

# Digital Flag Manual

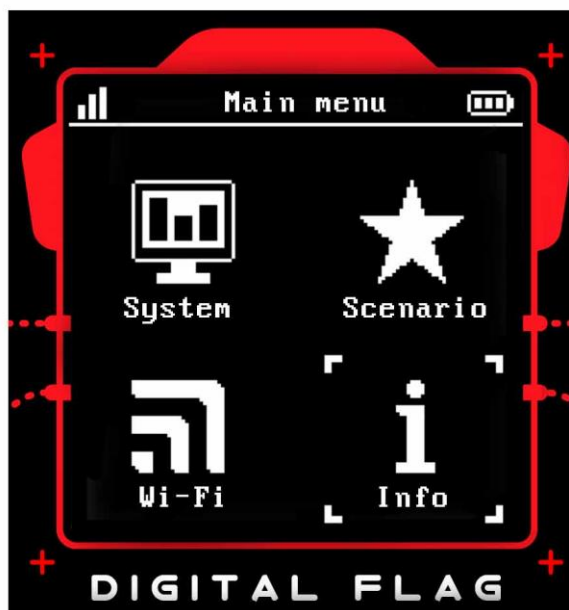
"Digital Flag" device is activated by a button located on the top of the device under the top frame. Switching on is accompanied by a sound signal and a light indication. It will flash with red-blue-yellow-green-violet-blue colors.

Navigation through the menu is made with "<" / ">" buttons, selection is confirmed with the "OK" button, cancellation and return to the previous menu is made with the "Esc" button.

## Global settings

To enter the main settings menu, press the "Esc" button in main Scenario selection menu.

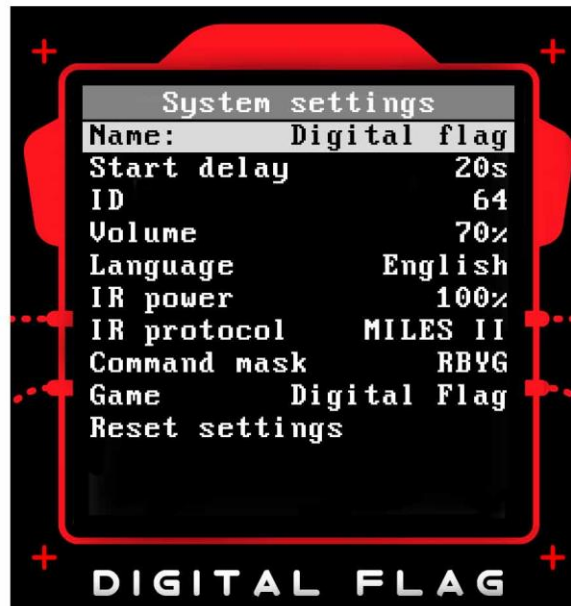
Global settings menu consists of four sections.



1. **"System"** - basic device settings.
2. **"Scenario"** - settings for each game scenario.
3. **"WiFi"** - network settings.
  - WiFi is switched on;
  - SSID (network name) - ALPHATAG\_NET (all CAPITAL LETTERS);
  - Key – (WiFi password) – no password by default.

4. **"Info"** - contains the firmware version of the Digital Flag and device serial number.

## System settings



The following options are set by default:

- **Name.** Digital flag (this name is required for network game)

- **Start delay:** 20 seconds by default.

Delay start of the device means that it cannot be captured during some period after beginning of the round.

The range 0 - 3600 seconds.

- **ID:** 64 by default

ID is required to identify the device in a wifi network game.

The range 1 - 65534

- **Volume:** 70% by default.

Sound volume of the device

The Range 1 - 100%

- **Language:** English by default

The language of the device menu.

- **IR power:** 100% by default

The power of device infrared emitters that affects the radius of device commands.

The Range 1 - 100%

- **IR protocol:** MILES2 by default

The protocol of the device commands that affects the compatibility of the device with different laser tag equipment producers.

- **Team mask:** RBYG (Red, Blue, Yellow, Green).

By default the device interacts with all teams participating in the game. Game manager can exclude any color in device settings and the device will stop interacting with the players of the excluded team.

- **Game:** Digital flag by default.

The scenario displayed when the device is turned on. The game manager can select any of the seven available scenarios.

- **Reset settings**

Resetting the device to factory settings.

## Scenario settings

Game manager can run seven scenarios:

- Digital Flag,
- Control point,
- Confrontation,
- Military Base,
- Outpost,
- Hospital
- Arsenal.

### 1. Digital flag scenario.

Each team in the game has a digital flag device (the device during the game will glow with the color of the team). The task of the team is to capture the opponent's flag and deliver it to own base. Capturing is made by a shot into the digital flag device form a close distance. The player who shoots the opponent's flag and captures it should run to his base and shoot his own flag to deliver the flag to his own base.

