

Instruction on using the Battle Royale scenario in laser tag games



Battle Royale is one of the genres of computer games, its name originates from a novel of the same name by Japanese writer Koushun Takami. There are two main principles for games of this genre: at the start, the players are practically unarmed and provide themselves with the necessary equipment already at the playground, and the second one is the safe zone, which can be decreased as the game progresses, in which players can be. The last survivor wins.

The scenario, built on the basic principles of the "Battle Royale", was developed by Lasertag Net for outdoor laser tag. To conduct such a game, in addition to the equipment itself (a tager, a headband, a vest with firmware 19.2 and higher), you must have a server (phone or tablet with the Lasertag Operator version 2.0.3 and higher installed) and a router that is installed in the center of the playground. The playing area will depend on its radius of action.

The principle of zone narrowing is implemented using RSSI control (the level of the received Wi-Fi signal from the router). At determined intervals, a player, whose game kit has RSSI less than the value defined in the scenario, starts with "bleeding" - a constant decrease in health units. To stop the bleeding, the player needs to approach the router. Thus, he will not be able to "sit out in the bushes" and become a winner without firing a shot.

Conventionally, the zones are circles of various diameters with a router in the center. But it must be taken into account that the Wi-Fi signal coverage can be heterogeneous and largely depend on the geometry of the playground, the presence of natural or artificial obstacles.

For each zone in the program, its own RSSI level is selected (from 0 to -100 dbm) and the time spent inside the zone when it is safe to be there.

When the time spent inside a certain zone is running short, the kits give an audible signal that it is time to move on to the next zone. The player is given time (set in the program) to move to the area with a higher signal level from the router.

In the last period of the game in the zero zone (in the center), bleeding is turned on at any RSSI value. As a result, even with zero player activity, the game will reveal the winner, i.e. the one with the last health units to run out of.

By default, friendly fire is turned on (players regardless of the color of the kit hit each other), a player has one life, damage 25%, auto-respawn is disabled. At the start the ammunition is limited - one clip with 10 cartridges.

Since ammunition can quickly run out, the so-called loots are placed throughout the playground. SIRIUS stations are best suited as loots - they can be programmed to distribute cartridges, clips, health units. An interesting option is the use of Sirius in the Bonus mode (with a shot at the device, health units are doubled), as well as in the Random mode (either the lives are doubled, or the magazine is filled with cartridges, or the health unit is added).

After some preparation, you can also use Smart mini remote as loot. Since it is programmable, each of its three buttons can be used to install almost any command, even a shot. To do this, it is better to use the Smart Remote Control by typing the desired code on its keyboard, and then transfer the command to the mini remote.

The operating instructions can be downloaded at <https://lasertag.net/support/manuals> by scanning the QR code.




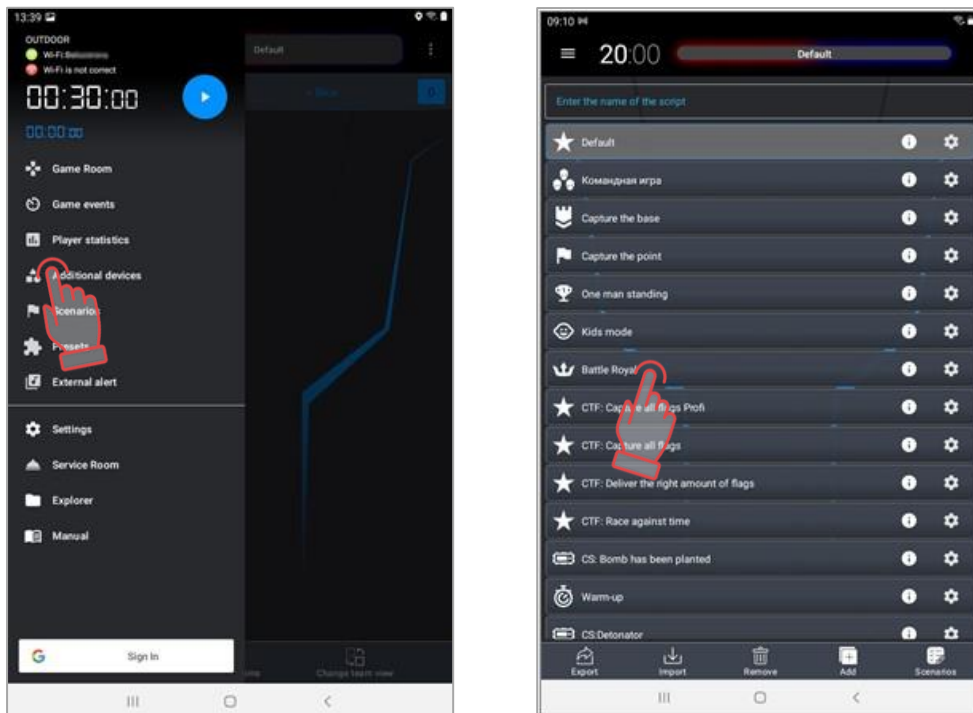
So that the mini remote control is not lost - it is placed in some kind of large case (the size of a shoe box), fixing it from the inside with a rope. Can be fixed on a tree or another natural object.

