

GAME MANUAL

HEADQUARTERS WORLD WAR II



SLITHERINE



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INTRODUCTION

Headquarters: World War II is a turn-based strategy game, that represents tactical-level military engagements with realistic visuals and object scale.

The game is set in the WWII period and covers the Battle of Normandy in the summer of 1944. You can play through 3 historical campaigns, playing for the army of the UK, the USA, or Germany. Moreover, you can enjoy Skirmish battles vs AI or Multiplayer games vs real opponents.

Under your command are various troops - infantry, tanks, and other armored units, vehicles, and artillery pieces, with a total of 20+ unit types represented in the game.

SYSTEM REQUIREMENTS

Minimum:

OS: 64-bit Windows 10

Processor: i5-4460 or equivalent

Memory: 8GB RAM

Graphics: Geforce GTX 950 (2GB VRAM)

DirectX: DirectX 11

Storage: 35GB available Space

Recommended:

OS: 64-bit Windows 10

Processor: i5-6400 or equivalent

Memory: 16GB RAM

Graphics: Geforce GTX 1060 (6GB) or equivalent

DirectX: DirectX 11

Storage: 35GB available Space

INSTALLING THE GAME

Please ensure your system meets the minimum requirements listed above. To install the game, go to www.slitherine.com/member/mypage, find Headquarters: WWII listed under 'My Games', then click the relevant 'File Downloads' link, and a new page will open. Click the 'Download' button provided for the game's Installer. Once the download is complete, open the downloaded archive, then double-click the application inside. (If you are presented with a Microsoft Defender window, click 'More info', then 'Run anyway'.) Follow all on-screen prompts to complete installation.

STEAM INSTALLATION

If you have purchased your game from the Steam store, you can download the game by selecting it in your Library in the Steam desktop app, and then clicking the 'Install' button. Any games purchased from the Slitherine store that are also available on Steam can be registered for a Steam key, allowing you to add the game to your Steam library. To do this, go to www.slitherine.com/member/mypage, find Headquarters: WWII listed under 'My Games', then click 'GET YOUR KEY!' under the 'STEAM KEY' heading. Copy the generated key, then activate it on the Steam website (at store.steampowered.com/account/registerkey) or via the Steam desktop app (by selecting 'Activate a Product on Steam...' from the Games drop-down menu)

UNINSTALLING THE GAME

Please use the 'Add or Remove Programs' option in the Windows Control Panel or the Uninstall shortcut in the game's Windows Start menu folder to uninstall the game. Uninstalling through any other method will not properly uninstall the game.

PRODUCT UPDATES

In order to maintain our product excellence, Slitherine releases updates containing new features, enhancements, and corrections to any known issues. All our updates are available free on our website (www.slitherine.com) and can also be downloaded quickly and easily by clicking on the 'Update' link in your Game Launcher or by using the 'Update' shortcut in your Windows Start menu folder for the game. If you are using the Steam version, Steam will update it according to your settings.

We also periodically make beta (preview) updates and other content available to registered owners. Keeping up with these special updates is made easy and is free by signing up for a Matrix Games Member account. When you are signed up, you can then register your Matrix Games products in order to receive access to these game-related materials. Doing so is a simple two-step process:

Sign Up for a Slitherine Group Member account – THIS IS A ONE-TIME PROCEDURE; once you have signed up for an account, you are in the system and will not need to sign up again. Go to www.slitherine.com and click the Members hyperlink at the top. In the new window, select Register NOW and follow the on-screen instructions. When you're finished, click the Please Create My New Account button and a confirmation e-mail will be sent to your specified e-mail account.

Register a New Game Purchase – Once you have signed up for a Slitherine Group Member account, you can then register any Slitherine/Matrix title you own in your new account. To do so, log in to your account on either the Matrix Games website (www.matrixgames.com) or the Slitherine website (www.slitherine.com). Click Register Game near the top to register your new purchase.

We strongly recommend registering your game as it will give you a backup location for your serial number should you lose it in the future.

Once you've registered your game, when you log in to the Members section you can view your list of registered titles by clicking My Games. Each game title is a hyperlink that will take you to an information page on the game (including all the latest news on that title). Also on this list is a Downloads hyperlink that takes you to a page that has all the latest public and registered downloads, including patches, for that particular title. You can also access patches and updates via our Games Section: (www.slitherine.com/games/), once there select the game you wish to check updates for, then check the downloads link. Certain value content and additional downloads will be restricted to Members Area members, so it is always worthwhile to sign up there. Remember, once you have signed up for a Member account, you do not have to sign up again at that point you are free to register for any product you purchase.

Thank you and enjoy your game!

UNIFIED LOGIN SYSTEM

Slitherine and Matrix now have a new "Unified Login System". This allows you to access the Slitherine, Matrix, and Wargamer sites using just one username and password. To merge your accounts so that they work for all three sites, go to (<http://samelogin.slitherine.com/>) and enter the details of one of your accounts (ie. Either your Matrix or your Slitherine login). You will then be presented with the option to merge your accounts (listed as "[Merge my accounts]"), which will then allow you to combine any other accounts you have and/or generate a user for another website using the same details (For instance, if you were called "JohnSmith123" on the Slitherine site but had no account on Matrix, you could enter the details into the site and it would create a "JohnSmith123" account for Matrix as well, with the same password as the Slitherine login.)

GAME FORUMS

Our forums are one of the best things about Slitherine. Every game has its own forum shared by our designers, developers, and the people playing the game.

If you are experiencing a problem, have a question, or just an idea about how to make the game better, post a message there. Go to www.slitherine.com/forum and find the messageboard for Headquarters: WWII.

If you have a Steam account, you can also access Steam Discussions (even if you did not buy Headquarters: WWII through Steam) – another place where you can post questions, problems, and ideas for the game, which is regularly checked by other players and the game’s developers. To access this forum, go to the game’s Steam store page, then click on ‘View discussions’, or select the game in your Library in the Steam desktop app, then click ‘Discussions’.

DISCORD SERVER

You can also discuss the game, seek advice, and provide suggestions by talking to the developers and other players on Discord, a social platform that facilitates communication by instant messaging and audio/video calls. Slitherine operates an official ‘server’ – a collection of chat rooms and voice channels – dedicated to Headquarters: WWII.

To access the game’s Discord server, you must first create a Discord account. Go to www.discord.com/login, click ‘Register’, then fill in the form and follow the instructions to create an account. You can download the desktop application to use Discord by going to www.discord.com/download, or simply use your web browser by logging in to your account at www.discord.com/login.

Once you have set up your Discord account, you can join the official server ('Headquarters: WWII') by following the link on the game's Launcher Page.

NEED HELP?

The best way to contact us if you are having a problem with one of our games is through our Help Desk. Our Help Desk has FAQs as well as a dedicated support staff that answer questions within 24 hours, Monday through Friday. Support questions sent in on Saturday and Sunday may wait 48 hours for a reply. You can get to our Help Desk by going to www.slitherine.com/member/helpdesk/ticket/new. This will open a ticket in our system and send an email to support@slitherine.co.uk

GETTING STARTED

MAIN MENU

Welcome to the Main Menu of *Headquarters World War II*.



This is the place where you can access everything the game offers. On the right side of the screen, you can see three bars: **Campaign**, **Skirmish**, and **Multiplayer**. Each of them offers a unique gaming experience.



The **Campaign** mode is where you can take command over one of the three armies: American, British, and German. Each mission is inspired by real historical battles, in which you will test your skills as a commander. How hard it will be, though, depends on the difficulty level you choose. You may make it a purely entertaining journey into the past, or a daunting tactical challenge you will have to cleverly overcome.



SKIRMISH

Skirmish allows you to play against AI on a set of maps we have prepared for you, as well as maps you may generate or create all by yourself in the Map Editor.



MULTIPLAYER

Similarly, Multiplayer gives you an opportunity to play against other players on a set of maps we have prepared for you, as well as maps you may generate or create all by yourself in the Map Editor.

On the left side of the Main Menu, we have everything else you might need to fully enjoy the game.

LOAD GAME

Loading helps you access all saves that you have made, as well as the settings and list of hotkeys.

TRAINING

Training leads to a special Tutorial mission where you will learn the basics of the in-game mechanics, rules, and all major how-to's. It is highly recommended to play Training first before going to the Campaign, Skirmish, or Multiplayer.

SETTINGS

Settings provide you with options to tailor the gaming experience to your taste and expectations.

There are three categories of options: Sound, Video, and Game. Sound is responsible for the volume of every type of music or sound from the game. Video is for changing the visual presentation of the game. Game is where you change your language, switch from a keyboard to a controller and vice versa, enable/disable various in-game features (f.i., Fog of War or Line of Fire), and customize the functionality of features like Autosaving or Autocam.

**EDITOR**

Editor is a place where you can make battle maps for Skirmish or Multiplayer.

CREDITS

Credits provides a list of the creators of *Headquarters World War II*.

EXIT

Press Exit to quit the game.

USER INTERFACE

STARTING NEW CAMPAIGN

To begin a new campaign, you should click on the Campaign bar in the Main Menu, which will move you to the Campaign Selection screen.



On the left side of the screen, you will see a list of campaigns and countries that you can choose to play.

CAMPAIGNS

The Battle For Normandy

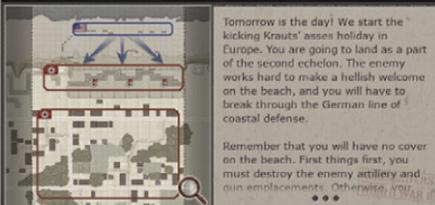
1944



MISSIONS

1. Omaha Beach Landing
2. The Battle of Gaignes
3. The Battle of Carentan
4. The Battle of Cherbourg
5. The Battle of Hill 192
6. Operation Cobra
7. The Battle of Saint-Malo
8. The Battle of Chambois
9. The Battle for Brest

MAP



LAUNCH

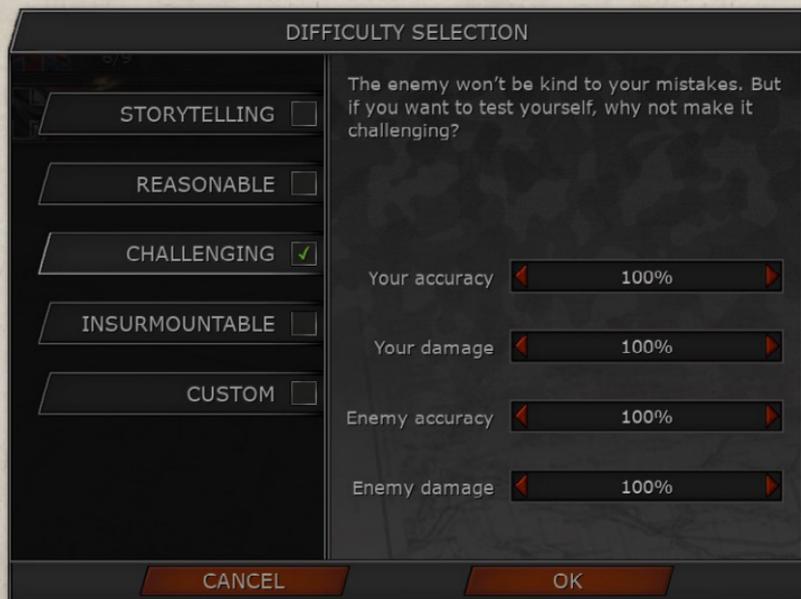
On the right side of the screen, you will see a list of missions in the currently chosen campaign for the country you want to play, and below that - a map for each mission with a short introductory description about that mission's objectives.

You can click on the map to enlarge it and get the extended description.

When you only start playing Headquarters, you cannot launch but the first mission of each campaign. By progressing through the story

and successfully completing each mission, you will unlock the completed missions, and later you will be able to replay any mission you like in non-chronological order (it is only possible if you have saves of your in-game progress).

Click on the **Launch** bar to start playing the mission you have chosen. Immediately after, you will see a smaller Difficulty Selection screen where you can choose one of the difficulties available to you: Storytelling, Reasonable, Challenging, and Insurmountable. Or you can customize the level of challenge you want to see in the game by choosing the Custom option below.



When choosing any of the difficulty options, you will see the correspondent distribution of Accuracy and Damage for your and enemy units. The bigger the difference between those numbers, the harder/easier (depending on whose numbers are higher - yours or AI's) it is to beat the enemy.

BATTLE SCREEN



After choosing the difficulty and seeing a loading screen, you find yourself looking at the battlefield and listening to the mission briefing, the text of which can be found in the upper left corner of the screen. To skip the narrative part, you can click the **Left Mouse Button**, which will end the currently playing message and move forth to the next one until there are no



**Allan Weaver**

Captain

Listen up, people! Captain Weaver here! We're spread thin across the sea wall and the Krauts ain't about to let up anytime soon.

Primary objectives:

- Capture the forts: 0/3
- Destroy the enemy guns: 0/2

**Click the Left
Mouse Button to
skip**

more messages left, after which you are in control of the units and

ready to start winning.

When the briefing has concluded, you will find your current objectives in the upper left corner where the subtitles have been playing.

Clicking on any of the objectives with the **Left Mouse Button** will automatically move the camera to the tile of interest and highlight it. If there are several such tiles, you need to press on the Objective name several times - every time you press, the next tile of interest will be highlighted. If your Objective is to kill an enemy unit, which has not yet been discovered, then the tile will not be highlighted.

The majority of the screen shows you the battlefield. If you want to hide the interface and leave only the battlefield on the screen, you can press 'Ctrl+H.'



Every tile you point at with the cursor makes the Terrain Info bar appear and change above.

Terrain - Clear, Cover - 0, Elevation - 1
Press the Y key to show the extended terrain info

Pressing 'Y' shows and hides the extended **Terrain Info**.

Terrain Info shows you all the necessary information about a tile: the type of Terrain, its location (X=24, Y=27), what kind of Object, Obstacle, Building, or unit is on the tile, etc.

More about the Terrain Info you can learn in the correspondent section of the manual.



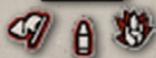
Your units have a **blue** HP bar above their Unit's Class icon. Allied units have a **yellow** HP bar, and the enemy - a **red** one.



A little crossed-out eye sign above some unit's icon means that this unit is **hidden** from enemy eyes. Little **green bullets** next to your unit's icon show how many **Attacks** this unit still has. A **green boot** means that the unit still has unused **move points**.



If a unit has **no Attacks or Reactions** left (depending on whose turn it is), a white, highlighted in red, bullet will appear underneath the unit's icon.



