi-Fi is turned off, it will prompt you to turn it on.

5 Tell the server what equipment you'll be using and which headband you'll be wearing. Next to «Equipment,» there will be a «Connect» button

6 Bring the smartphone closer to the activated headband. Press «Connect». If the connection fails, double-check the headband's and server's connections.
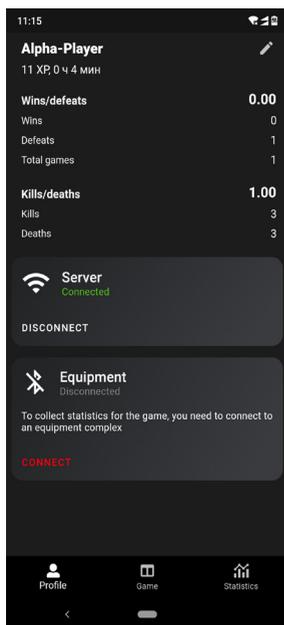
Connecting to a server
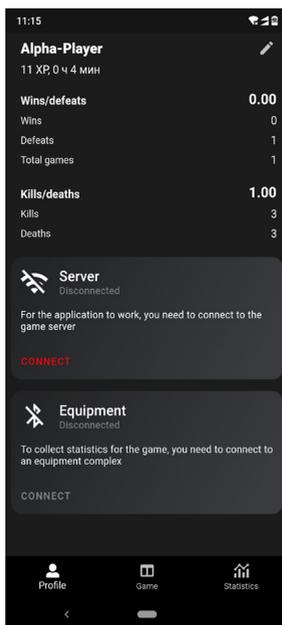
Connecting to equipment
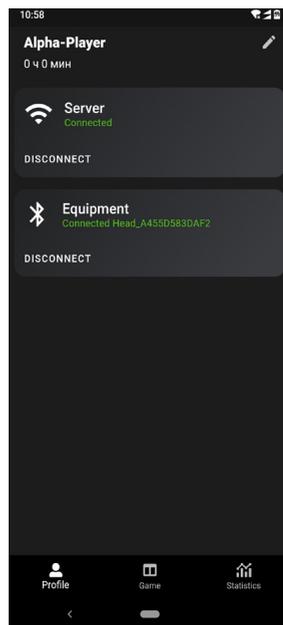
The connection with the server and equipment has been established

Using the programme

General statistics for all games can be found in the «Profile» section, including how many rounds have been played, how many wins, losses, kills and deaths have occurred, the amount of time spent playing, and the status of connections.

The «Game» tab shows details about the current online game, such as the scenario name,team points, time remaining, and a table with player scores. The statistics are updated directly during the game.

The «Statistics» tab contains 3 tabs:

- **Blitz**. Almost the same as the information on the current game. Here you will see the final, completed results. Visit this tab if you want to quickly check the game results.
- The **«Details» tab**. Here is detailed information about the game and each of the players.

- **«Player» tab** Personal statistics for the selected game are displayed here: ranking position, weapons played with, key stats and achievements.
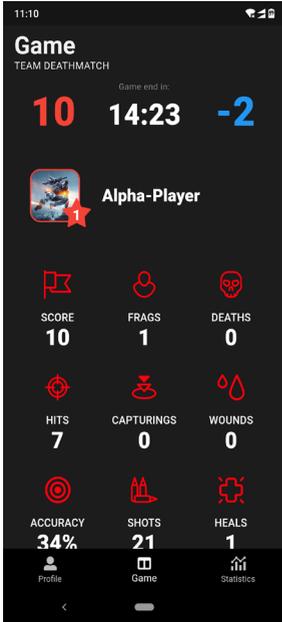
«Game» section
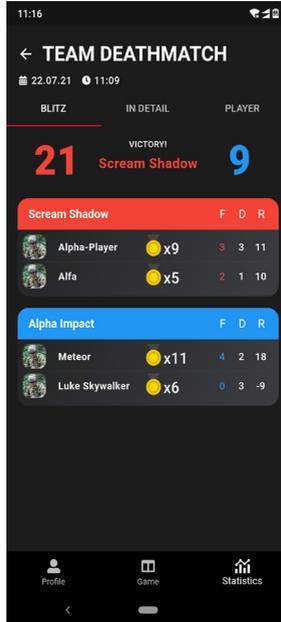
«Statistics» section. Blitz
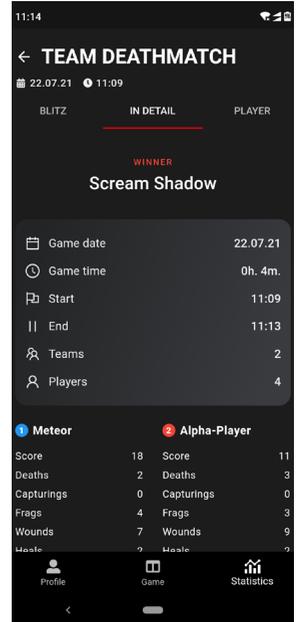
«Statistics» section. Details

Any laser tag equipment that is under warranty and has malfunctions can be repaired, provided that the terms of the warranty are observed.

Advice relating to the software operation is free of charge. If you have experienced a malfunction, you can download the software logs with the dates at

%userprofile%\AppData\Local\Laserwar\Alphatag\Logs

There you will find the event history, the software version, and the firmware on the weapon. This will help to correct any malfunctions as quickly as possible.

We can answer your questions on the use, settings and equipment operation:

📞 by phone: **8 964 616-15-15, 8-800-551-88-02 (add 103)**

✉ by E-mail: **help@laserwar.ru**

Ⓢ via Skype: **help-laserwar.ru, support-laserwar.ru**

💬 via WhatsApp, Viber: **+7 (964) 616-15-15**

FORESIGHT

PARALLAX OPTICS

PROSYGNAL SPEAKER

OLED-DISPLAY

BACKSIGHT

LENS PARALLAX

PICATINNY RAIL (FROM 4 SIDES)

FIXED MAGAZINE

ACT

ALPHATAG BOARD

BOLT FOR RELOADING

CHARGING SOCKET

5200 MAH BATTERY

FIRE MODE SWITCH

STRAP WHOLE

ACTIVATION LOCK

WHOLE FOR CARRYING SLING CLAMP

BUTT PLATE

VIBRATION (FEEDBACK)