It is recommended that loots are mainly located far from the router - so that from the start the players scatter throughout the territory and do not collide near one device.

The Battle Royale scenario is already integrated in the Lasertag Operator program, but, like any scenario, based on the lineup of the players and the configuration of the playground, it needs to be adjusted. Or create your own scenario, based on it.


Let us consider customizing one of the scenario options.

In the program menu, click on the Scenarios item and in the list of scenarios that appears, click the button  to the right of the Battle Royale name.



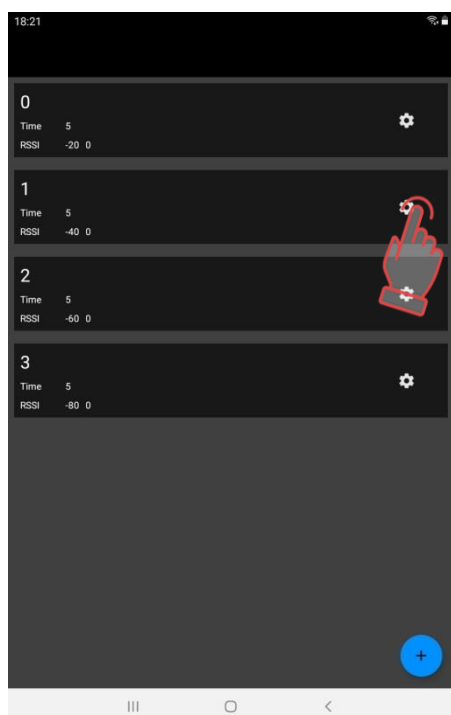
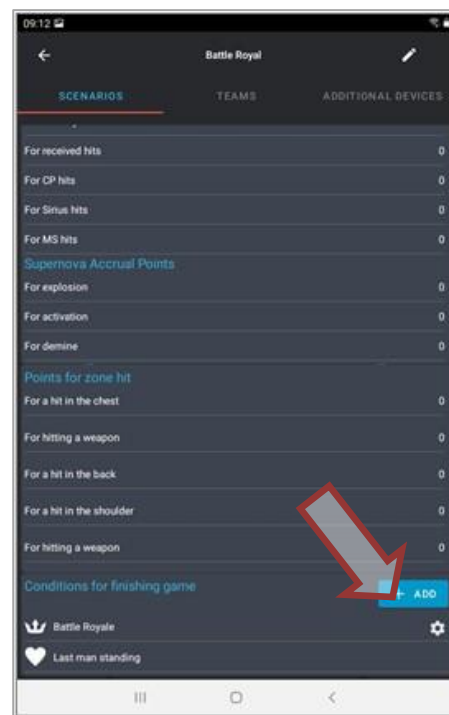
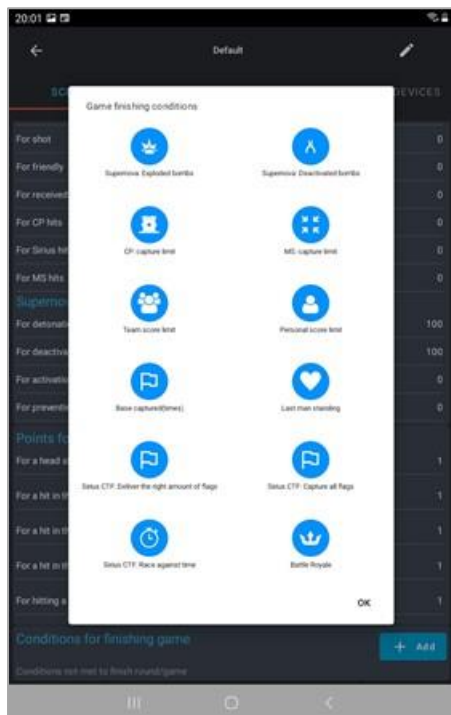
In the window that opens, on the Scenarios tab, first of all, you need to set the conditions for completing the scenario - click on the button "+ADD" in the lower right corner of the window. Then click on the button with the "Battle Royale" icon (by default, the condition has already been added to the scenario with the appropriate name). After that, the name of the condition will appear in the Game finish conditions field.

