Nor law, nor duty bade me fight,
Nor public men, nor cheering crowds,
A lonely impulse of delight
Drove to this tumult in the clouds;

— W. B. Yeats
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Introduction

Thank you for buying and playing UFO: Aftershock!
UFO: Aftershock is a combination of small-squad tactical combat and a global strategy game that pits you against an alien threat. In the strategic part of the game you control the expansion of your territory, research new technologies and manufacture new equipment for your soldiers.

In tactical missions you and your elite squad will fight the alien scum and their local helpers in close combat. You will be using our Simultaneous Action System, designed to give you complete control of the battlefield while capturing the action of combat with an alien threat.

We hope you will enjoy playing it at least as much as we enjoyed making it.

Installation

UFO: Aftershock comes on one DVD. To install the game, simply insert it into your DVD drive. If you have autoplay enabled on your PC, a splash dialog will appear. Select the install option.

If the dialog does not appear, double-click the “My computer” icon and then double-click the DVD drive icon. Here, run the Setup.exe program by double-clicking it.

System requirements

UFO: Aftershock runs on a 100% Intel-compatible computer that meets, or exceeds the following specifications:

Minimum
- CPU 1 GHz
- Nvidia 5700, or ATI Radeon 9500
- 512 MB RAM
- 4 GB free on HDD
- DVD ROM drive, mouse
- Windows 2000/XP with DirectX 9

Recommended
- CPU 2 GHz
- Nvidia 6600, or ATI Radeon 9800
- 768 MB RAM
- 4 GB free on HDD
- Windows XP with DirectX 9

The manual

It is not really necessary to read this manual before you start playing the game. There is an extensive in-game tutorial that should guide you through various stages of the game. We suggest you try playing the game and reading the tutorial first and turn to this manual only when you feel you need more detailed information.

The biggest part of the manual describes the game in detail and tries to outline the workings and relationships of different parts of the game. It is less concerned with controlling the game (this is explained in the in-game tutorial and also in tooltips within the game). In short, the manual answers the ‘Why?’ questions rather than ‘How?’.

UFO: Aftershock is designed to evolve as you play. At certain points of time, you acquire completely new abilities, or the style of the game changes profoundly. As we try to cover the whole game in this manual, there are necessary sections that deal with these more advanced parts of the game. These sections are marked with the following warning:

<Danger: Spoiler>
Read on at your own risk!

Story so far

UFO: Aftershock is a sequel UFO: Aftermath (developed by ALTAR interactive, published by Cenega in 2003). It is not necessary to be familiar with Aftermath in order to play Aftershock. It is not even necessary to know what happened in Aftermath (the humans on the Laputa have to find for themselves anyway) but, in case you are curious, here is a brief summary:

<Danger: Spoiler>

In 2004, a giant spacecraft approached the Earth. Silent, it hovered ominously over the world, ignoring all human attempts at communication. After a few days it began to release great clouds of spores into the upper atmosphere. Rapidly multiplying, the spores soon darkened the skies, and before long obscured the sun completely. In later days, this period will be known as the ‘Twilight’.

Having reached critical mass in the skies, the spores begin to rain down, and over the course of several days, begin to clog the streets and bodies of water, smothering people in their homes, and burying animals in the wild. During the
after the laboratories on your territory develop blueprints for it. And it is not free either, you have to have raw materials to construct buildings (factories, laboratories and others), to carry out research, and to actually manufacture anything.

Resources are gathered from the territories in the Commonwealth and this completes the circle: the more territory you control, the bigger your technological advances and the better the chances that you will win more territory.

Let us now take a look at different parts of this process.

** Territories **

Collectively, your territory is known as The Commonwealth of Earth. The smallest territorial unit is called a province. Several provinces form a country. Thin black lines separate the provinces of a single country. Thin blue lines separate the countries. The thick blue line is the border of the Commonwealth.

** Exploration **

At the beginning of the game most territory is unexplored. You have no information about the provinces that make it up. After you win your first mission, you gain your first base and your first two provinces. These belong to the Commonwealth and you know everything about them. They appear blue on the Geosphere view.

There are two intermediate steps: explored and identified provinces. The former are surrounded by thin blue lines, but their territory is not colored. When you select an explored province, you can see information about it (the owner and available resources). Identified provinces are not permanently displayed on the globe, but they are highlighted when you move your mouse over them. They can be selected, but no information is available about them.

To explore an identified province, first select it and then press the Mission button. An exploration icon will appear over the province and after some time it will be explored. It is only possible to explore one province at a time.

