TANK ON TANK
DIGITAL

MANUAL

LOCK 'N LOAD
PUBLISHING

INTRODUCTION

Tank on Tank, Digital edition is a low-complexity, Second World War armored combat game, modeled after the Lock 'n Load boardgames, *Tank on Tank: Westfront* and *Tank on Tank: Eastfront*. This digital edition combines both boardgames into one, dynamic computer game. Choose your side and command your forces to outwit and outplay the system AI, or head-to-head action online!

In order to bring you this very fun game, playable in a digital format, some minor changes to the official rules were necessary.

This digital edition gives you more maps, new scenarios, and the ability to play in campaign-mode!

1.0 THE MANUAL AND HELP GUIDE

This manual is designed to offer you the full rules of play for the digital edition of the game. For immediate help in the game, you can also press the **HELP** Button to find quick answers to most common questions.
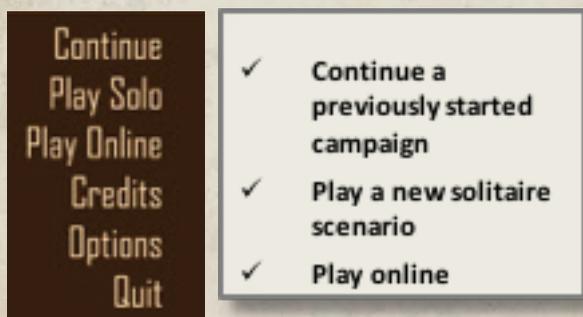
1.1 COMMUNITY AND SUPPORT

If you have any questions, or if you are looking for other gamers to chat with, you can find quick replies on the Lock 'n Load Forum at: http://forums.lnlpublishing.com. Visit the Resource Section for community-design resources, as well.

2.0 STARTING THE PROGRAM

2.1 MAIN MENU.

Upon starting *Tank on Tank, Digital*, the **Main Menu** is displayed, where you can:

This is also where you can view credits of who brought you this cool computer game; audio adjustment options; and where you will exit (Quit) the program.

Additionally, you can just press *Fight!* to start a random game

LET'S GET STARTED!

2.2 PLAY SOLO.

One of the hallmarks of this digital edition of *Tank on Tank* is the ability to play solitaire against an AI! When you click the **Play Solo** button on the **Main Menu**, the following **Control Panel** will be displayed:

2.2.1 MODULES, SCENARIOS, AND CAMPAIGNS.

The Control Panel allows you to view and choose which scenario you wish to play. Depending on which **Modules** you own, a different list of **Scenarios** will be presented for Western Front or Eastern Front battles.

Clicking on a scenario brings up a small battle map, with unit starting positions shown for that particular battle. Once you decide which scenario you wish to play, you then choose which Nationality you wish to command.

- Click the **Start** button to play your chosen scenario.

- Click **Highscores** to see a list of score rankings.

- Click the **Back** button to go back to the Main Menu.

2.2.2 PLAY CAMPAIGN

You can also play in campaign mode, where several scenarios are played in a row. If you win, you build on your successes with a bonus awarded (e.g. an additional tank), available for the next scenario. If you lose the scenario, the opponent will start the next scenario stronger.

You are allowed to lose one scenario and go on with the campaign; but if you lose two scenarios in a row, you lose the Campaign.

Upon completion of a campaign scenario, a screen with a recap of scenarios played will be displayed. If you won the previous scenario, this is where you choose which bonus you'd like to receive.

The next scenario will also be listed, which you move on to by clicking the Forward button (with two arrowheads). Or you can save the campaign and continue another time.

- Click **Save and Quit** to exit campaign mode, and continue later.

- Click **Resign** to end the game and quit the campaign entirely.

Campaigns are not possible in online-games.

So now that you know how to select your first scenario to play the game, let's take a look at:

WHAT YOU SEE ON THE SCREEN!

*(Note that the following sections cover when playing in **Solitaire**, **Campaign**, and random **Fight!** modes. To see how to play **Online**, please refer to Section 12 at the end of the manual.)*

3.0 THE SCENARIO BATTLE SCREEN

THE **BATTLE SCREEN** that will be displayed when you launch a scenario is comprised of a main battle map, upon which you will move and fight with your forces; and various game control buttons and status bars/tracks.