In this case, this condition has advanced functions - it can be configured.

The settings window is opened by clicking on the button  to the right of the condition name. First you need to determine the number of zones - they are added by pressing the plus button. Deleted by swap left. In our case, we select, in addition to the zero, 3 more zones.

Now you need to configure each zone - to do this, click on the same button on the right side of the field cell. You can configure the RSSI level range, the time to stay safely inside the zone (in minutes), turn on/off the bleeding and its delay time, i.e. how many seconds is given to the player to move to the next zone.

Moving the scroll bar left-right, RSSI values are set: for the 3rd 0th zone - from -80% to 0%, for the 2nd - from -60% to 0%, for the 1st - from -40% to 0% and for the 0th - from -20 to 0%. Set the safe time in the zone for 5 minutes. Turn on bleeding with a delay of 10 seconds. Click OK.

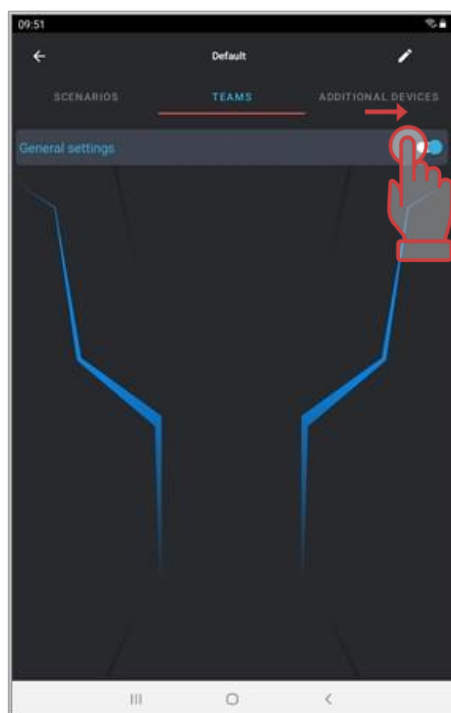


In addition to the condition Battle Royale, it is necessary to add “Last man standing” if the game is “Every man for himself” or “One command remains” if it is a team battle.



On the same tab you can set the number of points received by players for various actions. Since the survival game is in this scenario, it is not necessary to take into account the points. But for statistics, you can set, for example, 1 point per hit, 2 points per deactivation.

Next, select the Teams tab. So that all players are in equal conditions, select the general settings - move the switch to the right. To change the settings, you need to tap on the inscription General Settings.