Exploration also occurs automatically, however, this automatic exploration takes a long time, and the provinces that are explored are chosen randomly.

** Capitols and resources **

There are two kinds of provinces: capitols and resources. Each country has a single capitol province. You can construct bases in capitol provinces. Resource provinces supply you with the raw materials required for research and manufacturing. When you click a province, information regarding the province is displayed in the window along the right edge of the screen.
Strategic screen

The range of the Laputa landing craft

Explored territory
(icons show the available resources; the diamond shaped icon is the stash, the round one is the mine)

Another explored territory
(no resource icons; this is probably the capitol of the country)

Commonwealth borders

Tracks

Capitol province
(the base icon shows the buildings present in the base)

Country borders

Province borders

Resource province
(the icon shows the type of resource mined in the province)

Unexplored territory

Laputa
it is a distinct possibility. When a province is attacked, you must fight a defensive mission to maintain control of the province (alternatively, a defensive mission can be fought by your militia if it is present in the country).

**Cultists and Starghosts**

*<Danger: Spoiler>*

In later stages of the game several other races appear, two of which can also own territory — Cultists and Starghosts. The Cultist territory is red, Starghosts’ is yellow. Both races can attack the Commonwealth provinces and capture them, and while it is possible to capture Cultist territory, it is not possible to attack the Starghosts.

The Cultists will never ask for help and there is no way of taking their provinces other than by force. They are also adept at infiltrating and persuading people to join them, so it is possible that one or more of your provinces will suddenly convert to Cultist, without a fight. This usually happens when a province is surrounded by Cultist territory for some time.

You can decrease the chance of that happening by increasing the knowledge level of the base in the country, but you cannot eliminate it altogether.

The Starghosts gain territories only to put their Pillars of Death in them and convert them into a psionic wasteland. Once this happens, there is no way of winning the territory back.

**Connecting territories**

Your first base is the main base; it serves as the hub of your planet-side operations, and the clearinghouse for all of your resources. In order to function, your other bases must be connected to it via tracks.

Tracks facilitate the transport of material to and from a country. The latter is important for adding a country’s resources to the common resource pool, while the former is necessary for the base to operate: without a connection you cannot construct buildings, manufacture items, or research technologies in the base.

To build a track, click the territory in which you want to start the track (this province must already be connected to the track, or it must be your Main Base). Next, click the Track button, then a neighboring province where you want the track to end. A dim line connects the two provinces. This is a track that is under construction. After some time, the track turns bright yellow to show that it is complete and functioning.

There is no raw material cost to build a track, but you must pay an upkeep cost to keep your tracks functioning. The upkeep cost of your track network is displayed in the Overview window. To decrease upkeep, you can destroy tracks.
Each resource province can yield up to two resource types: permanent resources and limited resource stashes. All resource provinces have permanent resources (represented by round icons). These are mines that yield a regular flow of resources—usually ten units per day, unless production is increased by the presence of certain buildings. The other resource type is a stash—a special resource (diamond icon) that disappears from the map and is added to your resource pool the moment you take control of the province.

To see the total amount of raw materials a country supplies to the resources pool, select it on the Bases Screen.

Buildings

Buildings are constructed on the Bases Screen. Select a base from the list on the left side of the screen to display that base in the main window. Each base has four to six building slots. Move your mouse over the base display to highlight the building slots.

To construct a building, click a building slot on the base and then click a building on the list of available building types. When you select a building, its description is displayed in the lower right corner of the screen. You can also see how much it will cost and what the required Knowledge Level for it is. The total amount of resources required for construction of a building is subtracted from your resource pool when you start construction. When you demolish a building, you recover half of its construction cost.

There are four kinds of buildings: factories, laboratories, knowledge, and defense. The filter buttons on the building list allow you to display only the building types you want to view. As you research new floor plans, more buildings become available for construction.

As you might expect, factories allow you to build equipment and weapons, and laboratories allow you to research and develop plans for new items. These buildings rely on the global track network to coordinate their work. For example, when you research a new technology, all laboratories of the appropriate type join in the research effort for that item—assuming they are all connected to the track network. The same rule applies to factories—all factories of a like type connected to the network join in all production efforts.