If a unit has **lost half of its Morale**, a white flag will appear underneath the unit's icon.

If a unit's **Overwatch** has been disabled by enemy fire, a white hand surrounded by fire will appear underneath the unit's icon.

At the bottom of the screen is the **Unit List** panel. There you can see images of every unit under your control.



Each picture in the default layout of the **Unit List** panel has several useful symbols depicted on it:

- a **green bullet** and a **green boot** mean that the unit still has **unused attacks** or **move points**;
- a **green number** in the lower left corner of the picture shows the number of **alive crew members**;
- a **star** in the upper right corner shows the **current level** of the unit - there can be a total of three gold stars on the image (the highest possible level) while an empty star means that the unit has no level yet;
- if the unit has a **hero** assigned to it, then a golden **laurel wreath** will be added to the image.

To the right of the Unit List panel, you can find the Unit Info panel with:



- Unit Action panel where you can find and choose every action that the chosen unit can do during the turn;



- Unit Crew panel with the available Crew members of the unit (grey icons mean that those members are lost; each loss affects the unit with certain penalties);



- Unit Stats panel where you can find how many Attacks, Reactions, Move Points, current Level, Armor, and Morale the unit has, as well as how high that unit's Accuracy, HE and AP Attacks, Attack Range, Armor, Spotting, and Camouflage.



When a unit is affected by an Effect, you will see a green or red arrow (the red color is a negative effect while the green - positive) appear above the armor info.



In addition, a number will appear next to the affected unit's stat: it is added to or subtracted from the base value (again the color highlights whether it is a negative or positive change).



You can also make the Left Mouse click on the **Unit's Name** button to see the extended **Unit Info** screen (alternatively, by pressing 'T' after you have chosen a unit).



The **Unit Info** screen has three different categories:

- The **Info** screen shows all the Stats the unit has, as well as available Skills that the unit has learned and the Effects that the unit is currently subjected to. In addition, by clicking on the **Customize** button, you will be able to change the appearance of this unit;

INFO LEVEL UP HEROES ACQUIRE

Riflemen CREW PARAMETERS

10 / 10 Customize

SKILL EFFECTS

Low Profile Athletics Enter Building

Enter Wreck Board Transport Anti-Tank Grenade

Assault

Rough Terrain

A squad of riflemen is armed with M1 Garand rifles. This unit is also equipped with anti-tank grenades to attack vehicles.

Camouflage Insignia Rename Unit Presets

Hue

Saturation

Brightness

Tiling

Reset Save as Preset Apply to All Apply

- The Level Up screen shows the Skills the unit has learned, as well as the Skill Tree where you can learn a new Skill;



- The Heroes screen shows the information about all the Heroes that you currently have: their short biography, skills, class of unit they can be assigned to, etc. If no hero has been unlocked yet, you will not be able to interact with the Heroes Button above.

INFO
LEVEL UP
HEROES
ACQUIRE ✕

Riflemen
SKILLS



 Low Profile	 Athletics	 Enter Building	 Enter Wreck
 Board Transport	 Anti-Tank Grenade	 Assault	

ASSIGN HEROES

Richard Winters 	 Deadeye
Lafayette G. Pool 	 Lucky
Matt Urban 	 Commanding Presence

Richard Winters

Richard Winters was the commanding officer of Easy Company, 2nd Battalion of the 506th Parachute Infantry Regiment of the 101st Airborne Division. During D-Day, the German artillery shot down the Easy Company HQ, killing their commanding officer, and that's when Richard Winters took command of survivors and led his unit of 13 men to attack the German artillery battery. This assault would be known as the Brécourt Manor Assault. This operation would promote Richard Winters to captain.

Richard Winters would lead many successful attacks and operations throughout the rest of the War. Under his command, Easy Company assaulted 200 German soldiers with only 20 men during Operation Market Garden, fought in the Battle of the Bulge, liberated Holocaust prisoners at the Dachau concentration camp, and even captured Hitler's personal mountaintop retreat, Berchtesgaden. For his achievements, Richard Winters was awarded the Distinguished Service Cross.

RECALL
Hero cannot be assigned
ASSIGN

After choosing one of your units, you will immediately see where it can go



and who is in its Line of Fire sight, in other words - whom you can shoot at. A little orange icon of a shell impact on a tile means that at least one enemy unit has its eyes on that tile and will shoot at your unit (Overwatch) if it goes to that tile. If the enemy unit is hidden and your unit doesn't know of its existence, you will not see any warning icons on the tiles, but that doesn't protect you from getting hit.



When you point at the enemy after choosing a unit to control, you will see a small icon appear.

It is a **Quick Prediction** of your attack, as well as the enemy's Return fire. The percentage signifies the chance of hitting the target, and the numbers below show the potential damage (how many Crew Members are going to die) to the target if hit.

Simultaneously with the prediction icon, you will see the **Combat Prediction** info panel appear in the upper right corner of your screen.

YOUR UNIT'S ATTACK				
	Riflemen	VS HE Attack	75 mm Pak 40	
	Crit	Hit	Graze	Miss
CHANCE	2%	48%	46%	4%
DAMAGE	4	2	1	0
ENEMY'S UNIT RETURN FIRE				
	75 mm Pak 40	VS HE Attack	Riflemen	
	Crit	Hit	Graze	Miss
CHANCE	21%	52%	28%	0%
DAMAGE	4	2	1	0
Press the C key to show the extended combat prediction				

It provides more detailed information on the potential outcome of your attack. Pressing 'C' will show you the extended combat prediction.

YOUR UNIT'S ATTACK				
	Riflemen	VS HE Attack		75 mm Pak 40
	Crit	Hit	Graze	Miss
CHANCE	2%	48%	46%	4%
DAMAGE	4	2	1	0
Final accuracy calculation				
Unit's accuracy				120
Positive multipliers		Negative multipliers		
		Cover	-20%	
		Target profile	-20%	
Final accuracy				$120 * 0.80 * 0.80 = 77$
Damage modifier calculation				
HE Attack	30	Enemy armor	10	
Final HE Attack	30	Total armor	10	
Damage modifier	$= ATAN((30-10)/50) * 2/PI = 24\%$			
ENEMY'S UNIT RETURN FIRE				
	75 mm Pak 40	VS HE Attack		Riflemen
	Crit	Hit	Graze	Miss
CHANCE	21%	52%	28%	0%
DAMAGE	4	2	1	0
Final accuracy calculation				
Unit's accuracy				120
Elevation Effect				6
Positive multipliers		Negative multipliers		
		Target profile	-20%	
Final accuracy				$(120+6) * 0.80 = 101$
Damage modifier calculation				
HE Attack	24	Enemy armor	10	
Final HE Attack	24	Total armor	10	
Damage modifier	$= ATAN((24-10)/50) * 2/PI = 17\%$			
Press the C key to hide the extended combat prediction				

To better understand the **Combat Prediction** information, you need to check the **Combat Mechanics** section of the manual.



All units have a number of **Reactions**, the total of which you can find on the **Unit Stats** panel along with the number of **Move Points**, **Attacks**, and **Morale** available.

Right above the **Unit Action** panel, you can find special **HQ skills** for this mission.

Two permanent **HQ skills** will always be there for you:

- **Rally** restores the chosen unit's **Morale**.
- **Reinforcement** restores the chosen unit's lost **Crew members**.

And there are temporary **HQ skills** that change from mission to mission.

For example, in the first mission of the **American Campaign**, you have the option to use **Naval Bombardment**.

Notice that every **HQ skill** has a **Cooldown**.

In the lower-left corner of the **Battle Screen**, you can find the interactive **Map** panel. In addition to the map of the mission, which you can use to move from one location to another with the **Left Mouse Button** click, there are several buttons available to you.



The **Cog** icon opens the Menu screen (alternatively, by pressing 'Esc');



The **Optical Sign** icon allows you to turn on/off the Line of Fire on the map (alternatively, by pressing 'L');



The **Grid** icon allows you to turn on/off the tile grid layout of the map (alternatively, by pressing 'Ctrl+G');



The **Bar Chart** icon opens the Combat Results screen with the mission statistics. In addition, you can change the difficulty of the game there (alternatively, by pressing 'X');



The **Crosshair** icon puts your camera in the default position (alternatively, by pressing 'M');



The **Soldier** icon makes the Unit List icons bigger or smaller (alternatively, by pressing 'U').

When your units are out of Actions and Move Points, unable to do anything else, you need to pass a turn to the AI. To do so, click on the **End Turn** button in the upper right corner of the Battle Screen (alternatively, by pressing **Ctrl+Enter**).



Notice that there is a number of turns left before the **Game Over**, indicated right above the End Turn button.

A few additional tips:

- You can turn on/off the **Fog of War** by pressing 'Ctrl+F.' It strips the area your units cannot see of color. This way, you can better understand the distance of your units' collective vision.

However, remember that the visible area out of the Fog of War might still have hidden enemy units that you do not see.



- To quick save, press 'F5.' To quick load - 'F9.'
- Pressing 'F6' opens the list of hotkeys.

Last but not least, the game has a **photo mode**, accessible by pressing 'P.' If you want to commemorate some moments from the battle or capture the spirit of War World II, feel free to check it out.



VICTORY SCREEN

After the main objectives have been completed and the end-mission briefing has concluded, the Victory Screen appears with the summary of what transpired throughout the mission.

MISSION REWARD		ENEMIES KILLED		UNITS LOST	
VICTORY BATTLE RESULTS					
PRESTIGE Primary objectives 500 Secondary objectives 0 Total 500					
NEW UNIT AWARDS					
 					
		Total cost: 0		Total cost: 0	
CHANGE DIFFICULTY					

First of all, if you have not finished all secondary objectives, you can click on the **Return To Game** button and take control of the remaining units once more to complete any unfinished objectives.

The Victory Screen has three columns.

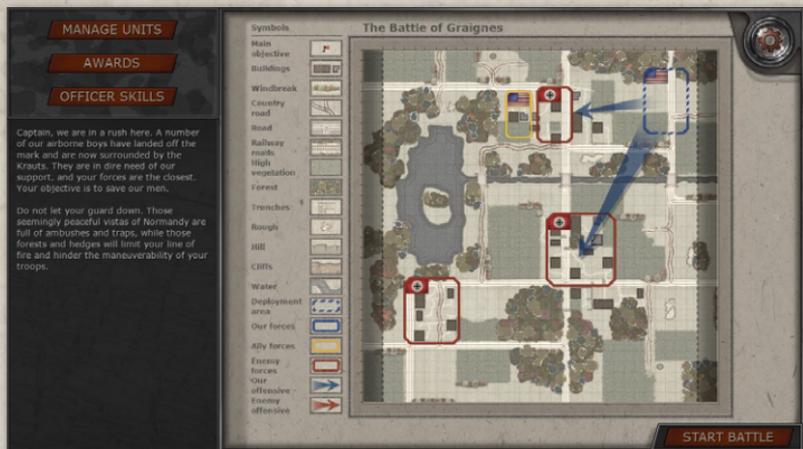
- **Mission Reward** shows everything you gained or unlocked with the completion of the mission. It shows the number of Prestige you earned for the completed objectives, which you will be able to use later on during the Headquarters screen. Below the Prestige information, you will find two more columns: New Unit/Hero and Awards. The New Unit/Hero column shows an unlocked unit or hero, which can be acquired on the Headquarters screen. Awards show the insignia you have received for completing objectives. You can earn two awards per mission, one for main objectives and another for secondary. Each award equals one Officer Skill Point, which you can use to learn Officer Skills between missions.
- The **Enemies Killed** column shows every enemy unit you have eliminated;
- The **Units Lost** column shows how many units you have lost during the mission.

If you have found the mission too challenging, you might consider changing the game difficulty by clicking on the **Change Difficulty** button at the bottom of the Victory Screen.

If you are ready to move on to the next mission, click on the **Finish Operation** button.

HEADQUARTERS SCREEN

Before every mission except for the first one, you will find yourself before the Headquarters screen. This is the place of preparation before embarking on the history-defining missions.



To better envision the upcoming fight, you will have a map of the next mission before your eyes. It has a list of necessary map signs to read and understand each map. On the map, you will see where your main objectives are, where your units will be deployed, where some of the enemy and allied units are, etc. Looking at the location beforehand is essential, because knowing the type of location the fight will be happening in, you will know what type of units you should take for the mission.

Clicking on the **Manage Units** button moves you to the Unit Management screen.



The Unit List column shows every unit you have for this mission. Buttons Info, Level Up, and Heroes work the same as during the battle, after choosing one of the units, you can get more information about the unit, learn new skills, and assign heroes through those buttons. In addition, you can buy transporting vehicles in the Unit List column for the units that can be boarded. For that, you need to click on the Truck icon.



When the mission starts, your unit will be automatically boarded onto the assigned vehicle. If there are a few boarded vehicles under your control, to distinguish which one transports which unit, pay attention to the icon of each truck, as it will include a smaller icon of the currently transported unit.



The **Acquire** panel on the Management screen is the place where you can choose a unit to replace one of yours.

Since each mission takes place in a different type of location and the usefulness of some units depends largely on the location (for example, Flamethrowers are great at burning out enemies from the buildings, but they are extremely vulnerable in the open areas), you might want to change some units for more suitable ones. And if we are talking about armored vehicles, some tanks have tougher armor and more powerful guns: changing your current tanks for stronger ones is always a good strategy.

How does the exchange happen exactly?

Each unit has an assigned value. When you replace a unit, its value will be subtracted from the cost of the replacement unit. If your unit is more expensive than the unit you want to get, you will get the unspent Prestige back.



The difference in stats can be seen in the upper region of the Acquire screen: to the left is a picture of the unit you are replacing, and to the right is a picture of the replacement. In the middle, you can see the stats being affected by the replacement.



Below the comparison window of the Acquire screen, you can find the pool of units you can choose as a replacement. If you want to narrow down the search for your perfect new unit, use the **Shop filters** where you can click on the Unit Type button and see only the class of units you are interested in purchasing.



If the unit that you want to be replaced has gained enough experience and unlocked some of its skills, the **same amount of experience will be carried over** to the new unit. However, if these units have different sets of skills, you will need to reassign your skill points and study new skills once again.

Now, let's return to the map and click on the **Officer Skills** button. It will move you to the Officer Skills Tree for three types of units: Infantry,

The Officer Skills Tree is divided into three columns: Armor, Infantry, and Artillery. Each column shows a progression of skills from level I to level VI, connected by vertical lines. Skills are represented by icons and text labels.