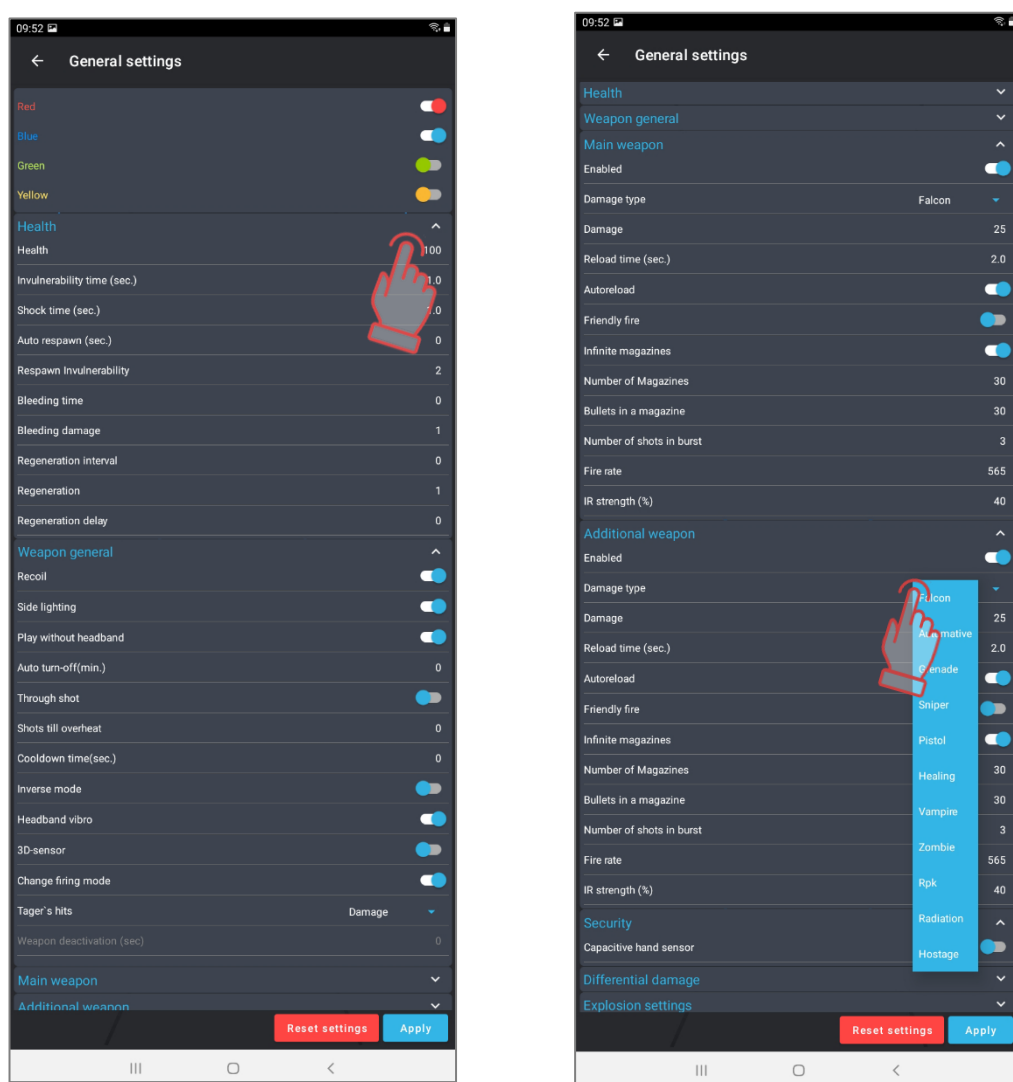


To add color to the game, include all four colors of the teams (although in our case the game is without teams). Settings of game kits are divided into groups: Health, Weapon, Differentiated Damage, Setting the explosion. To expand the group, click on the white checkmark button to the right of the name.

In order to save the settings it is necessary, after the changes in each group, to press the orange button with a tick.

In the Health group, set up 100 health units, the invulnerability time is 1.0 sec, and the shock time is 1.2. Choose a bleeding period of 1 second, damage from bleeding - 1 unit of health. Set autorespawn time and other parameters to zero.

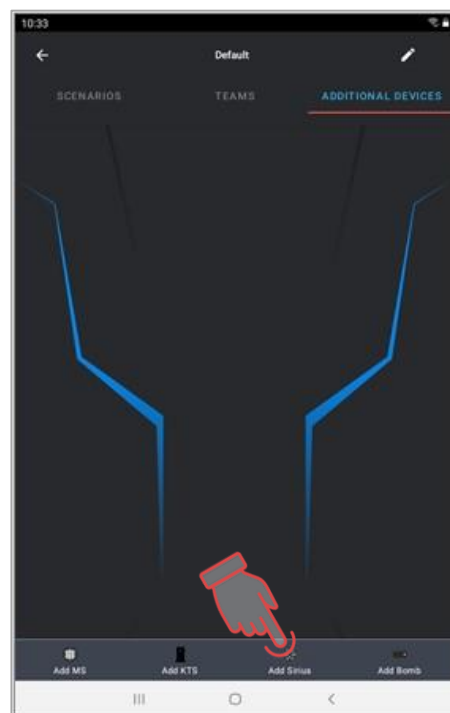
In the General Weapon select only the inclusion of recoil (if it is available on the tager). Disable the rest of the parameters