3.1 THE BATTLEFIELD MAP.

Combat units fight upon a Battlefield Map, which consists of hexes, weaving together the complex terrain representative of deadly battlefields found on the WWII Western or Eastern Fronts.

Terrain affects how units move and fight. For instance, certain terrain cost more movement points to enter; while other terrain blocks Line of Sight (LOS) in combat actions.

Types of terrain include: Clear, Hill, Town, Depression, Woods, and Water (River/Sea). There are also Roads, which run through and between hexes.

> ✓ Note that water hexes cannot be entered by any units!
>
> ✓ Road Bonus: An entire move along a road provides a bonus of +1 hex.

And a special Terrain you will only find on Stalingrad-Maps is Debris, into which only Infantry may enter.

Terrain is depicted on the battlefield map with the following graphics:

3.2 COMBAT UNITS.

The combat units that you will command are represented on-screen, as counters, which include: Main battle tanks, heavy tanks, tank destroyers, self-propelled artillery, Infantry units, and even aircraft!

Specific units take up a substantial portion of each hex's real estate, which can sometimes present a challenge to what specific terrain feature you are dealing with. To see what specific terrain is under any given unit, simply hover your cursor over any unit on the battlefield. Then look up in the upper left-hand corner of the battle screen:
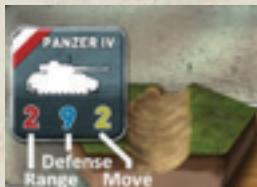
The current player nationality symbol and sample terrain hex that is normally displayed, will have changed to that specific unit (hovered over with your cursor), with combat and movement factors highlighted; and the specific terrain shown (on which the unit sits)

Example: Unit on a Clear hex   **Example: Unit on a Hill hex**

Example: Unit on a Depression hex

3.3 COMBAT RESOLUTION AND CHANCES BAR.

At the top of the Battle Map are three rectangular fields, which display Combat data.
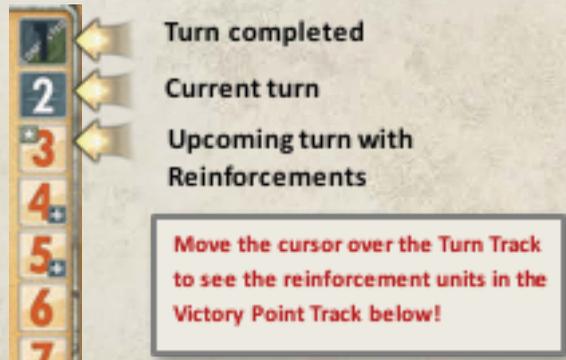

Field 1   Field 2   Field 3

Field 1: **FIRE TABLE** shows the last combat result

Field 2: **CHANCES TABLE** of a planned shot

Field 3: Shows the **Scenario Name; chances of alternate planned shot; or the 3rd airstrike hit**

3.4 TURN RECORD TRACK.

On the left side of the battle map is the **Turn Record Track**, which shows the number of turns the scenario has (maximum turns are 18), and tracks turns as they are played by each side.

Turn completed

Current turn

Upcoming turn with Reinforcements

Move the cursor over the Turn Track to see the reinforcement units in the Victory Point Track below!

3.4.1 SNOW.

In games on **Winter Maps** you will see a *Snow Marker* above the Turn Record Track. Snowfall influences combat results and airstrikes. (10.4 and 11.1)

A random dice roll at the start of each turn decides weather conditions: 10 or more on the dice means the weather changes; when the weather changes, the dice turn red.

Weather Changes

3.5 HELP AND EXIT SCENARIO BUTTONS.

Below the Turn Record Track are two buttons:

✓ The **HELP** button will bring you to screens that will provide quick reference to game mechanics.

✓ The **EXIT** Scenario button will take you out of the current displayed scenario, back to the Main Menu.

3.6 END TURN BUTTON.

Located at the top right of the Battle Map is the End Turn button.

END TURN After you have spent all APs on unit actions for your turn (or if you decide to end your turn early), clicking the **END TURN** button will progress the game turn forward. The button will pulse with a halo to remind you that your turn is over.