Armor	Infantry	Artillery
Retribution	Thrill	Shooting Practice
Tank Fear	Forward Observer	High precision
Concealment	Pathfinding	Covered Position
Tank Fear II	Forward Observer II	High precision
Replenishment	Encirclement	Destroyer
Decisive Attack	Tenacity	Demolition
Replenishment II	Encirclement II	Extra protection
Ambush	Advanced AT Tactics	Vantage Point
Flanking	Vantage Point	Ambush
Ambush II	Stamina Training	Vantage Point II
Flanking II	Vantage Point II	Ambush II
Tenacity	Optics	Tenacity
Shock Attack	First Aid	Quick Aiming
Deadly		Fast Reload

RESET SKILLS Skill points: 2 LEARN

Armor, and Artillery. For each mission, you can earn no more than two **Officer Skill points**, by completing primary and secondary objectives, and these skill points you can use to learn new passive abilities.

Since you can earn a maximum of **16 Skill Points**, you should prioritize what skills you want more than others and spend your hard-earned skill points cleverly. However, you can reapply all your skill points at any time you want. To do so, you need to click on the **Reset Skills** button and every invested skill point will be returned to you for another round of spending and learning.

The **Awards** button leads to the Awards screen where you can see all the insignia you can get for this campaign. The awards in full color are those you have gotten for successfully completing objectives.



In addition, you can see your current rank, as well as what the benefits of this rank are.

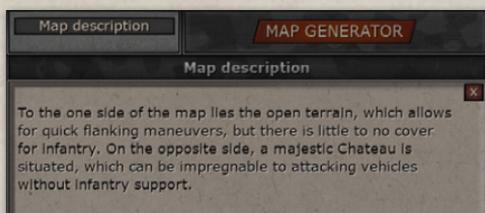


SKIRMISH SETUP SCREEN

Now, let's cover the Skirmish mode in Headquarters. This is where you can fight against AI on several maps we prepared for you or on the map you can create yourself.

After clicking on the Skirmish bar in the Main Menu, you will see the next screen.





On the left side of the screen, you have the Map column. There is a list of six maps you can use immediately: Cannoned at Royal Chateau, Military Base Takeover, Riverside Battle, Crossfire at Three Hills, Marshland Clash, and Countryside Skirmish.

Each of the maps has a different size, number of flags, and player count - all of the important information is right above the list next to the

chosen map image. Immediately below the map, you can find the Map description button, clicking on which will provide short info on the map. And you can click on the **Map Generator** button if you want to quickly create a new map.

On the right side of the screen, you have the **Options** column. In the upper half of the screen, you can choose the number of your party, which affects where you will appear on the map at the beginning of the Skirmish, a country for yourself and your enemies (or you can leave it random), a color of your units on the map, as well as your enemies, and last but not least - the Bias for each party.



Bias influences how much Prestige you can get each term. If you set a lower Bias, you will gain less Prestige per round. If you make it higher, it will be vice versa. By manipulating the difference between your Bias and that of the enemy, you can change the difficulty of the fight. If you have 30% Bias while the enemy has 130%, you will have a harder time fighting against the enemy, since you will have far less Prestige to buy new units.



Next, you can pick the Victory conditions of the battle: some, all, or one of them.

- The **Conqueror** condition: you have to capture the HQ locations (starting points) of all enemy players. If you lost yours - you lose the match.
- The **Control the Flag** condition: there will be several flags on the map that players need to capture. Each captured flag rewards the captor with a **Victory point** at the start of their turn. To win the battle, you need to earn a total of **Victory points**, which can be set in the **Advanced options** below. Note that capturing a flag by one player doesn't prevent another player from recapturing it - and earning **Victory points** when their next turn starts.
- In the **Wipe them out** you have to eliminate all enemy units to win.
- The **Time** condition puts a limit of turns into the game. If you play the battle with only this **Victory condition**, then when the turns end, the player with the highest **Score** will win. The **Score** of each player equals to the combine **Prestige cost** of all enemy units this player eliminated throughout the game. If you play both with 'Time' and

any other Victory condition, then you need to accomplish the other condition's requirements before the time ends (or get as near to those requirements as possible).



In the **Advanced Options** column, you can set a limit on turns and victory points (VPs only applicable when you play 'Control the flag'), choose how much Prestige you will be starting with, as well as the income rate of the currency.

You can decide what will be the unit's starting level and whether you have heroes during the

battle. Finally, you can choose which HQ Skills can be used during the Skirmish.

Click on the **Start Game** button when you have customized the rules of battle and are ready to show AI who's a better tactician.

SKIRMISH BATTLE SCREEN

The Skirmish battle screen is almost identical to that of the Campaign (read more about the UI of the battle screen in the correspondent section of the manual), but it has an addition - the **Prestige** button. The button shows the number of Prestige you currently have, and by clicking it, the Acquire Units screen will appear (alternatively, you can press 'B' to immediately open that screen).



After you have bought all the units you want to get onto the battlefield, you need to deploy them. You can deploy no more than a certain number of units per turn. It depends on the number of deployment tiles per player available on the map, in general, there are 12 to 16 deployment tiles, but there can be much more in the player-made maps.



The deployment tiles, which you cannot see, have four levels of Priority. The 1st Priority tile is situated under your country flag, which is also your headquarters for the Conqueror Victory condition. The tiles of the 2nd, 3rd, and 4th Priorities are in the adjacent tiles, but their layout differs from one map to another, as we tried to put the deployment tiles in the most tactically convenient places.

Moreover, each type of unit has its own level of Priority. The order by which your units will be deployed is the following:

1. Heavy tank;
2. Medium tank;
3. Assault gun;
4. Light tank;
5. Scouts;
6. Self-propelled AA gun;
7. Self-propelled AT gun;

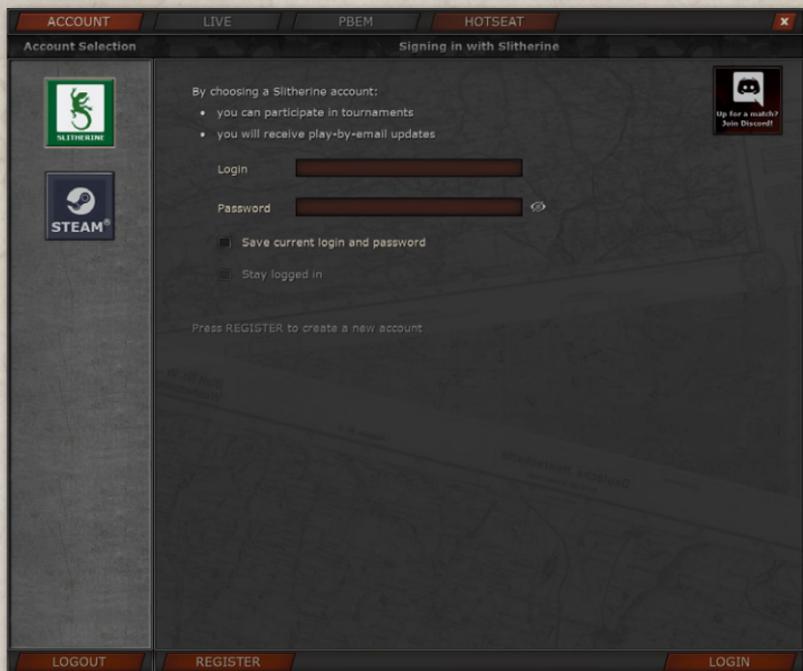
8. Self-propelled artillery;
9. Flamethrowers;
10. Machine gunners;
11. Mortar team;
12. AT team;
13. Riflemen;
14. Snipers;
15. Elite infantry (Commandos, Rangers, Panzergrenadiers);
16. Paratroopers;
17. Towed AA;
18. Towed AT;
19. Towed artillery;
20. APC;
21. Armored car;
22. Truck

So, if you acquired one Heavy Tank, two Medium tanks, and four scouts, then the heavy tank would be deployed under your country's flag while the other two tanks and four scouts would most likely be in the adjacent tiles.

You cannot deploy units on a tile that is not your deployment tile, which means that if your attack on the other side of the map fails and your units are eliminated, you will need to send new troops all the way from your headquarters point.

MULTIPLAYER

If you want to play against other players, Multiplayer mode will be quite helpful.



After clicking on the Multiplayer bar in the Main Menu, you will see the following screen.

To play with other players, you need to sign in. There are two types of accounts: Slitherine and Steam. Both allow you to play, however **Slitherine** account will also keep you updated about your play-by-email games and give you the opportunity to participate in the Headquarters tournaments.

If you do not have a Slitherine account, you can always make one.

If you do not know with whom to play, you can go to the Discord channel by clicking on the **Discord** icon in the upper right corner of the screen. There you might find other players who want to have some friendly tactical competition.

After signing in, you will be able to play Live and Play-by-Email.



When you click on the **Live** button, you will see a list of games you can potentially join. Obviously, if a live game requires a password, you must know it to access this particular party.

You can also create your own game and wait for others to join. Clicking the **Create Game** button will transfer you to a screen similar to the Skirmish options. The only difference is that you can enable a time turner in your game, setting a time limit for every player's turn (from 30

to 1000 seconds or 0.5 to 16 minutes), and create a password for your game.

Note that once you are in the live game, you won't be able to leave without automatically losing.

In PBEM, you can stop worrying about leaving the game early. It is perfect for those who can't play long sessions in one sitting.



To create a new game, you click on the **New Game** button and follow the same steps as with the Live. By clicking on the **My Games** button, you will see the list of the ongoing parties. If it is your turn, you will be able to click on the **Play Turn** button. The **Finished Game** screen allows you to see the last turn of your previous battles, see statistics, and reminisce on what went wrong or take pride in how you dispatched the opponent.

Hotseat multiplayer is for you and a friend or friends to play on the same device. You do not need to have an account to play it. Everything else about this mode works the same as other Multiplayer modes or Skirmish.

MULTIPLAYER BATTLE SCREEN



The Multiplayer battle screen is almost identical to that of the Skirmish and Campaign (read more about battle screens in the sections of the manual concerning Skirmish and Campaign battle screens), but it has a **Chat** button exclusive to the Multiplayer only. You can click on the envelope icon to access the chat.

You can choose the addressee of your message or send it to everyone.

BASIC CONTROLS

CAMERA CONTROLS

To move your camera over the battlefield, you can:

- use the 'W, A, S, D' keys;
- move your mouse cursor to the edge of the screen in the direction you want to move;
- hold the **Left Mouse Button** and drag the camera in the direction you want.

In order to rotate the camera, 'Q' is responsible for the clockwise rotation while 'E' - counterclockwise.

To set the camera into the free mode, you have to hold down the **Middle Mouse Button**. To zoom in and zoom out, use the **scroll wheel**.

To return to your chosen unit wherever it is, press **Spacebar**.

UNIT CONTROLS

To take control of your unit, you need to click on it with the **Left Mouse Button**. Or you can choose one of the units on the **Unit List** panel below. There are also a few useful hotkeys to switch between your units.

- Pressing 'N' chooses the next unit that hasn't moved or attacked yet, while 'Ctrl+N' gets the previous such unit under your control.
- Pressing 'Tab' and 'Ctrl+Tab' chooses the next or previous unit of the list and puts it under your command, respectively.

To move the unit, you can simply **right-click** on any **EMPTY** tile within the **Move** area of the unit. The **Move** area is surrounded by a bolder type of white line if you have a tile grid turned on. Alternatively, you can select **Move** on the **Unit Actions** panel and **right-click** on one of the highlighted tiles.

Note that every Unit Action has a hotkey assigned to it, which is depicted in the lower right corner of the Unit Action icon. In the case of the Move Action, by pressing 'V' you can select this action.

To attack, you can **right-click** on the enemy within your Line of Fire, or use **Attack** on the Unit Actions panel, just like you do with the Move Action.

Each unit has a number of Unit Actions, some of which are unique to the Class this unit belongs to. Choosing the one you want to use and **right-clicking** it on the target is how you apply all of them. However, every action has a cost and some have a cooldown, so pay attention to what your unit has already spent during the turn and what you can still use.

GAMEPAD CONTROLS



- **Camera.** To move the camera you need to use the Left Stick. Pull the Right Stick to the left to rotate the camera clockwise and to the right to do it counterclockwise. To set the camera to the default position, push the Left D-pad button and choose “Default camera position” with the Left Stick or D-pad before using the “A” button to confirm your choice. The camera goes into free mode when you hold down the Left Stick Button.
- **Movement.** To move the unit, you can simply press “A” on any EMPTY tile within the Move area of the unit. Alternatively, you can select Move on the Unit Actions panel by pressing the “X” button and then pressing “A” on one of the highlighted tiles.
- **Unit Action.** For any other unit action (attack or unit’s special actions), you can use the same approach as with the Movement - the controls are the same.
- **End Turn.** To finish your turn, hold down the “Y” button.
- **Objectives.** To find the location of your Objective, press the Up D-pad button to go to the list of Objectives and press “A” on the name you’re interested in, then the camera will automatically move to the tile of interest and highlight it. If there are several such tiles, you need to press on the Objective name several times - every time you press, the next tile of interest will be highlighted. If your Objective is to kill an enemy unit, which has not yet been discovered, then the tile will not be highlighted.
- **Unit List.** You can switch between units via the Left Bumper and Right Bumper buttons.
- **Map.** Press the Left D-pad button to interact with it.
- **HQ Skills.** Press the Right D-pad to interact with it.
- **Crew Members panel.** Press the Down D-pad button to interact with it.

- **Unit Info screen.** Press the Right Stick to open the Unit Info screen.
- **Combat Prediction.** To open/hide the extended Combat Prediction screen, you need to press the Right Trigger.
- **Terrain Info.** To open/hide the extended Terrain Info screen, you need to press the Left Trigger.

Note that you need to assign Gamepad controls first in the Settings menu, by clicking on the Game button and choosing the Gamepad controls option, to play with a gamepad.