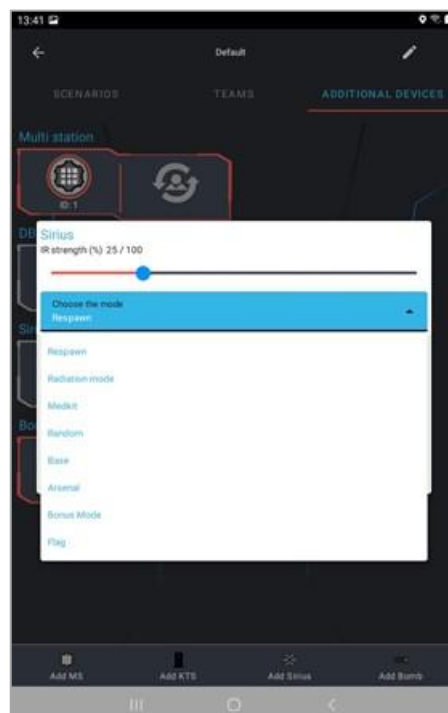
According to the scenario, each player at the start is provided with only one weapon with limited ammunition. Therefore, we select the Weapon 1 group and turn the switch on. We set the damage to 25 (since the player has 100 health units, the kit is defeated after 4 hits of the opponent), the type of damage is Falcon (standard), the cooldown is 0.4 sec. We select 1 magazine with 10 cartridges, single shots, rate of fire is 60 rounds per minute, IR-beam power - 40% (to exclude long-range shooting and possible bounces). Turn on Friendly Fire, turn off the rest of the parameters.

In the Weapon 2 group, turn off the second weapon. Save the settings and go to the "Additional weapons" tab. In order to fully play in this scenario, loot is required, as described

above. Therefore, we use the available SIRIUS Stations - click on the selection button and sequentially add devices to the game. After the SIRIUS cards appear in the tab field, you need to configure the devices. To do it, tap on the card - a window opens with a choice to remove the device from the scenario, configure or change the ID.



For example, you set up that three SIRIUS will work in the Arsenal mode - every 30 seconds give out one magazine with 10 rounds. Two SIRIUS will restore health units and two others at a time - in the modes Random and Bonus.



Editing the scenario is finished by clicking the arrow in the upper left corner of the program window.

Now you only need to select the Game Room item in the Main Menu, select the Battle Royale scenario and "scatter" kits of players by colors.

Time in this scenario is not limited, so the timer can be set, for example, for 60 minutes.

Now you need to prepare the playground - put the router in the center and it is best to arrange it in such a way that the entire zone closest to it is as open as possible - without barriers and shelters and so that players cannot hide inside it.

If it is not possible to connect it to the mains, use an autonomous power source. Loots should be placed throughout the playground, preferably outside the 3rd zone.