#### Scenario Features:

1. A player who carries the opponent's flag cannot shoot other players.

2. Several players can carry the opponent's flag at the same time.
3. The player who carries the flag loses it if he is killed.

## Settings



**a) Round time.** Range 0 - 1440 minutes

**b) HitPoints.** How many flag health points should be destroyed by the player to get the flag.

**c) Team.** The color of the team that will have a flag in the game.

**d) Recovery time.** Range 10 - 3600 seconds. The period when the team has no flag, after been captured by an enemy team player. During this time the flag can't send respawn commands and being captured by enemy team players.

**e) Regen Time** is the speed of Flag health point restoring. The shorter the time, the faster the flag health points will be restored.

**f) X-Ray** (negative radiation from the device that reduces the health points of players nearby)

- on / off

- delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send a radiation pulse, causing damage to all players who are near the digital flag.

- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

**g) Impulse.** In this scenario Digital Flag can also send positive pulse healing/respawning command. It will affect only the players of the team that holds the flag.

- on / off

- Pause. Range 10 - 900 seconds. If the "Impulse" parameter is turned on, then after a specified time after the beginning of the round, this impulse will be ready for use. If the device is ready to respawn the players the button in the form of a fingerprint will glow blue.

- quantity. Range 1 - 99. The number of respawning pulses. To trigger the pulse, a player should touch the button in the form of a fingerprint. After using Impulse, it needs time to recharge. While recharging time, the fingerprint button will blink, indicating a recharge.

At the end of the round, the flag beeps and flashes with the color of the holding team. The flag display will show how many enemy flags were captured by the players of this team.

## **2. Control point Scenario.**

### **Description**

Initially, the flag glows with neutral white color. Players should capture it with a shot. When the flag is captured it glows with the color of the team which holds it and the device counts the holding time. If the player of another team shoots the flag, it recolors to the color of the new team and starts counting the holding time of the new team. If the player of the first team recaptures it again, the device resumes counting the holding time of the first team.

### **Settings**

**a) Round time.** Range 0 - 1440 minutes

**b) Capture time.** Range 3 - 255 seconds. During the specified time, the flag is considered to be captured after the player shoots it. In the Control Point scenario capturing the point does not occur immediately after the player shot it but after some time. It means that if the capturing time parameter is set for 10 seconds, then capturing the point will occur in 10 seconds, if during this time the player of the team that owned the point didn't shoot at the device. If the player of the holding team shoots the device within these 10 seconds the point will immediately return to his team.

**c) X-Ray** (negative radiation from the device that reduces health points of players nearby)

- on / off
- delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send a radiation pulse, causing damage to all players who are near the digital flag.
- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

**d) Impulse.** In the "Control point" scenario, the "Respawn" command is used as an impulse. It will affect only the players of the team which holds the control point at the moment of the impulse. While the point is neutral, the use of impulse is not available.

At the end of the round, the flag emits a sound signal and flashes with the color of the winning team. The winning team is the one that holds the point longer than others.

### 3. Confrontation.

#### Description

At the beginning of the game, the digital is neutral and it glows with the colors of all the teams participating in the game. Capturing is made by a shot. The longer a team holds the flag, the more LEDs on the flag light up with the color of that team. As in the «Control point» scenario, the device summarizes the capturing time of each team.

#### Settings

- a) Round time.** Range 0 - 1440 minutes
- b) Capture time.** Range 3 - 255 seconds. During the specified time, the flag is considered to be captured after the player shoots it. In the Control point scenario capturing the point does not occur immediately after the player shot it but after some time. It means that if the capturing time parameter is set for 10 seconds, then capturing the point will occur in 10 seconds, if during this time the player of the team that owned the point didn't shoot at the device. If the player of the holding team shoots the device within these 10 seconds the point will immediately return to his team.
- c) X-Ray** (negative radiation from the device that reduces the health points of players near)
  - on / off
  - delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send

a radiation pulse, causing damage to all players who are near the digital flag.

- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

Device does not emit respawn impulse in this scenario.

At the end of the round, the flag emits a sound signal and flashes with the color of the winning team, that is, the team that owned the flag longer than others.

## 4. Military base scenario.

### Description

Each team participating in the game has a digital flag device. In this scenario, it acts as the team respawn base, where the dead players can restore health. The base has a certain number of hit points and can be destroyed by enemy players from a close distance. If being destroyed, the base stops respawning players' life, until the base is auto restored.

### Settings

**a) Round time.** Range 0 - 1440 minutes

**b) HitPoints.** Range 1 - 9999. How many flag health points should be destroyed by the player to capture the military base

**c) Team.** The color of the team that will have a flag in the game.

**d) Recovery time.** Range 10 - 3600 seconds. If an enemy player fired and damaged a military base but didn't destroy it (that is, there are still health points), then after a period of time specified in this parameter, the base will start gradually restore its health points.