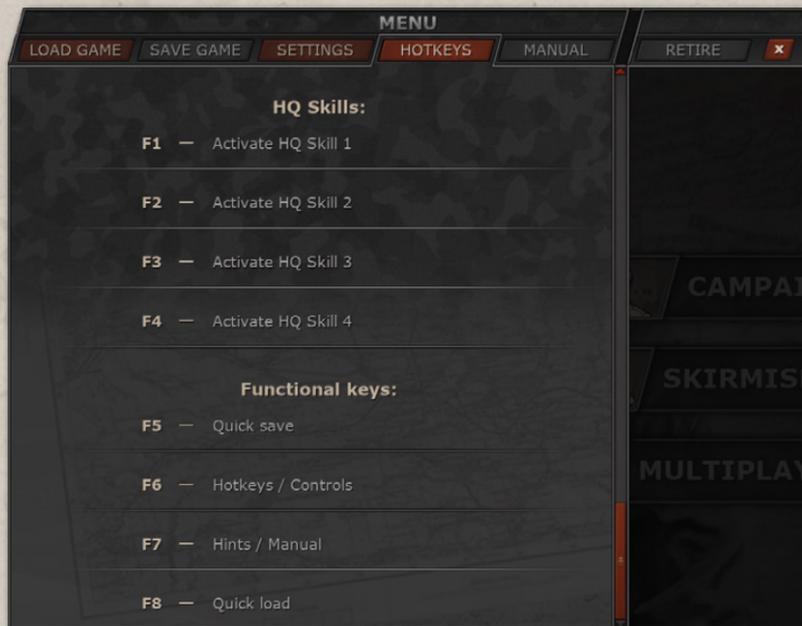
HOTKEYS

Here is an extensive list of hotkeys:

Esc	Open/Close Menu, deselect unit
W,A,S,D	Camera movement
Q, E	Camera rotation
M	Set camera position to default
Spacebar	Place camera above the selected unit
N	Next unmoved unit
Ctrl+N	Previous unmoved unit
Tab	Next unit
Ctrl+Tab	Previous unit
Ctrl+Enter	End turn
Ctrl+H	Hide/show interface
Ctrl+G	Hide/show tile grid
Ctrl+F	Hide/show Fog of War
I	Open the Unit Information screen
L	Toggle Line of Fire on/off
C	Toggle extended Combat Prediction
X	Open/Close Statistics screen

U	Toggle big/small unit icons
B	Open/Close Acquire units screen
P	Open/Close Photo mode
F	Attack
R	Rotate
G	Suppressive fire
T	Swap positions
V	Move
O	Toggle Overwatch on/off
1	Skill slot 1
2	Skill slot 2
3	Skill slot 3
4	Skill slot 4
5	Skill slot 5
6	Skill slot 6
7	Skill slot 7
F1	Activate HQ Skill 1
F2	Activate HQ Skill 2
F3	Activate HQ Skill 3
F4	Activate HQ Skill 4
F5	Quick save
F6	Hotkeys / Controls
F8	Quick load

If you want to remind yourself which hotkey responds for which action, you should open the Menu, by pressing the **Esc** button during the Battle screen, and click on the Hotkeys button. The **'P'** button leads straight to the Hotkeys subsection of the Menu.



Alternatively, to access the Menu, you can click on the Cog button of the Map Panel.

COMBAT MECHANICS

MOVEMENT

The first thing you need to know is how to move your troops around the battlefield, what factors can affect troops' movement, how to move towed guns, etc. In this section, we will have a closer look at how far units can move, what other movement-related actions they have, and what to do if your unit cannot move.

MOVE ACTION

The first action on your Actions panel is always the Move action. It allows you to move your unit any distance within its Move area. You can make a Move action any number of times per turn, before, after, or between your Attack actions. Your only limitation is your current Move points.



MOVE POINTS PARAMETER

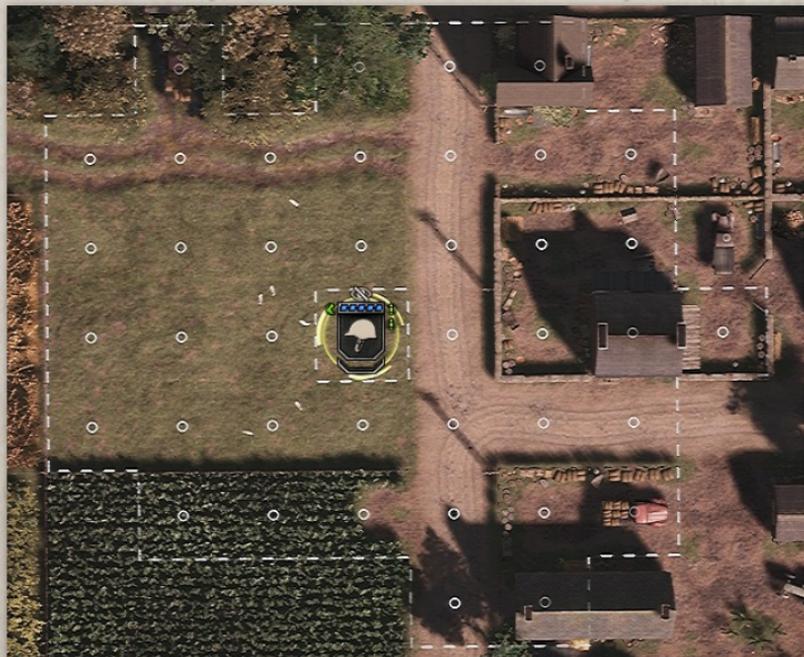
The Move points parameter indicates how far a unit can move. Looking at the Move points indicator below you can see two numbers - Current Move points and Maximum Move points. The **Maximum Move points** parameter shows your total Move points pool that may change during the battle if you lose Crew members that affect Move points (such as Driver),

or get a negative effect (such as Broken track). The **Current Move points** value shows how many Move points a unit can still utilize this turn.



MOVE AREA

The Move area indicates all Tiles, to which a unit can travel this turn. It is based on a unit's Current Move points, Terrain and its passability,



and Move cost. After a unit makes a Move action, the Move area is recalculated to adjust to the new Current Move points value. Allied and enemy units alike are considered unpassable tiles and affect the Move area.

MOVE COST

Every tile has its Move cost - how many Move points a unit has to spend to enter that tile. The basic value is 1 Move point per tile - you can expect that for Tracked or Infantry units on a Clear or a Road terrain. However, many tiles are more difficult to move through and have higher Move costs. Move cost also depends on the movement method.

Move Points Cost	On Foot	Towed	Tracked	Half-tracked	Wheeled	Off-Road
	1	1	1	1	1	1

MOVE METHOD

The Move method describes how a unit moves. There 6 methods: Wheeled, Off-road, Half-Tracked, Tracked, Towed, or On foot. Every terrain has different Move costs depending on the Move methods. Additionally, some Terrain types, Buildings, and Obstacles may be unpassable for certain Move methods. For example, Tracked or Wheeled units cannot move through Buildings while On foot units can. At the same time, On foot units cannot go through the Barbed wire Obstacle while Tracked units can.

DIAGONAL MOVEMENT RULES

A unit can Move diagonally if both adjacent tiles they are passing through are passable. The cost of moving diagonally depends on the Move cost of 3 tiles - the destination tile and two adjacent tiles a unit moves through. The diagonal Move cost is calculated as follows:

Example 1:

Tile A Cost 2 MP	Tile B Cost 1 MP
Tile C Cost 4 MP	Unit

Diagonal Move cost = $(0.5 * \text{CostA} + 0.25 * \text{CostB} + 0.25 * \text{CostC}) * = (0.25 + 1 + 1) * = 3.18$ (cheaper to go costA + costB = 3).

Example 2:

Tile A Cost 2 MP	Tile B Cost 1 MP
Tile C Cost 3 MP	Unit

Diagonal Move cost = $(0.5 * \text{CostA} + 0.25 * \text{CostB} + 0.25 * \text{CostC}) * = (0.25 + 0.75 + 1) * = 2.83$ (best route, alternative costs: Tile C -> Tile A = 3+2=5 and Tile B -> Tile A = 1+2=3).

ROTATE ACTION

During your turn, all your armored units can use the Rotate action to change the direction they are facing. The rotation happens without moving out of the tile.

What is the point of this action?

1) Each armored unit has four types of Armor: Top, Front, Back, and Side Armor (more on that you can read in the correspondent section of the manual). The strength of each Armor differs, and so the direction of the attack matters. If you know that the enemy is coming from a certain direction, you can prepare for the following enemy attack by using Rotate and putting your unit in the most favorable position.

2) Units with a Rotating turret or Non-rotating turret have limited Overwatch angle and Return fire angle, so their facing is an important factor for Overwatch and Return fire.

Units, like Infantry, that have no varied armor and 360-degree Overwatch and Return fire have no need to use Rotate action, so such units have no Rotate action on their Actions panel.



MOVE BACKWARD ACTION

The Move Backward action allows you to move while facing the other direction. Most of the armored units have the strongest armor up front, but when you move, your unit turns to face the direction of the movement, and if it was facing the enemy, then when moving, it would open its vulnerable rear to the enemy.

So, if you know your unit will likely be attacked from behind while moving forward, it is preferable to turn around and use the Move Backward action, instead of a regular Move action. That way, you will get a much better chance of surviving the fight.



Note that units that have uniform armor values - like Infantry or Truck - do not have this Action, as it would serve no purpose for them.

SWAP POSITIONS ACTION

A unit cannot go through a tile with another unit - be it your or enemy unit. You can, however, use the Swap positions action to move your unit into a tile occupied by your other unit. Both units will move to each other tiles and will both spend the Move cost of entering the corresponding tile. There is **no extra cost** - just the regular Move cost for each unit. Units have to be in adjacent tiles to make a Swap position action.



CLEAR WRECK ACTION

Destroyed enemy vehicles or other large objects can block the path, making a tile unpassable for your vehicles. In most cases, you can use Clear Wreck action to remove such obstacles from your way. Clear Wreck



cost is equal to the Move cost of entering a tile with a Wreck. So, it would be **twice as costly** in terms of Move points to enter a tile with a Wreck - first, you spend the Move points for the Clear Wreck action, and then you spend them again for the Move action.

UNITS TRANSPORTATION

Infantry and Towed units can board the transport and move inside a Truck or an APC. It allows you to transport the less mobile units more efficiently and keep up with the armored units and self-propelled guns. Transport units have a **Drop-off** action, while units that can be transported have a **Board** action.



REPAIR TRACK ACTION

Tracked units could lose the ability to Move if they have a Broken track negative Effect. You can use the Repair track action to remove that effect and regain the ability to use the Move action.



ATTACK

This section explains how to attack, what types of attacks there are, and what key rules apply to your attacks.

ATTACK ACTION

The second action on your Actions panel is always the Attack action. It allows you to attack an enemy unit within the Line of Fire. You can make an Attack action several times per turn, limited by the number of attacks.



NUMBER OF ATTACKS PARAMETER

The number of Attacks (or simply Attacks) indicates how many times per turn you can make an Attack action with this unit. Usually, it is 2 Attacks, but some Skills, especially Hero skills, can increase that number. Additionally, some special attacks may require more than 1 Attack to be used - you can always see that in the Action description.



ATTACK RANGE

Every unit has an Attack range parameter that indicates the maximum range the unit can attack the enemy in. If the enemy unit is in front of your unit, the Attack range equals the number of tiles between you and the enemy unit. In the case of diagonal tiles, we calculate the range as the Number of tiles / $\sqrt{2}$.



LINE OF FIRE

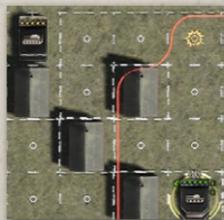
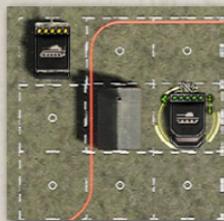
Line of Fire is the area that includes all tiles where your units can attack the enemy. It depends on two main factors - Attack range and Line of Fire blockers. If there are no blockers, then Line of Fire just shows the area within the Attack range. However, usually, some blockers limit the area.

The Line of Fire blockers are:

- Terrain (Forest)
- Buildings
- Obstacles (fences, walls, tree lines, etc)
- Elevation levels

Line of Fire blocking rules (without Elevation):

1. The unit can see a tile if the line drawn between the center of the unit's tile and the target's tile does not cross any **blocking tile** (e.g., Forest) or a tile with a **blocking edge** (e.g., Treeline)
2. The unit can see a tile even if one or more blockers are touching that line, but only if they are all on one side of the line: all on the left or all on the right.
3. When a blocking tile (or blocking edge) obstructs the LoF, the blocking tile itself is still within the Line of Fire and can be fired upon. Only the tiles behind it are beyond reach.



- Extra calculations also consider the Elevation levels of Terrain and the height of Forrest, Buildings, Obstacles, etc. With enough Elevation levels, you can fire over certain obstacles. Also, you should keep in mind that the LoF calculation works similarly for both units uphill and downhill - they could see each other, however, units uphill gain an extra Spotting bonus from Elevation. So, if both units have a lot of Spotting, or are close to each other - they will be on equal footing in terms of vision, but at a long-range or with low Spotting, the unit uphill will have better vision.

HE ATTACK PARAMETER

High-Explosive Attack value indicates how effective the unit's attacks will be against the Unarmored targets (targets with Soft Defense).



AP ATTACK PARAMETER

Armor-Piercing Attack value indicates how effective the unit's attacks will be against the Armored targets (targets with Hard Defense).



SUPPRESSION FIRE ACTION

A Suppression fire action allows to attack a tile without a visible enemy unit. Suppression fire takes 2 Attacks to make and equals 1 regular Attack in terms of damage but deals double damage to Morale, so it equals 2 regular Attacks in terms of inflicting Morale loss on the enemy. It is useful if you can guess or predict the location of an enemy unit, but have not spotted it yet.



REACTION ATTACK

This section explains what Reaction attacks are and how they work. Reaction attacks are the attacks units make during another player's turn. There are two ways to utilize Reaction attacks - Overwatch and Return Fire.

NUMBER OF REACTIONS PARAMETER

The number of Reactions (or simply Reactions) indicates how many times per turn the unit can make a Reaction attack of any type. Usually, it is 1 + the number of unused Attacks, but some Skills, especially Hero skills, can increase that number. Additionally, if you increase the number of Attacks, you will also increase the potential number of Reactions (if you leave these Attacks unspent during your turn). Usually, units have 2 Attacks and 1 additional Reaction attack. This means that if the unit did not attack on its turn, it would have 1+2=3 Reactions. However, if it did attack and spend 2 Attacks, it would only have 1 Reaction. Therefore, you can control how many Reactions you leave to be available during the enemy's turn.



OVERWATCH ATTACK

During the enemy turn, a unit can automatically attack an enemy unit when it enters its Line of Fire, making an Overwatch attack. Each Overwatch attack reduces the number of Reactions by 1. If the unit runs out of Reactions, it can no longer Overwatch. Additionally, if the unit was attacked, this unit can no longer Overwatch this turn, regardless of other factors.