On the other hand, knowledge and defense buildings only work locally—their effects are confined to the base in which they are located. Knowledge buildings increase the Knowledge Level of the base, which increases the speed at which materials are mined. In addition, some buildings require a minimum Knowledge Level in order to be constructed. A higher Knowledge Level also increases the base’s resistance to enemy propaganda. Defense buildings train militia units that help defend the country if attacked.
Base management screen

- Income from the selected base
- List of bases
  - Aerial view of the selected base. Use right mouse button to rotate it, left mouse to select slots, or buildings and mouse wheel to zoom in and out
  - A free building slot is selected. You must first select a place, then select a building you want and press the Build button
  - The Barracks are producing militia. Currently, two Recruits of six possible are present in the base
  - The position of the base on the globe

Use these buttons to access other management screens
Use the buttons to display the buildings of the type you want to build
Manufacturing

The factories you build allow you to produce new items. The Manufacture Screen displays a list of all factory types currently in operation at your bases, and the total number of factories of each type. The center portion of the screen shows a list of all items you can manufacture. For each item listed, there are two icons—the type of factory that manufactures the item (on the left), and the item's production status (on the right).

When you select a factory on the Manufacture Screen, the factory's production queue is displayed, and the list of items available for manufacture is filtered to show only those items that can be manufactured in the selected factory. Selecting an item automatically selects the factory (if available) and displays information regarding the item in the upper right section of the screen. Also listed is the amount of material required to produce the item.

You can add an item to the production queue (if you have the proper type of factory), move an item up and down the list to raise or lower its priority, or increase/decrease the quantity of the item that you want the factory to manufacture. When you add an item to the production queue, its material cost is immediately deducted from your resources. If you remove an item from the queue, the materials that would have been used to manufacture that item are returned to your resource pool.

Research

Research several purposes in the game. First, it allows you to develop technologies that allow the construction of new buildings, the production of new items, and the handling captured items. Second, researching some technologies can effect global change. For example, the completion of certain research projects makes other factions more cooperative. Finally, research is the only way you can find out what really happened on Earth and who your real enemy is.

The Research Screen is similar to the Manufacture Screen. The list on the left displays the available laboratory types, and the technologies available for research are displayed in the center of the screen. Selecting a laboratory filters the technologies list so that it displays only those technologies that can be researched by the selected lab type, and selecting a technology automatically selects the laboratory where it can be researched.

There are three basic technology classifications: finished, available, or unavailable. (In progress and queued are different states of available). The classification is determined by the state of the technology's prerequisites. When you select a technology on the list, its prerequisites are displayed in the bottom center of the screen.

The three icons that appear in front of the prerequisite's name provide additional information about the prerequisite. The left-hand icon shows whether the prerequisite is an item, or a technology. The middle icon indicates whether, or not you currently possess the prerequisite. The right-hand icon indicates whether the prerequisite is required, or supporting.

If a required prerequisite is not available — it is a technology that has not yet been researched, or an item that you do not have — technologies that have this prerequisite are unavailable for research until you research, or obtain the prerequisite. Supporting prerequisites merely speeds up the research when available. You can begin research on an item if you don’t have its supporting prerequisite, but the research will take longer.

You can add a selected technology to the research queue and move it up and down in the queue. Research does not require the expenditure of resources in and of itself, but your laboratories require an ongoing expenditure of resources for upkeep while research is in progress. The resource expenditure for a research project is, therefore, the cost of laboratory upkeep for all labs of the type engaged in the research multiplied by the amount of time it takes to complete the research. More labs mean faster overall research time, but higher upkeep.

Defense

Defense buildings in your bases produce militia. These are units that can defend the provinces in the country if they come under attack. The Mission Information Window displays a button 'Militia' for if the mission appears in territory where militia can operate. Pressing the button will send in the local militia and the mission will be won, or lost depending on the relative strength of the attackers and the militiamen. If you decide to handle the mission yourself, militiamen may, or may not be present to assist, depending on the mission's objectives.

Producing militia is free: it does not cost any resources, it only takes time. Once you finish a defense building, it starts training militia. You can see its progress in the Bases Screen. Once the building trains its full quota of militiamen, it does nothing else, until any militia units are lost. This can happen when you let them handle an incursion alone, or if they fight alongside your forces.