3.7 ACTION POINT (AP) TRACKER.

Below the END TURN button is the **AP TRACKER**, which shows Action Points as they are spent, and possible unspent APs available. (8.0)

Most actions in *Tank on Tank* cost APs. At the start of each turn you automatically receive 2 APs, which are shown as active and ready to use. You may then, possibly receive a 3rd or 4th additional APs, determined at random each turn; these being greyed out until you get to a point where the 3rd and 4th action might be available.

3.8 UNIT ACTIONS BAR.

Below the ACTION POINT TRACKER is the **UNIT ACTIONS BAR**, which allows different actions to be performed, such as activate Airstrikes, Headquarters Activation, Fire weapons or Cancel Fire.

A sub-bar is located to the left with the unit Pivot (change of facing) control buttons. These buttons can be used as an alternative to the directional controls that pop up around a unit when it is moved. Either method works to the same end, and is a matter of user preference.

3.9 Victory Points (vp) TRACK – Who wins?

To win the game, collect more VPs than the enemy! The VP TRACK keeps tabs on VPs as they are accumulated for each side.

Each **ENEMY KILL** gets 1 VP Kill symbol added for each enemy unit eliminated.

VICTORY POINT HEXES have a red dot indicating VP value. These hexes will pulse with a halo for a moment when the scenario starts. When you capture VP hexes, VPs are added to your score and removed from your opponents score.

If both sides have equal amount of VPs at the end, the Defender wins!

If you kill *all* the units of your enemy, you receive all VPs on the field.

Now that you know what the complete SCENARIO BATTLE SCREEN looks like, let's move onto the game mechanics!

4.0 FACING

A hex has a 360-degree perimeter, made up of 6-hexsides. A unit will always face a hexside.

4.1 FRONT FIRING ARC.

The top of the unit counter (with a nationality indicator at the top left corner, and the unit type at the top right corner) will always face what you intend as its *front-most hexside*. The hexsides to the immediate left and right complete the **FRONT FIRING ARC**. This makes up a 180-degree front arc from which you can fire on enemy units

Example: The American Sherman tank will advance one hex up, and will then be capable of firing at the German armored car within range, as it is in the Sherman's Front Firing Arc.

The **white Arc Wings** help you to distinguish between the two arcs.

4.2 FLANK ATTACK ARC.

This firing arc principle also works in tandem with the attacked unit, and which direction your attack is coming from. Imagining the same kind of Arc Wing for the enemy unit, you will either be attacking its front or flank.

The three hexsides to the rear of a unit make up the **FLANK ATTACKS ARC**. Attacks to an enemy units' flank gets +1 added to the attack die roll result! This obviously makes flank attacks more dangerous, and desirable.

Example: The American Sherman tank will advance one hex up, and then - being in range - will be able to fire at the German Infantry units' FLANK!

4.3 PIVOTING.

Units can change their facing, but only after being activated for movement. Once activated, a unit can pivot to face in any direction. You can change facing either with the **White Arrows**, which will pop up on the hexsides when you click on a unit; or you can use the green buttons on the **UNIT ACTIONS** ➡ **sub-BAR**. (3.8)

> **ATTENTION:** Pivoting without moving costs 1 AP! If a unit moves, pivoting is free.

5.0 COMBAT UNITS: HARD TARGETS

HARD TARGETS are armored units, such as tanks, tank destroyers, and self-propelled artillery. They are easily identified by having a single Defensive Value.

5.1 COMBAT FACTORS

Each hard target unit has three numbers on it. From left to right, these are **Range, Defense and Movement Points (MPs)**. Range is how far the unit can shoot; defense is how hard it is to kill; and movement is how far it can move each turn.

5.2 THE NATIONALITIES & TYPE

These are the hard targets in the game:

SOVIETS:

Tank	Tank	Tank	Tank	Self Propelled Artillery

AMERICANS:

Tank	Tank	Tank	Tank	Self Propelled Artillery

GERMANS:

Tank	Tank	Tank	Tank	Tank	Self Propelled Artillery

All hard targets are capable of moving and firing at enemy units.

5.3 HEADQUARTERS (HQ)

The names of some units are underlined and marked as **HQ** (Headquarters). They make movement more efficient.