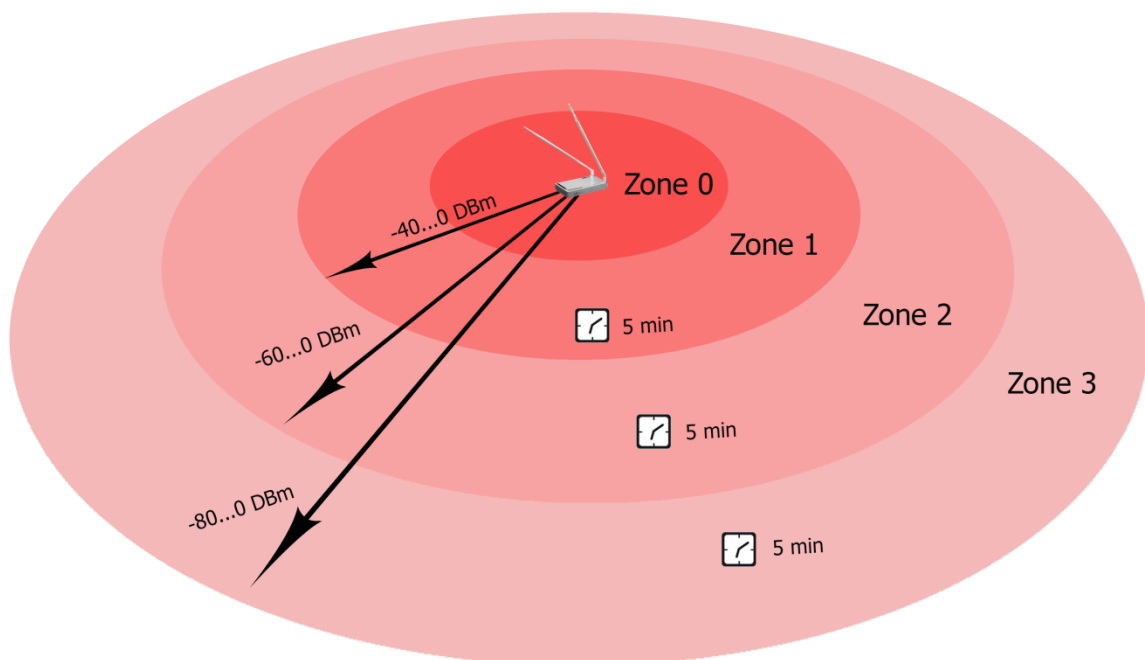
The start of the game can be made from the center of the playground (players scatter) or around its perimeter. Players can try to immediately hit each other, but, given the very limited starting ammunition and low rate of fire, players are unlikely to be able to quickly deactivate opponents. At the beginning of the game, the task of the players is to find devices that will help them survive the game. At the same time try to get into opponents.

With these settings for the scenario, after 5 minutes for everyone whose Wi-Fi signal from the router (RSSI) is more than 80 units, bleeding begins, i.e. the player will lose one health unit every second. To avoid it, the player needs to move to the next zone within 10 seconds. A variant is possible when some obstacle interferes with the signal (shelter, stone, tree, etc.), then it is enough to simply move within the zone.

After another 5 minutes, the critical RSSI value will be -60%, after another 5 minutes already with a level of -40% it will be unsafe.

Therefore, the players during the game need not only to try to hit the opponents, but also to monitor the virtual change in the playground configuration.

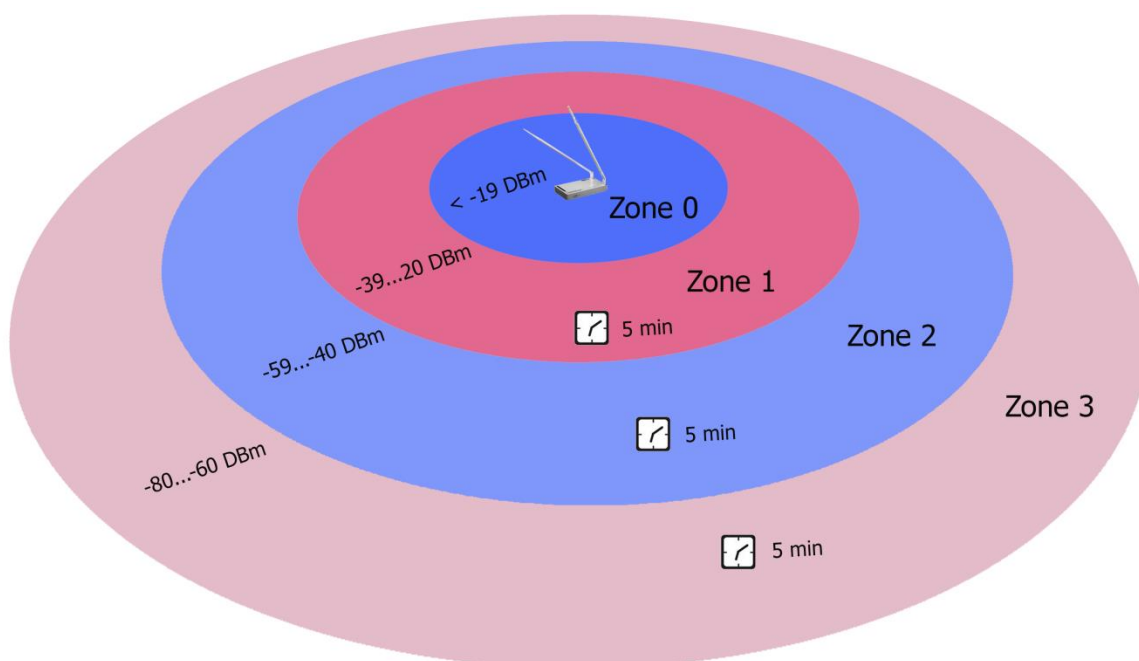
After the expiration of the next 5 minutes, all survivors, regardless of RSSI, will automatically be taken away health units. If by this moment more than one player remains, the player, whose health runs out later than the others', wins.