Knowledge

Knowledge buildings increase the Knowledge Level of a base. This effect is free, the building does not consume resources once it is completed. You can see how much each particular building adds to a base’s Knowledge Level. The Knowledge Level of the base is simply the sum of all these contributions, so if you build two versions of the same building it will add twice as much to the
Manufacturing management screen

- **List of available factories**
- **List of equipment that can be manufactured in the selected factory**
- **Ammunition box**: The ammo for the selected weapon appears there, but only if you have appropriate factory
- **The production queue in the selected factory**: Use the +/- buttons to increase the number of items to be produced

**Uses these buttons to access other management screens**

**Cost of the selected item**

### SPAS 15 Shotgun

This shotgun, a more advanced version of the SPAS 12, features both manual and semi-automatic operation. It comes up to 6 12-gauge rounds in its detachable magazine. Despite having a lower ammo capacity than the SPAS 12, the advantages of this model over its predecessor are a faster rate of fire in semi-automatic mode and faster reloading time. Like all shotguns, the SPAS 15 is most effective at shorter ranges.

Our Basic Weapon Factories can manufacture the SPAS 15. No special training is required to use this weapon.

**Cost**: 11 4 0

**Property**: 31132 1012 1017

**Go to Squad**
Research management screen

List of available laboratories

List of technologies that can be researched in existing laboratories. Select a lab to limit the selection to techs available in that lab only.

Button ‘No Lab’ displays technologies you cannot research because of the lack of the appropriate lab.

The research queue in the selected laboratory

Use these buttons to access other management screens.

Prerequisites of the selected technology: the first and last are technologies (1st column), first and second are required (2nd column), all three are available (3rd column).
Some of these territories must be conquered - these are marked with mission pins, just like they are on Earth.

The goal in this sub-campaign is to destroy the three strands that keep the mothership together. A mission description shows if it will be possible to destroy a thread at any particular location. As a rule, you must first fight your way through to get to the areas where the threads are exposed and vulnerable.

**Diplomacy**

Your decisions and performance in tactical missions influences your standing with the humanoid factions on Earth. You can see your relationships with the factions with whom you have established contact on the Diplomacy Screen.

These factions are usually neutral with regard to one another, but your presence can tip the balance of power. Maintaining good relationships with the locals is essential for the well-being and growth of Commonwealth.

Your relationship with each Earth faction can be either positive, negative or neutral. On the Diplomacy Screen, the bar graph next to each faction’s name is green for those factions with whom relations are positive and red for those factions with whom relations are negative. There are three buttons next to each faction: Send Material, Ask for Material, and Ask for People.

**Trading material**

If you are in need of resources, you can ask a friendly Earth faction for help. To do so, click the Ask for Material button. This opens a window that lists available materials and allows you to select the materials you need. The amount of materials you receive as a result of your request depends on how friendly you are with that faction. When you request materials from a faction, your diplomatic standing with that faction is reset to neutral.

Sending materials to a faction can improve your diplomatic relationship with that faction. To send materials to a faction, click Send Material, and specify the material and quantity you want to send from your reserves on the following screen. Factions generally prefer to receive materials that are not available to them. For example, Cyborgs place a higher value on low-tech and alien materials than they do on high-tech materials.

**Asking for people**

Although you start off with a number of available soldiers, you are bound to lose some people in battle. The only way to enlist more soldiers is to recruit them from the factions on Earth. To recruit new soldiers, click the Ask for People but-
Spaceship construction screen

Currently the ship has one Engine module, there is room for one more.

The image of the spaceship. Image is updated as you add modules to the ship.

This slot is disabled until another engine module is added.

Currently the ship can have up to four payload modules.

The capacity of the Store and Living quarters modules

Use this button to access Team Management screen to load soldiers and equipment.
ware. This allows them to use cybernetic devices to enhance their skills and abilities. The Cyborgs are all male.

Cyborgs can be equipped with body, leg, arm and eye implants. This is also their special ability. The implants are mechanical enhancements that improve certain skills. Once a Cyborg is equipped with an implant, the implant is permanently attached and cannot be removed.

Although implants cannot be removed once installed, they can be upgraded. For each basic implant, there is an advanced version. An advanced implant simply enhances the effects produced by the already-installed basic version.

The normal role of Cyborgs is as an offensive, front-line unit.

Psionics

The Psionics have a highly developed mental capacity and powers that are far beyond those of average human beings. These heightened mental powers are caused by a mutation — one that apparently only manifests itself in females. Psionics are born to human communities and develop the mutation sometime shortly after birth.

Psionics can be equipped with a circlet, collar, vambraces and suit. The first three are special devices enhancing some ability of the Psionic wielding them to project an effect on friendly, or opposing forces in battle. Unlike many conventional devices, like medikits, psionic equipment does not require activation — it is always ‘on’. The effects produced by each psionic device are explained in their descriptions.