5.4 HEADQUARTERS BONUS/ PROMOTION

When an **HQ** unit is activated for movement, all adjacent units - marked white in the illustration below - can also move freely at that time, but they do not have to stay with the HQ when they are moved. This makes HQs a crucial part of a player's operation.

Example: The HQ has to move first!

 If you *don't* want the HQ to move first, or even not move at all, press the **HQ ACTIVATION** button

Now the HQ is also marked white and the adjacent units can move freely. The HQ may move or stay, but it is still considered to have used its MPs for the turn.

Example: Any unit can move first!

An **HQ** can be used to allow an adjacent HQ unit to move, but the second HQ unit does not, in turn, activate other adjacent units.

> Note: The HQ bonus cannot be used when entering units onto the map

5.5 HQ FIELD PROMOTION

 FIELD PROMOTION allows the player to return one of his eliminated HQ pieces to play. He spends one AP and replaces a piece that is the same type as the eliminated HQ. The new HQ keeps the facing of the replaced unit. When a promotion opportunity occurs, the PROMOTE Button lights up. Choose your new HQ and click the "Promote" Button! Promoting a unit costs 1 AP!

> ATTENTION! A promoted HQ can still be activated to move and/or fight.

5.6 ACE.

 Some units are marked with an ACE symbol, and that firing Ace unit gets to rolls the dice twice! You see the two results on the FIRE TABLE on top of the screen. The better die roll is used, of course!

6.0 COMBAT UNITS: SOFT TARGETS

Defense Value/higher
in Town, Woods, improved positions

SOFT TARGETS are soft-skinned units, such as Infantry, Armored Infantry, AT (anti-tank) Guns, and towed-artillery. They are easily identified by having two Defensive Values, separated by a slash.

6.1 COMBAT FACTORS

Although soft targets resemble hard targets, with similar-format combat factors (Values), they possess **two defense values**, separated by a slash (/). The **top value** is used when a soft target occupies a Clear or a Depression hex; the **bottom value** (higher value) is used in a Hill, Woods, or Town hex.

6.2 THE NATIONALITIES & TYPE

These are the soft targets in the game:

SOVIETS:

| Artillery | Artillery | Infantry | Infantry |

AMERICANS:

| Artillery | Artillery | Infantry | Infantry |

GERMANS:

| Artillery | Artillery | Infantry | Infantry |

6.3 Cannot move and fire in the same turn

During a turn, soft targets can move **or** fire – not both.

6.4 Infantry range Limitation

Infantry and Armored Infantry receive no range benefit for being on a Hill; its maximum range is always 1 hex.

6.5 Infantry bonuses on the attack

When an Infantry or Armored Infantry unit is included in an attack, it cancels the -1 penalty (if applicable) for firing at a unit occupying a Town or Woods hex. Note that a soft target still receives its bottom (higher) defense strength.

6.6 Infantry Advance after combat

When an Infantry or Armored Infantry unit participates in an attack, and the attack successfully destroys the enemy unit, the Infantry unit can make a free move into the enemy unit's hex. The advance-hex is then marked blue; click it if you want to move into it. The unit can change facing normally after the advance.

If you *do no*t want to enter the previously enemy-occupied hex, click the **CANCEL ADVANC**E button to skip the advance.

Note: While Infantry is generally not as powerful as armored units, it remains the one unit that can attack and enter an enemy hex for the expenditure of a single AP.
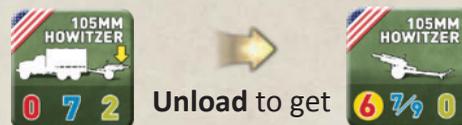
6.7 mounted units

ARMORED INFANTRY *move farthe*r when loaded in their transports. To use these units as **INFANTRY**, they must be **UNLOADED** from their transports – Press the **UNLOAD** button.

EXAMPLES:
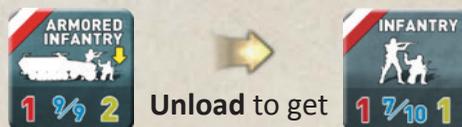
Remember: Units with 0 MPs are able to move 1 hex along a road!