Factors that are required to make an Overwatch attack:

- Your unit was not attacked by the enemy this turn;
- Your unit has at least 1 Reaction left;
- You have Spotted or Identified the enemy unit (can see it);
- The enemy unit is within your unit's Line of Fire;
- The enemy unit is within your unit's Overwatch angle;
- Your unit could deal more than 0 damage to the enemy unit (there is at least some chance to deal 1 or more damage);
- You did not disable the Overwatch yourself by activating the Hold Fire action (learn more in the correspondent section below).

Note that Infantry units carrying AT grenades (Riflemen, Elite Infantry, and Paratroopers), normally cannot Attack or Overwatch armored units at range. However, they can Attack or Overwatch this unit using AT grenades if they are in an adjacent tile (at point-blank range). This makes Infantry ambushes very deadly, when in a Building or Forest terrain.

TURRET TYPE: OVERWATCH AND RETURN FIRE ANGLES

There are 3 Turret types in the game:

- **Non-rotating Turret** - used by most assault guns and all types of artillery guns. A Non-rotating type turret means that the unit can Overwatch and Return Fire at a 90-degree angle.



- **Rotating Turret** - used by tanks and some other vehicles. A Rotating type turret means that the unit can Overwatch at a 90-degree angle and Return Fire at a 360-degree angle.



- **Infantry** - used by units that can face in multiple directions - all Infantry units. An Infantry-type turret means that it does not matter which direction the unit faces, it still can Attack, Overwatch, and Return Fire at a 360-degree angle.



An Overwatch angle is an angle at which the unit can Overwatch.

A Return Fire angle is the angle at which the unit can do a Return Fire attack.

WAYS TO AVOID OVERWATCH

To avoid enemy Overwatch:

- Do not enter the enemy's Line of Fire;
- Ensure it has no Reaction left;
- Disable its ability to Overwatch, by attacking with another unit, ideally from a greater range - use Artillery or Mortars. An HQ skill attack can also do the trick;
- Attack from outside the enemy's Overwatch angle.

RETURN FIRE ATTACK

During the enemy turn, when attacked, a unit can automatically respond with an attack of its own immediately after the enemy attack, thus making a Return Fire reaction attack. Every Return Fire attack reduces the number of Reactions by 1. If the unit runs out of Reactions, it can no longer make Return Fire attacks.

Reasons why the unit could not make a Return Fire attack:

- The unit is out of Reactions
- The unit has 0 AP Attack and the enemy has Hard defense (is an Armored unit)
- The enemy is out of Attack range (or Line of Fire)
- The enemy is outside of the Return Fire angle
- The enemy is Unseen (see Levels of Spotting and Ambush)

HOLD FIRE ACTION

A Hold Fire action allows you to temporarily prohibit your unit from making Overwatch attacks. It could be useful if you want to avoid giving away your position to the enemy with a premature Overwatch attack - for example, if you are making an ambush and want the enemy troops to get closer. You could also use it to keep more Reactions at the ready in case of an enemy Assault attack, and so on. There could be numerous tactical ways to utilize this capability.



HIT TYPES - MISS, GRAZE, HIT, CRIT, AND DEFLECT

Most attacks have four possible outcomes, called Hit types - Miss, Graze, Hit, and Crit. You can see the chance for each outcome of your attack in the Combat Prediction window (more on that further below). Depending on the situation, you could have 1 to 4 outcomes possible at varied chances. The best potential scenario is a 100% Crit, and the worst - a 100% Miss. Each Hit type applies a corresponding damage multiplier called the **Hit type modifier**:

x3 Damage - Crit

x2 Damage - Hit

x1 Damage - Graze

x0 Damage - Miss

	Crit	Hit	Graze	Miss
CHANCE	25%	50%	25%	0%
DAMAGE	3	2	1	0

Additionally, if your attack was a Graze/

Hit/Crit but still did 0 Damage, it would be considered **Deflected** - the damage was prevented by the enemy armor. For example, Deflect would happen if you attacked a heavily armored unit with a gun that had a low AP Attack value. **Deflect** doesn't depend on the chance: it happens when the Damage Modifier is so low, that even when multiplied by the Hit type modifier, the final damage still results in 0 (Damage Modifier x Hit type modifier < 0.5).

The chances of each of the 4 outcomes depend on the Final accuracy - your unit's Accuracy after all the other factors are taken into account. More on that below.

ACCURACY

Accuracy determines each Hit type's chances during any attack, except Flame attack, Assault, and Overrun. The Final accuracy is the Accuracy of the unit after all additional bonuses and modifiers are taken into account. While the Accuracy of the unit can go above 200, the Final accuracy is a value between 0 and 200.

At 0 Final accuracy, the unit will Miss 100% of the time

At 50 Final accuracy, the unit has a 0% Crit, 22% Hit, 41% Graze, and 37% Miss chance.

At 75 Final accuracy, the unit has a 0% Crit, 47% Hit, 47% Graze, and 6% Miss chance.

At 100 Final accuracy, the unit has a 20% Crit, 52% Hit, 28% Graze, and 0% Miss chance.

At 150 Final accuracy, the unit has a 60% Crit, 30% Hit, 10% Graze, and 0% Miss chance.

At 200 Final accuracy, the unit has a 100% Crit chance.

	Crit	Hit	Graze	Miss
CHANCE	25%	50%	25%	0%
DAMAGE	3	2	1	0

ACCURACY PARAMETER

This is the base value of the unit's Accuracy. It can be increased via Level Up bonus, skills (including Hero skills), being at a higher elevation than



the enemy unit, and so on. Losing certain Crew members (like a Gunner) or suffering other penalties will lower a unit's Accuracy.

COVER VALUE

Cover value directly affects Accuracy. It is a modifier that reduces the attacker's Final accuracy (if it attacks the target that has Cover) by a Cover value percentage. For example, if the attacker had a total Accuracy of 100, and the target has 60% Cover, then the Final accuracy of the attacker will be 40. So, Cover has a big impact on units' Accuracy.

There are 4 Cover values:

- 0% - No cover
- 20% - Moderate cover
- 40% - Medium cover
- 60% - Good cover

These values apply to **Terrain, Buildings, Objects, Obstacles, and Wrecks.**

Obstacles occupy not a full tile but only its edge. They can provide only a portion of its cover if the attack comes at an angle. For example, the unit is behind a high stone wall that provides 60% Cover, but the attack comes at a 45-degree angle to that wall - that will result in Cover being only 30%, instead of 60%.

Note that if a unit has more than 1 source of Cover at any given time - only the highest Cover value will apply (in other words, Cover bonuses do not stack, unlike Armor bonuses).

ACCURACY MODIFIERS

There are a number of factors that could affect the Final accuracy of the attack. You can see all applicable modifiers in the Extended Combat Prediction window. The Unit's Accuracy is multiplied by all modifiers.

Final accuracy calculation			
Unit's accuracy			160
Positive multipliers		Negative multipliers	
	Range		-20%
	Cover		-20%
	Target profile		-20%
Final accuracy			$160 * 0.80 * 0.80 * 0.80 = 82$
Damage modifier calculation			
HE Attack	40	Enemy armor	10
Final HE Attack	40	Total armor	10
Damage modifier	$= ATAN((40-10)/50)^2 / \pi = 34\%$		

COVER MODIFIER

Cover modifier = 1 - Cover value

Eg, with 60% Cover, it would be: Cover value = 1 - 0.6 = 0.4

RANGE MODIFIER

Range modifier = Range to target * Pi / 3.95 * Units' maximum range

MOVING TARGET MODIFIER

Moving target modifier = 1 - Number of tiles moved * 4 / 100

MOVEMENT MODIFIER

If Current Move points > 50%, then Movement modifier = 0

If Current Move points < 50%, then:

Movement modifier = 1 - (Move points spent - Max Move points/2) / (Max Move points/2) * 0.3

TARGET SIZE MODIFIER

Target size modifier has 3 values depending on the Unit's Profile:

Small Profile - 0.8 (decreases accuracy)

Medium profile - 1

High profile - 1.2 (increases accuracy)

SPOTTING MODIFIER

This modifier applies when attacking Unseen (Suppression fire or Bombardment) or Spotted enemy units.

For Unseen, Spotting modifier = 0.25

For Spotted, Spotting modifier = 0.75

For Identified, Spotting modifier = 1

This means that attacking an Unseen unit would decrease Accuracy by 75% and attacking a Spotted enemy would decrease Accuracy by 25%.

For more details see Spotting below.

SMOKE MODIFIER

If the target, or the unit that attacks are in Smoke screen, then the Smoke modifier of 0.5 is applied.

ARMOR

Armor value indicates how much protection against the enemy attacks the unit has, and how much damage it would take if the enemy attack hit. There are two types of Armor - Soft (Unarmored) and Hard (Armored).

ARMOR TYPE

A Soft (Unarmored) defense type means that the damage to this unit will be calculated based on the HE Attack value of the enemy compared to this unit's Armor value.

The screenshot displays the Mortars unit interface. At the top, there are tabs for INFO, LEVEL UP, HEROES, and ACQUIRE. The main view is divided into several sections:

- Mortars:** A 3D view of the unit in a building. A tooltip for "Soft Defense" is highlighted, showing:
 - Armor: 20
 - Base: 10
 - Rough Terrain: +10
- CREW:** Four soldier portraits.
- PARAMETERS:** A grid of icons and values:
 - Top row: 1/3 (shield icon), 87/100 (heart icon)
 - Middle row: 100 (armor icon), 60 (speed icon), 5 (ammo icon)
 - Bottom row: 9 (range icon), 16 (accuracy icon), 5 (other icon)
- EFFECTS:** A grid of icons and labels:
 - Enter Building
 - Enter Wreck
 - Board Transport
 - Damage Building
 - Bombardment
 - Smoke Shell
 - Rough Terrain

A Hard (Armored) defense type means that the damage to this unit will be calculated based on the AP Attack value of the enemy compared to this unit's Armor value.



ARMOR FACING - FRONT, SIDE, BACK, AND TOP ARMOR

Most armored vehicles have 4 armor values:

- Front armor (usually the strongest)
- Side armor (usually not so good)
- Back armor (usually rather weak)
- Top armor (usually the weakest)

Each value indicates how much armor the unit has if attacked exactly from that direction - front, side, or back. However, in most situations, the attack would come at a certain angle, so it would be something in-between the front and side or side and back armor, and the exact value

will depend on the precise angle. The resulting value is an Adjusted armor value.

ADJUSTED ARMOR

The Adjusted armor value indicates how much armor the unit has when an enemy attack hits two or more armor values, taking into account the Attack and Elevation angles.

Enemy armor	Front 100
	Side 80
Attack angle	45°
Adjusted armor	90
Total armor	90

Example:

The unit has 100 Front armor, 60 Side armor, 40 Back armor, and 10 Top armor.

If it is attacked at an Attack angle of 45 degrees, it will use 50% of its Front armor and 50% of its side armor, so in the end it will have 80 armor.

Enemy armor	Front 90
	Top 25
Attack angle	0°
Elevation angle	14°
Adjusted armor	77
Total armor	77

Example 2:

The situation is the same as above, but the attacker is situated on a hill and has an Elevation angle of 30 degrees

- meaning it is firing from above. This means that the 80 armor from the example above (a combination of Front and Side) is further adjusted by Top armor as well. So, the result will be between 10 (Top armor) and 80 (Front/Side armor) and will depend on the Elevation angle.

CREW

The Crew indicates how many Crew members the unit has. It also indicates the survivability of the unit: when the last Crew member is lost - the unit is eliminated.

Most units have a 5-man Crew, but it could range from 2 to 5.

Each Crew member provides part of the unit's parameters, so losing a Crew member means reducing the unit's effectiveness. Different types of units have different Crew setups with different bonuses - for example, vehicles have Drivers and Infantry units do not.



Tip: If your unit has lost a part of the Crew - you could use the **Reinforcement HQ** skill to restore the Crew. More on that in the Skills section.



Tip: You can always see what bonus the Crew provides and the penalties for losing Crew members by hovering over Crew portraits.

DAMAGE

	Crit	Hit	Graze	Miss
CHANCE	25%	50%	25%	0%
DAMAGE	3	2	1	0

Damage indicates how many Crew members

of the enemy unit will be killed by an attack. In most cases, Damage is calculated as Damage Modifier * Hit type modifier. So, it is different for every Hit type.

DAMAGE MODIFIER

Damage modifier determines how much Damage and Damage to Morale an attack would make. Its calculation is based on the comparison of the attacker's Final AP/HE Attack value and the defender's Final Armor value.

For all HE Attacks and AP Attacks where Final Attack > Final Armor:

$$\text{Damage modifier} = \text{ArcTg}((\text{Final Attack} - \text{Final Armor})/50) * 2 / \text{Pi} + 1$$

For AP Attacks where Final Attack < Final Armor:

$$\text{Damage modifier} = (\text{ArcTg}((\text{Final Attack} - \text{Final Armor})/50) * 2 / \text{Pi} + 1)^5$$

Damage modifier calculation			
AP Attack	100	Enemy armor	Front 90
Range modifier	-20%		Top 25
		Attack angle	0°
		Elevation angle	14°
		Adjusted armor	77
Final AP Attack	80	Total armor	77
Damage modifier	= ATAN((80-77)/50) * 2 / PI = 4%		

Damage modifier is a number between 0 and 2, but in Combat Prediction, we multiply it by 100% and deduce 100%. So, if the Damage modifier is 0.7 it will be displayed as -30%, and if it is 1.45 it will be displayed as 45%. Thus, it goes between -100% and 100%.

E.g. 1:

A Damage modifier of 1 or 0% means that Each hit type would deal Hit type modifier * 1, equal to Crit - 3, Hit - 2, Graze - 1, Miss - 0 damage.

E.g. 2:

A Damage modifier of 1.5 or 50% means that Each hit type would deal Hit type modifier * 1.5, equal to Crit - 5, Hit - 3, Graze - 2, Miss - 0 damage

MORALE

Morale indicates a unit's will to fight.

If Morale falls below 50% - the unit cannot perform an Attack action or Overwatch (it can still Return Fire though).

If **Morale falls to 0**, the unit is forced to Flee 1 tile away. Any subsequent attack against the Fleeing unit will immediately Rout it regardless of Hit type.

Routed units are eliminated regardless of their remaining Crew number.