**e) Regen time.** Range 10 - 3600 seconds. The time during which the health points of the base is restored from 0 to 100%. This is the speed of base health points restoration

**f) X-Ray** (negative radiation from the device that reduces the health points of players nearby)

- on / off

- delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send a radiation pulse, causing damage to all players who are near the digital flag.

- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

**g) Impulse.** In the "Military base" scenario, the "Respawn" command is used as an impulse. It will affect only the players of the team which

holds the control point at the moment of the impulse. While the point is neutral, the use of impulse is not available.

At the end of the round, the flag beeps and flashes the color of the team to which it belonged. The flag display will show which of the opposing teams and how many times destroyed this base during the round.

## 5. Outpost scenario.

### Description

This scenario is similar to the Military Base scenario. The main difference is that the outpost is initially neutral, the teams should capture it. After the capture, the outpost will be able to reanimate the players of the team that owns it ("Impulse" setting should be enabled). To recapture the outpost, the player should destroy it.

### Settings

**a) Round time.** Range 0 - 1440 minutes

**b) HitPoints.** Range 1 - 9999. How many flag health points should be destroyed by the player to capture the outpost.

**c) Recovery time.** Range 10 - 3600 seconds. If enemy player fired and damaged a military base but didn't destroy it (that is, there are still health points), then after a period of time specified in this parameter, the base will start gradually restore its health points.

**d) Regen time.** Range 10 - 3600 seconds. The time during which the health points of the base is restored from 0 to 100%. This is the speed of base health points restoration

**e) X-Ray** (negative radiation from the device that reduces the health points of players nearby)

- on / off

- delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send a radiation pulse, causing damage to all players who are near the digital flag.

- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

**f) Impulse.** In the "Outpost" scenario, the "Respawn" command is used as an impulse. It will affect only the players of the team which holds the control point at the moment of the impulse. While the point is neutral, the use of impulse is not available.



At the end of the round, the device emits a sound signal and flashes with the color of the winning team, that is, the team that owned the outpost longer than others. The ownership time is displayed on OLED screen.

## 6. Hospital scenario.

### Description

Initially, the Hospital is neutral, and players should capture it with a shot. As in other scenarios the Hospital is colored in the color of the team that holds it.

### Settings

**a) Round time.** Range 0 - 1440 minutes

**b) Capture time.** Range 3 - 255 seconds. During the specified time, the flag is considered to be captured after the player shoots it. As in the control point scenario capturing the Hospital does not occur immediately after the player shot it but after some time. It means that during the specified time previous holding team can cancel capturing and take it back by a single shot.

**c) X-Ray** (negative radiation from the device that reduces health points of players nearby)

- on / off

- delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send a radiation pulse, causing damage to all players who are near the digital flag.

- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

**d) Impulse.** In the "Outpost" scenario, the "Respawn" command is used as an impulse. It will affect only the players of the team which holds the control point at the moment of the impulse. While the point is neutral, the use of impulse is not available.

At the end of the round, the device emits a sound signal and flashes the color of the winning team, that is, the team that owned the Hospital longer than others. The ownership time is displayed on OLED screen.

## 7. Arsenal scenario.

### Description

Initially, the Arsenal is neutral, players capture it with a shot, the Arsenal is colored in the color of the team that captured it. In this scenario, if the "Impulse" parameter is turned on, it restores not health points but the ammo of the players that belong to a team holding the Arsenal.

## Settings

**a) Round time.** Range 0 - 1440 minutes

**b) Capture time.** Range 3 - 255 seconds. During the specified time, the Arsenal is considered to be captured after the player shoots it. As in the Hospital point scenario capturing the Arsenal does not occur immediately after the player shot it but after some time. It means that during the specified time previous holding team can cancel capturing and take it back by a single shot.

**c) X-Ray** (negative radiation from the device that reduces the health points of players nearby)

- on / off

- delay. Range 1 - 9 seconds. If the "X-Ray" parameter is turned on, then after a specified time after a shot in the flag, the device will send a radiation pulse, causing damage to all players who are near the digital flag.

- Power. Range 1 - 100%. Percent of player's health that negative pulse takes away.

**d) Impulse.** In the "Arsenal" scenario, the "Restore Ammunition" command is used as an impulse. It will affect only the players of the team which holds the Arsenal at the moment. Impulse just restores player's ammo without healing them. While the point is Arsenal is neutral it does not send any impulse.

At the end of the round, the device emits a sound signal and flashes with the color of the winning team, that is, the team that owned the Arsenal longer than others. The ownership time is displayed on OLED screen.