When you move your mouse over a loaded unit, you will be able to see on the top left side of the screen, what they may change to. Unloading costs no AP!

Note: It is not possible to load a unit once it has been unloaded.

6.8 Anti-Tank (AT) Gun Bonus

If an AT (anti-tank) Gun fires by itself at a hard target, the attack does not consume an Action Point. If an AT Gun has not fired by the time a player runs out of APs, it does not get its shot.

6.9 Improved positions

Improved Positions (IPs) allow an occupying soft target to use its higher defense factor (regardless of terrain) as well as supplying an additional -1 modifier to incoming attacks.

Hard targets receive no benefit from an IP.

The IP is removed if the occupying unit leaves the hex or is eliminated. IPs are deployed during set-up and cannot be created during play.

7.0 TURNS
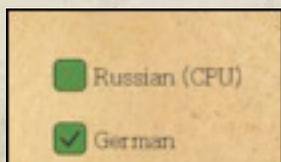
Each turn consists of one playing phase for each side. If playing solitaire against the Computer AI, the recommended side for the player in the selected scenario is advised.

During his player phase, a player has the opportunity to activate some or all of his units to move and/or shoot. However, the Action Point system may prevent him from doing everything he wants to do. The player may receive another 1 or 2 APs after having spent his original 2.

Regardless of how many APs a player has to spend, each unit can only move once and fire once each turn.

8.0 ACTION POINTS (AP)

ACTION POINTS (APs) are the tool by which players turn their intention into activity on the map. APs are expended to **move, fire**, and **promote** pieces. The player who uses his APs more efficiently deserves to win the game (though the dice can be fickle).

It costs __one AP__ to:

✓ Pivot and/or move **one** piece (7.0.)

✓ Fire any/all pieces at **one** target (8.0.)

✓ Promote **one** piece to HQ(6.2.)

It costs __two APs__ to

✓ Start an Airstrike

APs can be spent for these tasks in any order – it is permissible to promote a unit to an HQ piece, move several pieces and then fire them at a target. However, you must complete all activity for one AP before spending the next AP.

To repeat: Regardless of the APs a player has to spend, each unit can only move and fire once each turn.

9.0 MOVEMENT

Click on a unit to activate it for movement: It can spend Movement Points (MPs) equal to its movement allowance – its number of MPs. A unit moves by expending one MP for each hex entered. It can continue to move until its MPs are exhausted. MPs cannot be saved from one impulse to the next. You see the yellow outline on the map: this are all hex fields the unit can reach.

Note: One AP buys you all of a unit's MPs.

Once a unit's movement is complete, it can face in any direction.

✓ **Woods and Town** hexes cost an extra MP to enter if a unit is not entering along a Road. Hills cost only the normal 1 MP per hex.

✓ **Road March:** A unit can spend an extra MP if all of its movement occurs on/through Road hexes/hexsides.

✓ **Minimum Movement Rule:** As long as a unit possesses at least one MP, it can always move one hex when activated.

✓ Units can **never enter hexes occupied by units or prohibited terrain.** The Minimum Movement Rule does not override this prohibition.

9.1 STACKING

Stacking is not allowed in Tank on Tank. Only one unit counter can ever occupy a hex. There is no moving through hexes containing units, whether the piece is friendly or enemy.

9.2 Entry of Reinforcements

Throughout the game, the players may receive reinforcements. The Turn Track shows in which turn reinforcements will appear (this may also be an airstrike).

Example: On Turn 5 – the Germans get reinforcements

Reinforcements must be activated to enter the map. Units pay their normal MP costs to enter the first hex, and if they have MPs remaining, they can continue moving. If they enter the map via a Road, they qualify for the Road March bonus.

Note: Move the cursor over the Reinforcement sign on the Turn Track and see the reinforcement units for that turn in the Victory Point Track!

10.0 COMBAT

To shoot at an enemy unit, a player must satisfy three conditions:

✓ At least one friendly unit must have the enemy unit in its Front Firing Arc

✓ The enemy unit must be in Range of the friendly unit,

✓ The friendly unit must have a clear Line of Sight (LOS) to the target.

Any number of pieces can fire at the designated target, provided each firing piece satisfies these conditions and has not already fired this phase.