Units lose Morale when they suffer enemy attacks based on the Damage modifier of the attack. $\text{Morale loss} = \text{Damage modifier}^{1.5} * 12$

Note that units suffer Morale loss regardless of Hit type. So, Miss deals the same Morale damage as a Crit. It also means that there is no element of random in determining the Morale loss. The idea behind this is that if the enemy unit has high Cover, it could be difficult to eliminate it directly due to low Accuracy, so reducing the enemy Morale and eventually Routing it is a more assured way to do it.

Units gain 50 Morale at the start of the player's turn. They also gain 20 Morale when they Eliminate or Rout the enemy unit.

Morale also plays a crucial role in determining Damage in Assault and Overrun special attacks. More on that in the Special Attacks section below.



Tip: You could use the Rally HQ Skill to instantly boost a unit's Morale.

SPOTTING AND CAMOUFLAGE

Spotting and Camouflage parameters determine how well the units can hide their presence and how well they can spot the enemy troops. They are very important for your battlespace awareness.

SPOTTING PARAMETER

The Spotting parameter determines how far a unit can see and how well it detects enemy units.



CAMOUFLAGE PARAMETER

The Camouflage parameter determines how well the unit can hide its position from the enemy; in other words, how inconspicuous it is.



LEVELS OF SPOTTING

There are 3 levels of Spotting:

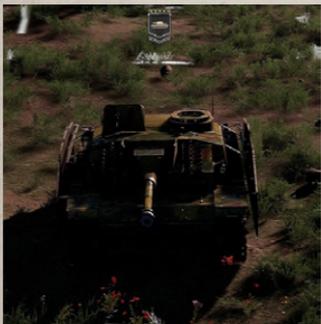
- Unseen (You cannot see enemy unit)



- Spotted (You can see enemy unit type but not full details)



- Identified (You can see all information about the enemy unit)



The Spotting level is calculated per each unit individually, but all units of one player share their vision.

How is the Level of Spotting calculated?

R - range between units

S - spotting of your unit with (unit A)

C - camouflage of the enemy unit (unit B)

If $R > (S - C)$, then the enemy unit remains Unseen.

If $(S - C) / 2 < R < (S - C)$, then the enemy unit is Spotted.

If $R \leq (S - C) / 2$, then the enemy unit is Identified.

Note that Camouflage could be significantly increased by terrain or building bonuses, as well as skills, so finding infantry in a city or forest could be a tall order.

Note that to see the enemy unit, it should not only fit the equation above but also fit the Line of Sight rules (see, Line of Sight and Line of Fire for more details).

Tip! When the unit attacks another unit, it reveals its position and receives an **Exposed position penalty** until it moves. So, you can move your units after firing to keep them hidden from the enemy.

LINE OF SIGHT

Line of Sight is calculated similarly to Line of Fire (see above), but unlike Line of Fire, it is not limited by the Attack range and is instead limited by Spotting. So, all the regular Line of Fire rules apply here as well.

Fog of war that can be toggled on and off during the game (see UI), indicates the area where your troops cannot see the enemy for sure. However, in the area where they can see the enemy units, there may still be hidden enemy units - that depend exclusively on Spotting rules (see above).

In other words, Spotting levels for enemy units will only be calculated in the area that is not covered by the Fog of War.



AMBUSH

Ambush can happen in two different types of situations:

1. An Ambush mechanic triggers when a unit attempts to enter a tile considered empty, but there is in fact an Unseen enemy unit in it. When that happens several things occur:
 - The unit does not enter that tile
 - Both units become Identified for each other.
 - The unit occupying the tile performs an Ambush reaction attack (similar to Overwatch) on the intruder, but only in the case it has at least 1 Reaction left. If it has no Reactions available - the Ambush attack will not happen.
2. An Ambush mechanic triggers when unit A attacks unit B, and before the attack, unit A has been Unseen for unit B. In this situation, unit B cannot perform a Return fire, due to the Ambush. In other words, the enemy unit cannot perform Return fire, because it has no vision of the Unseen unit.

Tip! After making an attack, the unit will get an **Exposed position penalty**, so its second attack will likely not be an Ambush. You might want to change position, removing that penalty before attempting another Ambush attack.

SPECIAL ATTACKS

Special attacks are alternative Attack actions that follow special rules that fall outside of how the regular HE and AP attacks work and are available on the Actions panel depending on the unit and its skills. Some units have Special attacks, as their regular Attack action, namely Flamethrower infantry (Flame attack), Mortar units, and Artillery (Bombardment).

BOMBARDMENT ACTION

Bombardment action represents the indirect fire of artillery and mortars. The key differences from regular Attack are:

- Bombardment attack is not limited by the Line of Fire area limitations - you can attack any tile within a unit's Attack range.
- It also allows you to attack tiles with no enemy units in sight, so it could also be used as a replacement for a Suppression fire action. This is why units with Bombardment action usually have no Suppression fire.
- Bombardment attack is considered to have a 45-degree Elevation angle in Damage calculation, so it partially goes against Top armor, making it more powerful against armored targets. The other part is calculated against the Front/Side/Top armor, so the unit armor facing still matters to a degree, but not as much as for a regular attack.

Otherwise, it follows regular HE and AP attack rules for Accuracy and Damage calculation.



ROCKET BARRAGE

Rocket barrage action represents the indirect fire of rocket artillery. It is similar to Bombardment action (see above) in terms of game mechanics, but units with it have different parameters. They are generally considered a bit less accurate but have higher HE Attack parameters making them a very powerful tool to demoralize the enemy infantry in cover or devastate it in the open.



FLAME ATTACK ACTION

A Flame attack represents a flamethrower attack. Most units have it as their main attack (second slot on the Actions panel). If this is the case, a Flame attack works as follows:

It ignores Accuracy, making all attacks with it a 100% Hit regardless of other factors. This means the Flame attack ignores Cover and other factors that affect Accuracy.

For some units, like Churchill Crocodile and Sherman Crocodile, a Flame attack is a secondary attack, as they keep their main gun operational as well. In this case, the Flame attack additionally increases the HE Attack and reduces the AP Attack, when activated.



ASSAULT ACTION

Assault action represents infantry storming positions of another infantry unit in close-quarters combat and occupying them. The key differences from regular Attack are:

- Assault ignores Accuracy, it is always considered a Hit.
- Both units attack each other simultaneously, unlike all other attacks. Assault and Overrun are two simultaneous attacks in the game, meaning you will be getting an enemy attack as well, even if the enemy was eliminated by your attack. Also, units can eliminate each other.
- Assault Damage calculation is quite different from the regular HE Attack, with the Morale of both units being a decisive factor.
- If the enemy unit is eliminated during the Assault, the attacker moves into the defender's tile.
- Assault action takes 2 Attacks, instead of 1.
- Assault action can only be performed against an enemy in an adjacent tile (including diagonal tiles).



- Assault Damage is calculated as $\text{Damage Modifier} * \text{Hit type modifier} * \text{Morale modifier} - \text{Enemy Excessive Damage}$.
 - The Damage modifier is the same as usual (see Damage and Damage modifier above).
 - The Hit type modifier is always a 2, as it is always a Hit.
 - Morale modifier is calculated for each unit as follows:
 - $\text{Morale modifier} = 2 + (\text{Unit A current Morale} - \text{Unit B current Morale}) / 100 * 2$
 - If a unit's $\text{Damage Modifier} * \text{Hit type modifier} * \text{Morale modifier}$ exceeds the number of enemy unit's Crew, the excess is counted as Excessive damage.
 - $\text{Excessive damage} = \text{Damage Modifier} * \text{Hit type modifier} * \text{Morale modifier} - \text{Enemy Crew count}$.
 - Excessive damage reduces the Assault damage of the enemy unit.
- For example, two units both with 5 Crew are engaged in Assault.
- Unit A has a $\text{Damage Modifier} * \text{Hit type modifier} * \text{Morale modifier} = 6.7$
- Unit B has a $\text{Damage Modifier} * \text{Hit type modifier} * \text{Morale modifier} = 3.9$
- Unit A has an Excessive damage of $6.7 - 5 = 1.7$

This means that unit B will deal $3.9 - 1.7 = 2.2$ Damage rounded to 2 Damage.

In the end, Unit A will deal 5 Damage and eliminate Unit B, but since Assault is counted as a simultaneous attack, unit B will still deal 2 Damage to Unit A, eliminating 2 of its Crew.

OVERRUN ACTION

Overrun action represents armored units mowing down the infantry units in the open - i.e. point blank attack at the enemy infantry to occupy its position.

It is calculated in a very similar way to Assault - see Assault above.

The differences between Overrun and Assault are:

- The use of AP Attack instead of HE Attack for damage calculation of a Defender (enemy infantry), while the Attacker (Armored unit) still uses HE Attack.
- Cannot attack a tile where an armored unit cannot enter (a forest, rough, or a building)
- Can only attack infantry units.

Usually, tanks will have no problems Overrunning enemy infantry in the open. However, there are situations where infantry can fight back very effectively:



- If you try to overrun AT infantry (they have a high AP Attack value)
- If the infantry you try to Overrun has a Cover, that Cover will increase the AT Grenade damage (see Anti-tank Grenade special attack below). For example, attacking Infantry in High vegetation or behind a high stone wall could be very risky for the armored units.

ANTI-TANK GRENADE ACTION

Anti-tank grenade action represents infantry usage of close-combat AT weapons such as AT grenades, satchel charges, explosives, etc.

The key differences from regular Attack are:

- It can only be used against an enemy in an adjacent tile.
- The unit can attack Armored units, despite normally having 0 AP Attack. This action provides additional AP Attack value and allows to attack Armored units.
- The unit gets an extra AP Attack, which is further increased by a unit's Cover. The higher the Cover unit has, the more AP Attack it should get, and the more effective the AT Grenade will be.



Tip! Infantry units with 40% or 60% Cover could be truly devastating to the enemy Armored units if they have AT Grenade action. Use that to prepare ambushes and eliminate the enemy's armored troops with your

infantry units. Try to attack where the enemy armor is the weakest to achieve the maximum effect.

Tip! Do not allow your armor to get ambushed by the enemy infantry with an AT Grenade - make sure your Armored units keep their distance from potential ambush locations and send in scouts or other infantry first to locate hidden enemies.

SNIPER SHOT ACTION

Sniper shot action represents a well-aimed and well-timed shot. It follows the general rules with 2 notable exceptions:

- It takes 2 Attacks instead of 1 to perform.
- It increases the unit's Accuracy by 100.



RAPID FIRE ACTION

A Rapid fire action allows a unit to perform 2 Attack actions at once at the cost of 1 Attack but with reduced accuracy. The enemy's Return Fire attack will happen after the first attack, so it would go as follows:

- Rapid fire Attack 1
- Enemy's Return fire
- Rapid fire Attack 2



HIT THE TRACK

Hit the track is the ability to deal reduced damage, but apply the Broken track Effect, which prevents the enemy unit from Moving, until it uses the Repair track skill to fix the problem.



SMOKE SCREEN

A Smoke screen action allows the unit to deploy a Smoke screen that covers a number of tiles. There are several types of Smoke screens:

- Infantry and recon units deploy Smoke screens in 1 tile
- Artillery and mortars can deploy a Smoke screen that covers a larger area
- An HQ Skill Smoke artillery deploys a Smoke screen that covers an even larger area.

What does a Smoke screen do?

- It blocks the Line of Fire (and Line of Sight), similar to a Building or Forest.
- Note that the first tile with a Smoke screen can still be fired at, but the tiles behind it are obscured.
- It reduces the Accuracy of all attacks against a tile with the Smoke screen by 50%.
- It reduces the Accuracy of all attacks coming from a tile with the Smoke screen by 50%.



TERRAIN TYPES

All tiles in the game have a certain Terrain type. You can see the Terrain type by hovering over a tile and looking at the Terrain info (see the User Interface section above). In this section, we will briefly go over all Terrain types.



CLEAR

Clear Terrain is an even ground that allows units to move across freely and does not provide any extra bonuses. As good as a Road for tracked units, but not so good for Wheeled and Towed units.



ROAD

Road Terrain allows units to move across freely and does not provide any extra bonuses.



DIRT ROAD

Road Terrain allows units to move across freely and does not provide any extra bonuses. As good as a Road for tracked units, but not as good for Wheeled and Towed units.



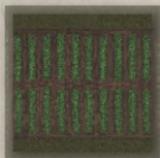
BRIDGE

Bridge Terrain allows a unit to cross water tiles and is as good as a Road for unit movement.



RAILROAD

Railroad Terrain allows unobstructed movement for Tracked units but provides slower movement for all other Move methods.



FIELD

Fields Terrain is difficult to Move across for all Move methods but otherwise has no bonuses or penalties. So, it would slow down your troops.



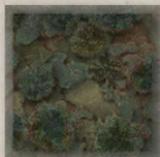
HIGH VEGETATION

High Vegetation Terrain is very difficult to Move through. It also provides a bonus to Camouflage and Medium (40%) Cover to Infantry units and smaller cars/jeeps (all units with a Low Profile skill). Units without a Low Profile do not get any bonuses from it.



ROUGH

Rough Terrain is unpassable for all types of vehicles, so only Infantry units can Move through, and even they do it with extra difficulty. It also provides a bonus to Armor and Medium (40%) Cover.



FOREST

Forest Terrain is unpassable for all types of vehicles, so only Infantry units can Move through, and even they do it with extra difficulty. It also provides bonuses to Armor and Camouflage, as well as, High (60%) Cover. Forest Terrain also blocks the Line of Fire.



TRENCH

Trench Terrain is unpassable for all types of vehicles, so only Infantry units can Move through. It also provides bonuses to Armor and Camouflage, as well as, High (60%) Cover.



SWAMP

Swamp Terrain is unpassable for all types of vehicles, so only Infantry units can Move through with extreme difficulty.



CLIFF

Cliff Terrain is unpassable for all units.



WATER

Water Terrain is unpassable for all units.



SAND

Sand Terrain is an even ground that allows units to move across freely and does not provide any extra bonuses. As good as a Road for tracked units, but not so good for

Wheeled and Towed units.

ELEVATED TERRAIN

Elevation, or Elevation level, means that the unit is located higher - on a hill, etc. Each tile in the game has an Elevation parameter that ranges between 0 and 5, with 0 meaning no Elevation, and 5 being the highest elevated position currently in the game.

If the unit is located on a tile with Elevation 1 or higher, it gains the Elevation effect, which provides the following bonuses:

- Increases Spotting and Camouflage by 1 for each Elevation level.
- Increases Accuracy by 5% during an Attack for each Level of Elevation difference.

The Level of Elevation difference is the difference between the Elevation levels of two units in combat. So, it could be different depending on the target's Elevation level.