The Psionics can carry the least equipment with them and they have the special ability of Psi detection (see section on Detection in Combat). Their best role in a squad is as a support unit.

Skills and Attributes

The performance of a soldier in combat is determined by their skills. There are fourteen skills (their detailed description is below), each of them influences a different aspect of tactical combat. The values of skills are displayed on the left part of the Team Management Screen.

The values of all skills are derived from the values of six basic attributes (also listed below). Attributes are fundamental and they can be increased when a soldier gains a level (see Experience and Levels), but do not directly influence skills e.g. a chance to spot an enemy. Skills are secondary, derived from attributes and cannot be directly modified, but all calculations in game (chance to hit, chance to spot, amount of damage, etc.) are based on them.
Team management screen

Slots for Helmet and Armor. For other races these will be replaced by race-specific equipment slots.

Humans have the largest backpack. Other races can carry less into a mission with them.

Use these tabs to switch between squads. Currently selected is squad A. The squad’s soldiers and equipment are saved when you switch to another squad (or exit the Team Management Screen).

The pool of available soldiers. Drag a soldier to the left to add them to the current squad.

Use these buttons to view stats for different weapon modes.

Unload button is the only way of unloading ammo from a weapon.

Use Training button to access Training mode where you can allocate Attribute points and manage training.
**Scale**

The values of both Skills and Attributes are expressed on a seven-point scale. It has the following values:

- Awful
- Poor
- Average
- Good
- Very good
- Excellent
- Heroic

We purposefully refrain from using numbers here. It is not true that Average is 3 and Good 4. The difference between the various levels gets higher at higher levels and this description is actually more accurate than a number would be. If, occasionally, a value of skill surpasses Heroic, it is displayed as Heroic + 2 for example.

**Skills**

There are fourteen skills in total and for easier orientation we divide them into four groups:

**Combat Skills:** Combat skills are mostly used when calculating the chance to hit. Each skill applies to a different type of weapon. See the section Attack resolution for more information.

**Long Range:** Long Range skill influences the chance to hit with sniper rifles.

**Rifles:** Rifles skill influences the chance to hit with assault rifles.

**Close Range:** Close Range skill influences the chance to hit with pistols and sub-machine guns as well as with melee weapons.

**Missiles:** Missiles skill influences the chance to hit with rocket/grenade launchers when throwing grenades and other objects.

**Mechanical:** Mechanical skill is important for repairing drones and using deployable equipment.

**Defense Skills:** These skills influence the soldier’s survivability in combat: whether they can avoid or withstand damage. See the Attack resolution section for more information.

**Dodge:** Dodge skill is the soldier’s ability to avoid being hit.

**Hit Points:** The number of hit points – the amount of damage the soldier can withstand – is calculated from this attribute.

**Movement Skills:** These are the skills that influence how fast the soldier moves and carries out their orders.

**Speed:** Speed governs how fast the soldier walks, runs, handles weapons and in general the timing of most actions.

**Capacity:** Capacity influences how much the soldier can carry.

**Detection Skills:** These skills pertain to the chance of spotting, or being spotted. See the section on Detection for more information.

**Stealth:** Stealth is the ability to avoid being spotted by the enemy.

**Observation:** Observation is the ability to notice enemies.

**Special Skills:** These are the skills that do not fit into any of the groups above.

**Medical:** Medical skill is the ability to heal wounds in the field.

**Enemy:** Enemy skill enables the soldier to hit enemies more effectively.

**Psi Power:** Psi power influences the chance to hit with a psionic attack and it is also the measure of the soldier’s ability to withstand psionic attack.

**Attributes**

Attributes are the fundamental statistics. Skill values are derived from them.

**Physical Attributes:**

**Strength:** Strength mainly influences Capacity, Missiles and Close Range skills.

**Agility:** Agility mainly influences Rifles, Missiles and Speed skills.

**Dexterity:** Dexterity mainly influences Mechanical skill and, to a lesser degree, a variety of defensive skills.

**Mental Attributes:**

**Willpower:** Willpower mainly influences Psi Power, Long Range and Rifles skills.

**Intelligence:** Intelligence mainly influences Enemy and Medical skills.

**Perception:** Perception mainly influences Observation and Stealth skills.

**Experience and Levels**

Soldiers gain *Experience Points* by participating in missions. The amount of experience gained depends on the outcome of the mission, number of participating soldiers, and other factors.

When a soldier accumulates enough experience, they can advance to the next level. Each time the soldier levels-up, they earn one *attribute point* that can be used to increase one of the soldier’s attributes. The amount of experience required to attain the next level is displayed in the upper left corner of the screen.