10.1 Range and Line of sight (LOS)

To see which enemy unit can be attacked, move the cursor over the enemy units. The red arrow(s) show you which enemy is in range and can be fired at by which of your units.

Range is how far the unit can shoot.

But you can only shoot if the enemy in your Range is also in **Line of Sight (LOS)**.

Blocking the LOS are all units, Hills, Towns and Wood hexes.

Units on Hill hexes can see (and be seen) over units on Clear-terrain hexes. **Add 1 to the range** of a firing unit occupying a Hill hex.

Units in Depression hexes are below the level of a field. Units can only see into these hexes if they are adjacent to the Depression terrain, and units in the Depression can only see out to hexes adjacent to the Depression. The best way to

understand this is the LOS can only cross Depression hexes between the origin and its destination.

Units in Depression hexes do not block LOS for units that are not also in a Depression hex.

Example 1: Fire with a Puma!
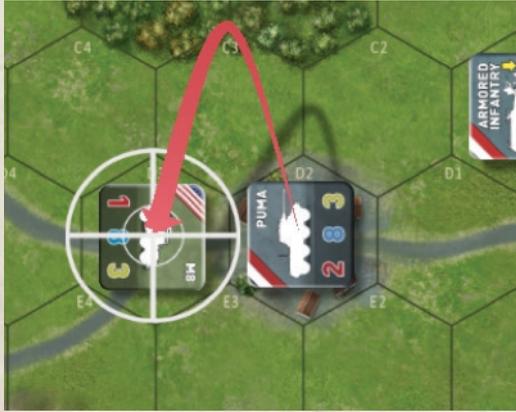
Example 2: Fire with a Puma and a PanzerIV simultaneously!

Example 3: If you click once on the target and once on the Puma, then the Puma does not fire!

Example 4, alternate fire: Click once on a planned target and compare your chances with another target – move the mouse over second possibilities. The chances are shown on the bar above!

10.2 Artillery Support

An **Artillery** unit *does not require LOS* to the target if at least one other *firing piece has a valid LOS* to the target. The artillery unit must still be within **Range** of the target.

10.3 Combat Resolution

After firing (double click on the target, or press **FIRE** button) you see the result on the top of the screen:

✓ Shows last combat result

✓ shows chances of planned shot

✓ ...and of alternate planned shot

10.4 HOW TO READ THE COMBAT PREDICTION AND HOW TO READ THE COMBAT RESULT

In our example the enemy has a Defense value of 9 and is located in a town; 2 units are shooting, one of them with a flank attack.

This shows you that you need to have 9 or more on the dice to kill:

✓ Sum of dice; + number of firing units; +/- combat modifiers

And this is the result after you shot:

2 dice = 8 · enemy in town · enemy defense value 9
2 attackers · flank attack · Result = 10, 10 ≥ 9 Kill!

If the attack roll is **equal to or greater** than the target's defense it is a kill. The unit on the board gets crumbled and you get your Victory Point!

If the attack roll is **less** than the target's defense, the attack **misses** and the target escapes harm.

Modifiers added to or subtracted from the dice roll:

+1 **+2** +1 for each firing unit

↺+1 +1 for flank attack

+2 +2 for hit by airstrike

🏠-1 -1 if the attacked unit is in a town or wood hex

🌳-1

❄-1 -1 if it is snowing

-1 -1 if the attacked unit hides in an improved position

Regardless of modifiers, an original die-roll result of 2 is always a miss and a result of 12 is always a kill.

10.5 COMBAT IN SNOW

Snowfall means: -1 on fire result.

Exception: If one firing unit is in a hex *adjacent* to the target, then there is no -1 on the result.

Infantry and Armored Infantry are not influenced by snowfall.

11.0 AIRSTRIKES

Some scenarios will allow a player to call in one or more airstrikes over the course of the game.