On top of that, the Level of Elevation difference and the Range between the units help determine the Elevation angle for AP Attacks against armored units (see Adjusted Armor above), increasing the power of AP Attacks as the attack is partially counted against weak Top armor.

BUILDINGS

Buildings are not a Terrain, they can be situated in a tile. Almost all buildings in the game (except a few very large ones or Bunkers) are destructible and have 4 stages of Destruction:

- Intact (Full HP)
- Scathed (Suffered at least 1 damage)
- Damaged (Below 50% HP)
- Destroyed (At 0% HP)

Buildings generally provide large bonuses to Armor and Camouflage, as well as High Cover (60%). They also block the Line of Fire.



INTACT



SCATHED

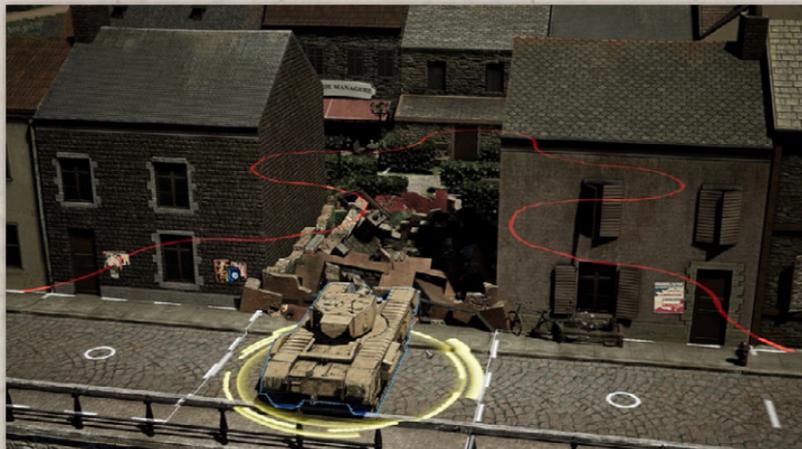


DAMAGED



DESTROYED

However, as the building loses integrity and goes to Damaged or Destroyed states - the bonuses it provides diminish. Destroyed buildings usually no longer block the Line of Fire.



Tip! You could bring down a building to gain extra Line of Fire area.

The damage to Buildings is done when the tile with the Building is attacked, based on the HE Attack value of the attacker. The higher the HE Attack, the more damage to Buildings the attack does. Note that some units cannot damage buildings - these are mostly armed with hand-held guns and MGs.

Tip! If you feel that the building your infantry occupies will collapse soon, it is better to move to another one. Destroyed builds offer much worse Cover and protection, so your troops risk becoming easy pickings for the enemy force.

Note that all Buildings make a tile unpassable for all vehicles, regardless of the Building state - even Destroyed buildings do not allow movement of vehicles. At the same time, Infantry can move freely through the Buildings.

OBSTACLES

Obstacles are walls, fences, windbreaks, and other things that occupy not the entire Tile but only its edge.

Obstacles are quite different in their parameters and features. They have several things to consider:

Obstacle	Cover	HP	Obstacles	
			Solidity	Line of Sight
1-Stone fence	20%	30/30	Medium	Clear
1-Stonewall	60%	15/15	Heavy	Blocked

Cover - indicates how much Cover they offer if the attack comes from the Tile on the other side of an Obstacle. If the attack comes at an angle, the Cover is reduced proportionally, until it reaches 0.



HP - indicates how much damage the Obstacle can take. When HP reaches 0, the Obstacle is Destroyed and no longer affects the battlefield in any way. Obstacles take damage if a Tile to which they constitute a Tile edge is attacked.



BARBED WIRE

Barbed wire is a unique Obstacle in a way that it prevents Infantry units from moving through it.

Tip! You can pave the way with your vehicles by running Barbed wire down and allowing Infantry to follow through. Alternatively, you could use artillery or mortar fire to eliminate the Barbed wire and clear the way for the Infantry.

WRECKS

Wrecks are destroyed vehicle remnants or intact civilian vehicles that block the path. They occupy a tile and prevent vehicle movement through it.



Tip! A Clear Wreck action can be used to remove a Wreck and clear the way.

Infantry units can occupy a tile with a Wreck, gaining extra Armor and Cover. Infantry can move freely through a tile with a Wreck in it.



Tip! If there is no better cover around, you could eliminate an enemy Armored unit, and occupy a tile with its Wreck with your Infantry unit, gaining some extra protection and boosting AT Grenade effectiveness.

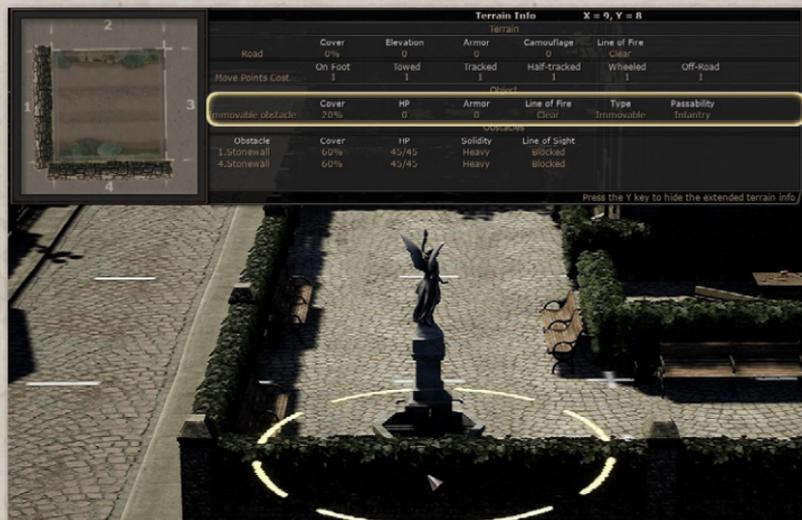
Wrecks cannot be damaged - only removed via Clear Wreck action.

Wrecks do not block the Line of Fire.

OBJECTS

Objects are other things that could be situated in a tile apart from Buildings and Wrecks - statues, fountains, heaps of straw, etc.

They have varied parameters and could block the way. You can learn more about them in the Terrain Info panel. They follow the same general rules as Obstacles, but they do not depend on the direction, as they occupy the entire tile.



TERRAIN INFO

Terrain info is presented in two forms - short and extended. It explains all the details about a tile - its Terrain, Elevation, coordinates, unit in it, Buildings, Obstacles, Objects, and Wrecks, as well as their parameters. You can toggle between short and extended forms. For more details - see above.



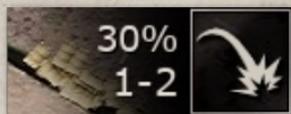
COMBAT PREDICTION

Combat prediction helps you understand how the Accuracy, Damage, and Damage to Morale are calculated. It exists in short and extended forms, and you can toggle between them.

QUICK PREDICTION

Quick prediction is shown when you hover over a target - it indicates concisely what you can expect from an attack. Here are some key points:

- The image in the middle indicates the type of attack - HE AP, Assault, etc.



- The percentage indicates your combined chances of dealing any damage to a target.
- The numbers below the percentage indicate the lowest and the highest Damage your attack could deal to the enemy unit.
- The numbers on the left are your attack, while the numbers on the right are the enemy's Return Fire.
- If there are numbers only on the left and no numbers on the right - that means there will be no Return fire.

SHORT COMBAT PREDICTION

YOUR UNIT'S ATTACK						
Commandos		VS			Anti-tank Team	
		HE Attack				
	Crit	Hit	Graze	Miss		
CHANCE	17%	52%	31%	0%		
DAMAGE	4	3	1	0		
ENEMY'S UNIT RETURN FIRE						
Anti-tank Team		VS			Commandos	
		HE Attack				
	Crit	Hit	Graze	Miss		
CHANCE	10%	52%	38%	0%		
DAMAGE	3	2	1	0		

Press the C key to show the extended combat prediction

Short Combat prediction shows your Attack and the enemy's Return fire. On top of the information provided in a Quick prediction, it

offers detailed chances of each Hit type and the Damage per Hit type (for more details see Accuracy and Damage).

EXTENDED COMBAT PREDICTION

YOUR UNIT'S ATTACK				
Sherman Firefly	VS		75 mm Pak 40	
	Crit	Hit	Graze	Miss
CHANCE	0%	47%	47%	6%
DAMAGE	3	2	1	0
Final accuracy calculation				
Unit's accuracy				120
Positive multipliers		Negative multipliers		
Movement	0%	Range	-2%	
		Cover	-20%	
		Target profile	-20%	
Final accuracy	$120 \cdot 0.98 \cdot 1.00 \cdot 0.80 \cdot 0.80 = 75$			
Damage modifier calculation				
HE Attack	20	Enemy armor	10	
Final HE Attack	20	Total armor	10	
Damage modifier	$= \text{ATAN}((20-10)/50) \cdot 2/\text{PI} = 13\%$			
ENEMY'S UNIT RETURN FIRE				
75 mm Pak 40	VS		Sherman Firefly	
	Crit	Hit	Graze	Miss
CHANCE	54%	34%	12%	0%
DAMAGE	4	3	1	0
Final accuracy calculation				
Unit's accuracy				120
Elevation Effect				12
Positive multipliers		Negative multipliers		
Target profile	20%	Range	-3%	
		Moving target	-8%	
Final accuracy	$(120+12) \cdot 0.97 \cdot 0.92 \cdot 1.20 = 142$			
Damage modifier calculation				
AP Attack	100	Enemy armor	Front: 90	
Range modifier	3%	Attack angle	Top: 25	
		Elevation angle	-9%	
		Adjusted armor	-34%	
Final AP Attack	97	Total armor	64	
Damage modifier	$= \text{ATAN}((97-64)/50) \cdot 2/\text{PI} = 37\%$			
Press the C key to hide the extended combat prediction.				

On top of the information provided in a Short Combat Prediction, the Extended Combat Prediction shows detailed Accuracy calculation and Damage Modifier calculation with all factors that are taken into account in its calculation (for more details see Accuracy and Damage above).

COMBAT PREDICTION FOR ASSAULT AND OVERRUN

SIMULTANEOUS ATTACK				
Commandos	VS		Riflemen	
	Assault		Riflemen	
DAMAGE			5	
MORALE DAMAGE			140	
LOSSES			3	
MORALE LOSS			86	
YOUR UNIT'S ATTACK CALCULATION				
Morale modifier calculation				
Current morale	125	Enemy morale	100	
Morale modifier	$= 2 + (125-100)/100 \cdot 2 = 2.50 = 150\%$			
Damage modifier calculation				
HE Attack	50	Enemy armor	10	
Final HE Attack	50	Building Armor Bonus	30	
		Total armor	40	
Damage modifier	$= \text{ATAN}((50-40)/50) \cdot 2/\text{PI} = 13\%$			
Hit modifier	100%			
Result	$2 \cdot 1.13 \cdot 2.50 = 5.63 = 462\%$			
ENEMY UNIT'S ATTACK CALCULATION				
Morale modifier calculation				
Current morale	125	Enemy morale	100	
Morale modifier	$= 2 + (100-125)/100 \cdot 2 = 1.50 = 50\%$			
Damage modifier calculation				
HE Attack	30	Enemy armor	10	
Final HE Attack	30	Total armor	10	
Damage modifier	$= \text{ATAN}((30-10)/50) \cdot 2/\text{PI} = 24\%$			
Hit modifier	100%			
Result	$2 \cdot 1.24 \cdot 1.50 = 3.73 = 272\%$			
Press the C key to hide the extended combat prediction.				

Assault and Overrun attacks are simultaneous attacks and use different Damage calculations, so they have a special Combat Prediction. It shows Damage and Morale loss for both units that happen at the same time. The Damage modifier is calculated as usual, but there is also a new Morale modifier calculation added,

showing how Morale affects the Assault outcome.

SKILLS

BASIC SKILLS



Basic skills are the abilities a unit comes with. They determine a lot of its capabilities. You can always look them up in the Unit info (see User Interface above).

Some examples of such skills are Low/Medium/High Profile (determining how noticeable and easy to hit the unit is), Light/Medium/Heavy (determining what types of obstacles and objects the unit can run over), Clear Wreck (allowing unit to remove Wrecks), Tank Machine Gun (allowing unit to deal extra damage to Unarmored targets at close range), and so on.

Note that some skills could be both Basic and unlocked through a Level up, depending on the unit class - for example, a Sniper shot ability.

LEVEL UP SKILLS

The Level up skills can be learned in the Level Up tab after the unit has gained a new level. Units can reach up to 3 levels and learn a total of 3 Level up skills. There are 3 tiers of Level up skills. To learn tier 2 skills, you have to learn at least one tier 1 skill. To learn tier 3 skills, you have to learn 2 skills from previous tiers.

Note that you could either learn one tier 1, one tier 2, and one tier 3 skill, or two tier 1 skills, and one tier 2 or tier 3.



On top of learning new skills, all units gain a passive bonus to their parameters that increases with each Level up, which is called a **Level up bonus** - increasing Morale and Accuracy.

The screenshot displays the 'Panzer IIIN' unit interface. At the top, there are tabs for 'INFO', 'LEVEL UP', 'HEROES', and 'ACQUIRE'. The unit is shown with three stars, a level of 10, and a shield value of 50. The 'SKILLS' section contains a grid of icons for 'Medium', 'High Profile', 'Clear Wreck', 'Tank Machine Gun', 'Repair Track', 'Accurate Damage Building', 'Overrun', and 'Level Bonus'. Below this is the 'LEARN SKILLS' section, which features a skill tree diagram with nodes for 'Veteran', 'Accurate', 'Unstoppable', 'Crafty', 'Rapid Fire', and 'Sniper Shot'. The 'Crafty' skill is highlighted, with a description: 'The unit gains 15% Front Armor.' At the bottom, there are 'RESET' and 'LEARN' buttons, and a 'Skill points: 1' indicator.

HERO SKILLS

Each Hero comes with 3 powerful skills that a unit gains when the Hero is assigned to it. In Campaign mode, you can Assign or Reassign heroes to your units between operations in the Headquarters screen. In Skirmish/Multiplayer, if you have heroes enabled in the game settings, you can Assign heroes to units after you Acquired them but before you have Deployed them. If a unit with a hero is eliminated in Campaign - it will come back after you finish the battle. If a unit with a hero is eliminated in Skirmish/Multiplayer, you can Assign this hero again to another undeployed unit.