When you select the Training tab you will see how many un-allocated attribute points the selected soldier has: this is the number after the label ‘level-ups’. Every soldier who has at least one unspent level-up is indicated by an icon over their portrait in the Team Management Screen.
Attribute points are allocated by clicking the plus button next to the attribute. As you do, you will notice that some of the skills (displayed in the left part of the screen) change as well. More information about the relationship between skills and attributes is found in the Skills and Attributes section.

Do not be afraid to experiment! Until you press the Confirm button, you can review your selection and award the attribute point wherever you want.

**Abilities and Training**

*Training* gives a soldier one, or more special Abilities. When the Team Management Screen is in Training mode, it displays all available soldier training options. Each training type has a minimum requirement in terms of soldier attributes—only soldiers that meet or exceed these requirements are eligible for that type of training.

Each training type has three levels, and each level of training has different requirements. A soldier can have a maximum of three different types of training. Therefore, you must select training types carefully for each soldier. You cannot replace a training type that the soldier has already learned with another.

Each level of every training type gives the soldier one, or more new abilities. Some abilities are common to more training types; for example the ‘Heal unconscious’ ability is common to both Medic and Doctor training. Every training type, however, has some abilities that are unique to it. You will do well to consult the in-game Glossary on what type of training you want to choose for a soldier.

**Abilities**

This is the complete list of abilities available in the game:

**Equipment Abilities**

This group of abilities allows the soldier to use weapons, or equipment that requires this type of training. To determine if an item requires particular equipment training, see its description. This group includes:

- Sniper Equipment
- Medical Equipment
- Scout Equipment
- Rocket Equipment
- Deployable Equipment
- Heavy Equipment
- Commando Equipment
- First, Second and Third-Level Implant
- First, Second and Third-Level Psionic

**Bonus Abilities**

These abilities increase one of the soldier’s skills by 1. This group includes:

- **Sniper Bonus**: increases Long Range skill.
- **Grenade and Rocket Bonus**: increases Missiles skill.
- **Rifle Bonus**: increases Rifles skill.
- **Close Combat**: increases Close skill.
- **Medic Bonus**: increases Medic skill.
- **Dodge**: increases Dodge skill.
- **Acute Hearing**: increases Observation skill.

**Enemy Abilities**

These abilities enable the soldier to get important information about the enemy. They all pertain to the enemies the soldier can see.

- **View Enemy Target**: Ability to view any planned attacks. Planned enemy attacks are displayed in the same manner as planned allied attacks — as numbers that appear over the target's head, showing the alien's chance to hit that target.
- **View Enemy Health I**: Ability to determine health status. Move the mouse cursor over the enemy for which you want information in order to see the enemy's health statistics.
- **View Enemy Weapon**: Ability to see the specifics of a currently equipped weapon. To see the statistics of the enemy's weapon, move the mouse cursor over the weapon.
- **View Enemy Health II**: Ability to constantly monitor health statistics. A health bar (identical to the health bar that appears over your soldiers) is visible for each enemy the soldier can see.
- **View Enemy Armor**: Ability to determine armor statistics. To view the armor statistics, move the mouse cursor over the enemy in question.

**Special Abilities**

This is the most interesting group of abilities. Each of them gives a soldier a new specific faculty, not available to the other soldiers. It includes:

**Target Body Parts**: Target body parts training allows a soldier to aim at a specific body part on a target (as opposed to targeting the enemy as a whole). A targeted attack often has a lower chance of hitting, but can do additional damage, or provide other valuable bonuses depending on the targeted body part:

- **Head**: inflicts greater damage
- **Hands**: disarms the enemy
- **Legs**: causes the enemy to fall down
- **Body**: identical to an untargeted attack in both effect and accuracy
Reanimation is automatic — when a soldier uses a medikit on an unconscious dead victim, the victim is revived. The effect does not work on all victims — those who have been dead for a prolonged period of time, are badly mutilated, or burned cannot be saved.

Reanimation is an advanced medical technique that allows a soldier with the medikit to bring a dead victim back to life. The effect does not work on all victims — those who have been dead for a prolonged period of time, are badly mutilated, or burned cannot be saved.

Reanimation is automatic — when the soldier uses a medikit, the victim’s temporary damage and some of their stun damage are healed.