An **airstrike** is possible if a **target is within 4 hexes in Line of Sight** (LOS) of a friendly unit. The Airstrike-Button lights up. All possible targets are indicated with a Bomb marker. Double-click on your chosen target (or single-click and hit the "Bomb" button) to start the Airstrike! After the first bomb lands, two random, adjacent hexes will be chosen for the remaining two bomb hits.
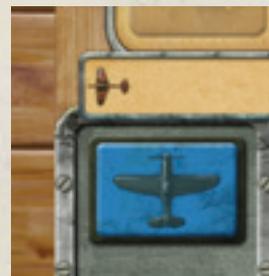
An Airstrike costs **2 APs**; 3 hits are possible!

An Airstrike adds +2 to the attackers dice roll!

But the protection in woods or town hexes is higher and so the attack counts **-2** on the dice for attacks in woods or town.

If the player does not have enough APs, the airstrike does not occur and the turn ends (the airstrike remains available for a future turn, you see the little plane on the right side of your screen as a reminder)

Note: Airstrike is not possible when it is snowing!

Attention: The bomb could hit your own troops!

11.1 AIRSTRIKES IN SNOW

Snowfall influences combat results and airstrikes.

Airstrikes are not possible when it is snowing!

The **Airstrike** is not lost; you can use it in any subsequent turn, assuming weather allows.

12.0 PLAY ONLINE

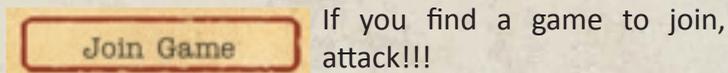You can play online against other gamers, or with a friend in private game.

Click **PLAY ONLINE** and enter your nickname (not more than 18 letters).

Now you can either **create a game** or **join a game**.

12.1 JOIN A GAME

There are public games and private games.

✓ Tick "Search for Public games" to see if there are any to join.

 If you find a game to join, attack!!!

...or **"Search for Privates Games"**, if you are invited to play with a friend:

Your friend will give you the "Enter Code"; type it in and join the game!
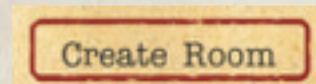
12.2 CREATE YOUR OWN GAMES

If you want to **Create a Game**, choose a scenario...

...Then choose **"Public"** or **"Private"**:

...and finally, **"Create Room"**:

For a **Private game**, you will get a Code. Simply give it to your friend and only he or she can join your game!

...or wait for someone to join your **Public** game, for which there is no Code for that option.

13.0 KEYBOARD SHORTCUTS

End turn: Return Key

Change of Facing: Arrow Keys left and right
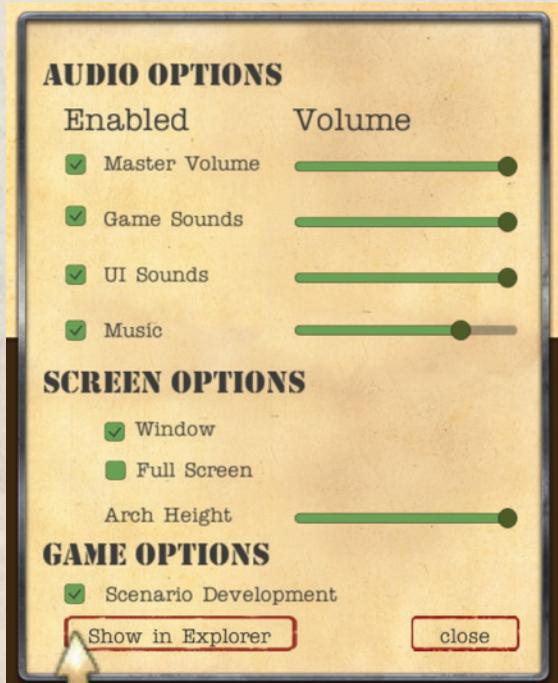

Fight: Return Key

That's it, Soldier ...now hit the battlefield!!!!

14.0 DESIGN YOUR OWN SCENARIO

To design your own scenarios or add other users scenarios to your game, open **"Options"** on the start screen and use **"Game Options"**

Tick **"Scenario Development"**, which requires to restart the game.

If you open **"Show in Explorer"** you find the folder where the new scenarios and example scenarios are located. There is also an *additional Manual* for scenario designing at this place, and therefore we do not go into further details here!

CREDITS

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Music:	"Waldameisen" Achim Behrens
Sound:	Rosi Bader
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Special Thanks:	Steve Overton and Trent Garner