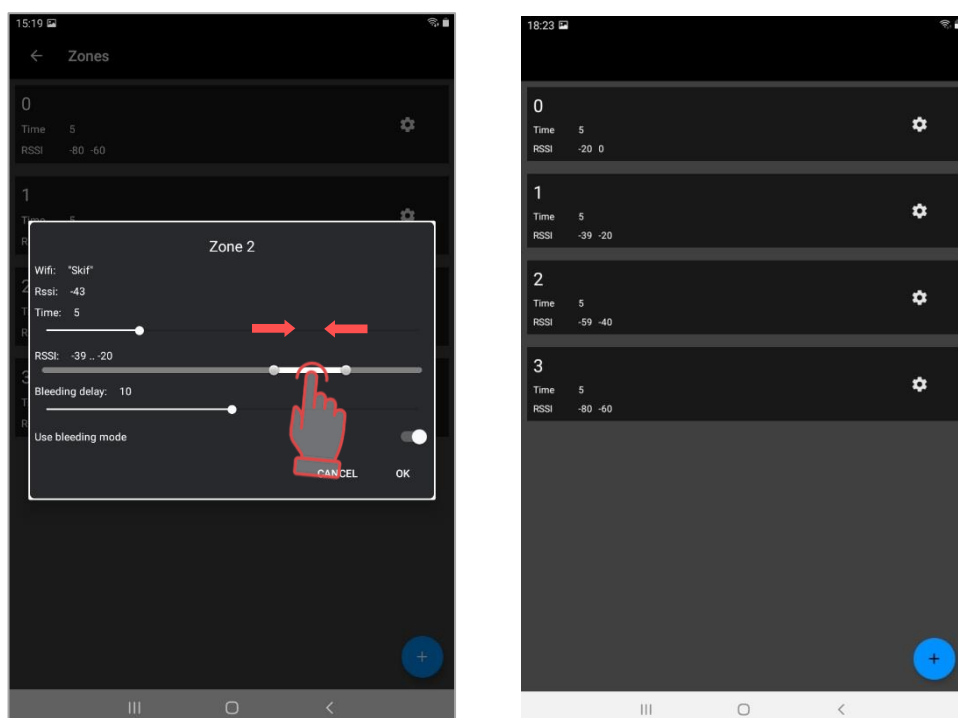
Like any scenario, this option needs to be adjusted to adapt to the playground and the contingent of players.

Numerous options for the development of the Battle Royale scenario are possible - starting the game not from the center, but after dispersing the players around the playground, set the zones in rings (not from zero to a certain value, but choose ranges), start the game without cartridges at all, play in pairs, use Quest-items etc.

For example, consider the option with zones - rings. In this case, at the start of the game, the players are dispersed along the farthest ring from the center of the court. After 5 minutes of being in this zone, they will need to go to the next zone in order to stop the "bleeding", after another 5 minutes - to the next, and so on to the central ring. The only difference from the classic type of game is that the players do not have the opportunity to leave a certain zone within 5 minutes and, for example, to approach the center of the court in advance.



In the program, in this case, the zones before the start of the game are configured as follows:



Other options for optimizing the scenario and conducting games are limited only by the physical capabilities of the playground and the imagination of the club staff.