ASSIGN HEROES

<p>Richard Winters</p> 	 <p>Deadeye</p>	<p>Richard Winters</p> <p>Richard Winters was the commanding officer of Easy Company, 2nd Battalion of the 504th Parachute Infantry Regiment of the 101st Airborne Division. During D Day, the German artillery shot down the Easy Company HQ, killing their commanding officer, and that's when Richard Winters took command of survivors and led his unit of 13 men to attack the German artillery battery. This assault would be known as the Brécourt Manor Assault. This operation would promote Richard Winters to captain.</p> <p>Richard Winters would lead many successful attacks and operations throughout the rest of the War. Under his command, Easy Company assaulted 200 German soldiers with only 20 men during Operation Market Garden, fought in the Battle of the Bulge, liberated Holocaust prisoners at the Dachau concentration camp, and even captured Hitler's personal mountaintop retreat, Berchtesgaden. For his achievements, Richard Winters was awarded the Distinguished Service Cross.</p>
<p>Lafayette G. Pool</p> 	 <p>Lucky</p>	
<p>Matt Urban</p> 	 <p>Commanding Presence</p>	

HEADQUARTERS SKILLS

Headquarters (or HQ) skills represent the help of your high command off the map. Every Campaign mission has its own set of HQ skills available. Every new rank you gain in Campaign decreases the Cooldown of all HQ skills by 1 turn.

In Skirmish and Multiplayer - you can set up to 4 HQ skills as well as adjust their Cooldown reduction.



OFFICER SKILLS

Officer skills are available in Campaign and you can learn them between battles. The number of Skill points available corresponds to the number of awards you gained.

Officers skills are split into 3 branches - Armor, Infantry, and Artillery, with 7 tiers in each. To unlock next-tier skills, you have to learn skills in the previous ones.

The screenshot shows the Officer Skills menu with the following skills listed:

- Armor:** Retribution, Tank Fear, Concealment, Tank Fear II, Replenishment, Decision Attack, Replenishment II, Ambush, Flanking, Ambush II, Flanking II, Deadly, Shock Attack.
- Infantry:** Thrill, Forward Observer, Pathfinder, Forward Observer II, Encirclement, Tenacity, Encirclement II, Advanced AT Tactics, Vantage Point, Stamina Training, Vantage Point II, Optics, First Aid.
- Artillery:** Shooting Practice, High precision, Covered Position, High precision, Destroyer, Demolition, Extra protection, Ambush, Extra protection II, Ambush II, Tenacity, Fast Reload, Quick Aiming.

RESET SKILLS Skill points: 2 LEARN



There are also “linked” skills - two skills that are linked by a chain icon. This means that a higher-tier linked skill cannot be learned without the lower-tier linked skill.

You can always Reset your skills and learn different ones between battles with no penalty.

Officer skills offer powerful bonuses to your troops, so learning and integrating them into your tactics is vital to your success.

EFFECTS

Effects are temporary conditions that affect your unit's parameters - there are both positive and negative ones.

TERRAIN-BASED EFFECTS

Some types of terrain, such as Forest or Rough, affect the unit's parameters by applying Effects, called Forest/Rough - allowing you to see the change in parameters. Additionally, the Elevation bonus is also displayed as an Effect.

You can find all the Effects currently affecting your unit in the Unit Info screen (or panel).

NO OVERWATCH



This is an Effect indicating that the unit was fired upon and can no longer Overwatch this turn (see Overwatch above).

EXPOSED POSITION



This is an Effect indicating that the unit gave away its position by attacking the enemy. It will have reduced Camouflage until it moves to another tile. This effect does stack.

Note that this Effect is more powerful for the Artillery unit, as well as for all units at Night.

SKILL-BASED EFFECTS

Some skills apply various effects.

BROKEN TRACK



For example, the Hit the Track skill allows you to attack the enemy's tracks and apply the Broken track penalty, reducing enemy Move points. The affected unit then has to use Repair track action to eliminate the penalty.

COMMANDING PRESENCE



This is an example of a Hero skill Effect that boosts the Accuracy of all units close to the unit with the hero assigned.

WEATHER EFFECTS

Weather effects are applied depending on a mission and do not change throughout the battle.

RAIN



The Rain effect provides a significant bonus to the Camouflage of all units. This could be both good and bad - as it is hard for you to spot the enemy units, but it is similarly hard for the enemy forces to notice your units.

NIGHT



The Night effect provides a major bonus to the Camouflage of all units. This could be both good and bad - as it is hard for you to spot the enemy units, but it is similarly hard for the enemy forces to notice your units.

Tip! You could use Night time to get closer to the enemy with ease and Assault it at close range.

RANDOM MAP GENERATION

MAP PROTOTYPE SELECTION

So, you decided to make a map to play on against other players, AI, or both. After clicking on the Map Generator button on the Settings screen of the Skirmish or any Multiplayer mode, you will see the Map Selection screen.



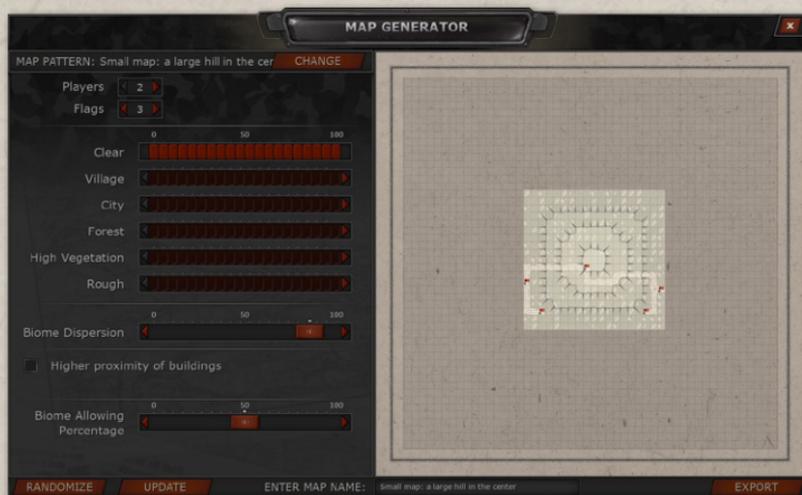
A large portion of this screen is occupied by a Map preset, which you will be able to further customize during the next steps of the Map Creation process. Right above the map, you can find the name of the map, which was not done to be creative or pretty but instead to succinctly show the main feature(s) of the map. Below the picture of the map, you can see the details about it: its size, the tile count, and the presence of hills, bodies of water, and cliffs.

To the left of the picture, you can find the Map List with every map preset of the game. Above the list, there are four buttons to change the list: all maps and only small, medium, or large maps.

After deciding which map to use as a basis for further changes, click on the Next button to start the next step.

MAP SETTINGS

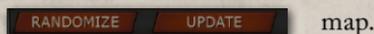
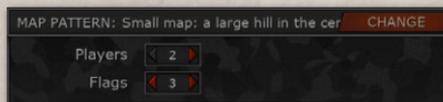
Next comes the Map Generator screen.



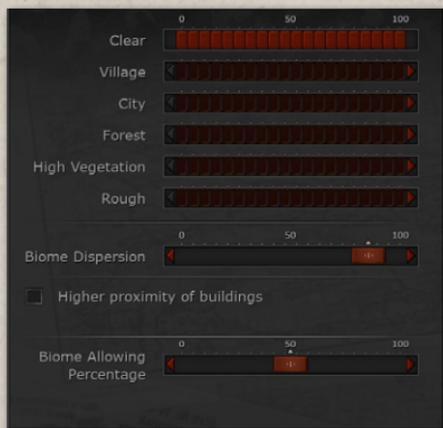
Just as on the previous screen, you have the image of the chosen map on your right, but this time it is shown in the tile format - so that you can better understand how much movement the map will allow. It will also show the locations of the flags you might fight for.

On the left side of the screen, you have options for customization of the map. First of all, you have the **Change** button next to the name of your map, in case you want to go back to the Selection screen and choose

another preset (you can also return to the Selection stage by pressing the 'Esc' button).



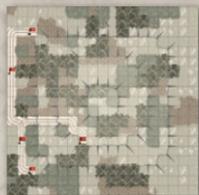
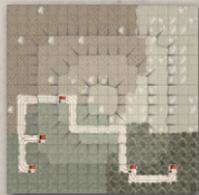
Note that to see any change applied and shown on the map, you need to click on the **Update** button at the bottom!



Further below, you have different scales you can interact with to change the content and types of the tiles. You have a **total of 100%** to distribute between the given parameters. At the start, the map is 100% clear. If you want to add Forest, Rough, or High Vegetation terrain, or buildings to the map (Village or City), you must redistribute 100% from the Clear to the parameters you are interested in changing.

Note that when you add more buildings to the map by increasing the percentage of either City or Village or both, the map on your right won't change too much. The map responds only to the terrain change, and buildings are not a type of terrain but objects situated on the tiles, hence they will be situated in the Clear tiles.

Underneath the map name, you can change the number of flags and players on the



Next comes the **Biome Dispersion** setting, by manipulating which you can change the integrity or dispersion of every biome. For example, if you set the Biome Dispersion to 0, then every type of biome will not be intermixed with the other ones.

If you set it to 100, then every type of biome will be less monolithic.

The option to include **higher proximity of buildings** affects how close buildings will be to each other within a block of generated buildings.

Finally, if you do not want to spend too much time making a map, you can click on the **Randomize** button to get a quick result.

When you are satisfied with how your map is, you may click on the **Export** button. However, you must name your map appropriately first, otherwise, you won't be able to export the map. **Your map name shouldn't**

ENTER MAP NAME:

use blank spaces or special symbols!

After the exporting is done, you will be moved to the Skirmish or Multiplayer Options screen where you can find your new map in the Map List.

MAP EDITOR

If you want to control every little step of the map creation, the Map Editor is there to give you the necessary tools.

MAP PROTOTYPE SELECTION

To access the Editor, you need to be in the Main Menu and click on the Editor bar. The next few steps are quite similar to the Map Generation in the Skirmish or Multiplayer modes.



First comes the Map Selection. It has one major difference from the same screen in the Skirmish or Multiplayer modes, which is you have a Custom button next to a Default button in the right corner of the screen. Default maps are the same presets you get in the Map Generator, while Custom maps are all maps you have previously generated or created. So, you always have an option to edit the maps you previously created.

After you decide which map you want to use as a template, click on the Next button to get the Editor started.



ADDING ELEMENTS TO THE MAP



As soon as the Editor is open, you will see a smaller Players' Form screen.

Here you can customize which player

will be playing for which country, the color of their units, and the number of their team. Clicking on the Continue button confirms the currently chosen options. If you want to change them later on, you can click on the Players' Form button in the lower left corner of the screen.



On the left side of the screen, you will see a column of buttons. Each of them is responsible for a category of things you can add to the map or a tool to edit what you have on the future battlefield.

1. The **Terrains** button provides you with a number of terrain types, as well as various roads and types of forest and vegetation.
2. The **Buildings** button allows you to build an entire city or military base, granting you access to many different buildings: residential (for villages, towns, and cities), religious, towers, hangers, tents, and bunkers.
3. The **Obstacles** button leads to a collection of obstacles: sandbags, fences, stonewalls, barbed wires, hedges, and separately - damaged obstacles.
4. The **Objects** button enables you to put Objects on any clear tile you want: Wrecks, Destructible Objects (Light, Medium, Heavy - in the game), and Immovable Objects that no unit can get rid of on the map.
5. The **Presets** button presents you with a lot of premade presets that you can use to bring more visual variety to the battlefield.
6. The **Units** button provides you with a list of all units to put on the battlefield. To find a particular unit, you can type its name into an empty bar above on the Units screen. Or you can choose a Unit's class or country where it was made. In addition, each unit you put on the map is assigned to a particular player - all you need to do is choose the necessary color of the player to whom this unit should belong.



7. The **Flags & Deployment** button has two purposes. First, it allows you to put flags on the map. The country flag serves as a point marker for this country/player's headquarters, which players need to capture to achieve the Conqueror Victory condition. The blank flag is a flag you need to capture to earn points and win the 'Control the Flag' game. Second, this category gives you the ability to influence the in-fight deployment when you buy new units.

So, when you buy a new unit, it will appear on the deployment tile. The rotation setting allows you to set up the direction the deployed unit will be facing after its deployment. If you have not changed the rotation, when deployed, the unit will automatically face the incremental X-axis direction (if you look at the Terrain Info in the Map Editor, you can find three numbers. The first one is the X-axis, the second - the Y-axis, and the third is the Elevation. The direction by which X:0 becomes a higher number is the direction the unit will face).

The Priority setting allows you to influence the order by which the units you bought will be deployed among the deployment tiles. A tile with the 1 priority will be the first to get a unit, while a tile with the 4th - last.

In addition, each type of unit has its own priority assigned to it:

1. Heavy tank;
2. Medium tank;
3. Assault gun;
4. Light tank;
5. Scouts;
6. Self-propelled AA gun;
7. Self-propelled AT gun;
8. Self-propelled artillery;

9. Flamethrowers;
10. Machine gunners;
11. Mortar team;
12. AT team;
13. Riflemen;
14. Snipers;
15. Elite infantry (Commandos, Rangers, Panzergrenadiers);
16. Paratroopers;
17. Towed AA;
18. Towed AT;
19. Towed artillery;
20. APC;
21. Armored car;
22. Truck

EDITING OBJECTS



The **Object Manipulation** button is a tool to rotate, move, or delete anything you added to the map. To move something, you need to pick a tile with a building, obstacle, unit, or object, click on a correspondent button to choose the Move action, and then click on any empty tile.

To rotate something, you need to choose what you want to rotate and click on any tile in the direction you want something to be turned.

However, Rotate, Move, and Delete cannot be applied to some of the Terrain types!

To remove a Forest from a tile, you need to click on the Terrains button and find the Clear terrain type: you can always replace any terrain with the Clear or Grass to make it empty.

Note that you can turn Roads through the Object Manipulation.

When you have chosen an object of your choice and moved/rotated it however you liked, you need to click on its name on the Object Manipulation screen to **stop interacting** with it.

After you have chosen the **Delete** action and deleted anything you wanted to, you need to click on the **Delete** button one more time to stop the action from repeating.

EXPORTING YOUR MAP

After you have finished making your battlefield, you should click on the Export Map button. Clicking will trigger a smaller screen with a prompt to name your map. Pick a name and click on the OK button to export the map to your Skirmish or Multiplayer screen.

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Joe Corrigan

Captain Crawford, British & German troops

Stewart Clarke

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Timothy Watson

Training Officer, British, US & German troops

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German Announcer, British, US & German troops

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British & German troops

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