Advanced Healing: A soldier with advanced healing is able to cure a number of special afflictions, including paralysis and blindness. No special actions are required to utilize this skill — when the soldier uses a medikit on a victim, any special affliction the victim is suffering is automatically cured along with the normal healing effects imparted by the medikit.

Heal Permanent Damage: Under normal circumstances, it is impossible to heal permanent (black) damage that is suffered by a victim in battle. However, a soldier with the heal permanent damage ability is able to do so. This ability is an automatic side effect of using a medikit on a victim — in addition to the medikit’s normal healing effects, some of the victim’s permanent damage is also healed.

The effects of the healing only apply to the current battle. Healing permanent damage does not change the amount of time the injured victim will have to spend in the hospital recuperating between missions from his wounds.

Stabilize Victim: This medical ability allows a soldier to stop unconscious units from bleeding, thus preventing them from dying from loss of blood during the course of the battle. This ability is automatic — when the soldier uses a medikit on a unconscious soldier, the victim is stabilized.

Heal Stun: Under normal circumstances, a soldier is only able to heal temporary damage on the battlefield. However, when a soldier has heal stun training, they are able to heal a victim’s stun (blue) damage as well. This ability is automatic — when the soldier uses a medikit, the victim’s temporary damage and some of their stun damage are healed.

Heal Unconscious: Under normal circumstances, a soldier equipped with a medikit can only apply first aid to conscious victims. When the soldier has heal unconscious training, they are also able to apply healing to victims who are unconscious (have no green remaining on their health bar). This ability is automatic — a soldier with a medikit can simply heal both conscious and unconscious victims.

Advanced Healing: A soldier with advanced healing is able to cure a number of special afflictions, including paralysis and blindness. No special actions are required to utilize this skill — when the soldier uses a medikit on a victim, any special affliction the victim is suffering is automatically cured along with the normal healing effects imparted by the medikit.

Heal Permanent Damage: Under normal circumstances, it is impossible to heal permanent (black) damage that is suffered by a victim in battle. However, a soldier with the heal permanent damage ability is able to do so. This ability is an automatic side effect of using a medikit on a victim — in addition to the medikit’s normal healing effects, some of the victim’s permanent damage is also healed.

The effects of the healing only apply to the current battle. Healing permanent damage does not change the amount of time the injured victim will have to spend in the hospital recuperating between missions from his wounds.

Stabilize Victim: This medical ability allows a soldier to stop unconscious units from bleeding, thus preventing them from dying from loss of blood during the course of the battle. This ability is automatic — when the soldier uses a medikit on an unconscious soldier, the victim is stabilized.

Reanimate: Reanimation is an advanced medical technique that allows a soldier to bring a dead victim back to life. The effect does not work on all victims — those who have been dead for a prolonged period of time, are badly mutilated, or burned cannot be saved.

Reanimation is automatic — when a soldier uses a medikit on an unconscious dead victim, the victim is revived.

Enemy Sight: Enemy sight allows a soldier to temporarily see through the eyes of the enemy. If any soldier in the squad has this ability, the Enemy LOS mode is available. When this mode is activated, the line of sight for all enemies who can see at least one of your soldiers who has enemy sight ability is highlighted on the map.

Calculate Hit Probability: When a soldier with this ability is present, you can click the chance to hit number on the map for a detailed summary of all of the elements that went into calculating the hit probability — the soldier’s skills, the enemy’s cover, movement, and so on.

Rocket Tracking: A soldier with the rocket tracking ability is able to determine where an enemy rocket, or grenade is going to land. When the weapon is launched, or thrown, a marker appears on the map at the explosive’s projected point of impact. As the weapon moves along its track, the marker converges on the precise point of impact.

Ambidextrous: A soldier with ambidextrous training can use two one-handed weapons (pistols, for example), or one-and-a-half handed weapons (submachineguns, for instance) simultaneously. When using this ability, both of the soldier’s weapons work as one — therefore, both weapons must fire at the same target.

Force of Will: Normally, when a soldier is critically wounded in combat, the soldier’s projected plan is interrupted. Soldiers with the Force of Will ability are able to shrug off the effects of the critical hit and continue their plan uninterrupted.

Inspiration: A soldier with inspiration ability is able to rally allied soldiers and reduce the effects of psionic attacks have on their actions. The inspiration ability essentially provides the allied soldiers with a 1-point boost in their Psi Defense skills.

Group Attack Bonus: A soldier with this ability is able to communicate his knowledge of an enemy to nearby allied soldiers. If the soldier with the group attack bonus ability has a higher Enemy skill than that of his fellow soldiers, it is this soldier’s Enemy skill that is used to calculate the amount of damage inflicted in an attack.

Rapid Attack: Soldiers with the rapid attack ability are able to close quickly on an enemy’s position when engaging in a melee attack. When you plan a melee attack for a soldier with this ability, the soldier crosses the last five meters to the target in a blur of motion, hitting the enemy before it has a chance to react.

Perseverance: Normally, a soldier whose health bar is completely red falls unconscious. When the soldier has perseverance, however, the soldier can continue to move and function in this condition.

Knock-back Resistance: Explosions cause a great deal of knock-back damage — when they go off they generally knock soldiers in the blast radius to the
When all of a soldier’s damage is permanent (the health bar is completely black), the soldier is dead.

**Health and Injury**

When a soldier (or any other unit in the game) is hit, they suffer damage. The amount of damage sustained depends on the kind of weapon used and on the type of armor the soldier is wearing. The total amount of damage/health is displayed on the soldier’s health bar.

There are three types of damage: *stun, temporary, and permanent*. Stun damage is the equivalent of a minor concussion, and its effects disappear over time. Temporary damage refers to minor wounds that can be healed in the field. Permanent damage represents serious wounds that can only be healed when the soldier is returned to the Laputa.

The ratio of stun/temporary/permanent damage depends on the type of weapon. On the health bar, the three types of damage are color-coded for easy identification: stun damage is gray, temporary damage is red, and permanent damage is black.

When the sum of all three types of damage the soldier has suffered exceeds the soldier’s hit point total — there is no green left on the soldier’s health bar — the soldier falls unconscious.

There are two types of unconsciousness: *stunned*, or *incapacitated*. The former happens when part of the total damage is stun damage (i.e. part of the healthbar is grey). In this case the soldier eventually recovers and can continue to fight.

However, if there is only temporary and permanent damage (the healthbar is only red and black) the soldier is incapacitated. The soldier does not recover consciousness on his own — he is bleeding and his temporary damage slowly turns permanent over time if it is not healed.

If a stunned soldier is hit, the damage is applied as normal. It is important to realize that the soldier has more stun damage than displayed on the healthbar: this excess stun damage is what keeps the soldier unconscious. If you move your mouse over the healthbar, you will see how much total stun damage the soldier has.

If an incapacitated soldier is hit, all temporary damage is applied but permanent and stun damage is ignored. It follows then, that nobody can be killed by a weapon that delivers only stun damage.

**Face Panel**

- **healthbar—grey**: stun damage
- **healthbar—red**: temporary damage
- **healthbar—black**: permanent damage
- **number of enemies seen**: click the number to move camera to next enemy
- **current activity**: running
- **time to finish the plan**:
- **finished training icon**:
- **long-term effect icon**: current weapon mode: click the button to cycle through available modes
- **current weapon mode**:
- **ammo in the current weapon**
- **ammunition in the current weapon**:
- **current weapon mode**: click the button to cycle through available modes

**Items**

On the right of the Team Management Screen there is a list of all the available equipment in your stores. The filtering options at the bottom of this list allow you to display items from specific equipment categories. You can also filter the equipment list by selecting an equipment slot. For example, if you right-click an armor slot, only armor is displayed on the equipment list.

Click an equipment item to display information about that item — range and accuracy (for weapons), defensive statistics (for armor), and so on. If you are
Ammunition and Reloading

Most weapons require ammunition. Ammunition comes in standardized calibers (e.g. 5.56x45 mm) and there may be several weapons that can use ammo of this caliber. As a rule, it is also possible to manufacture several kinds of ammunition of any given caliber (e.g. armor-piercing, anti-personnel, etc.).

Ammunition is produced and packaged in standard boxes (e.g. fifty rounds), but different weapons have different capacities of magazines. If you reload a weapon, only enough rounds are taken from the box to fill the weapon's capacity. The number on the Team Management Screen refers to the total number of rounds in your stores.

A weapon can be loaded with any ammunition of the right caliber and so, if there is more than one variant of ammo of that caliber, it is clear that the weapon can use several different types of ammo. One of those types is designated as default. The weapon is automatically loaded with the default ammo when you equip your soldier with it.

To load a weapon with a different ammunition type you must first unload it. Click the 'unload' button and then drag the new ammunition into the slot containing the weapon. It is not possible to load a new type of ammo while there is ammo of another type still in the magazine.

Composing items

Certain items — mostly ranged weapons, but also implants and some others — can be modified by attaching various add-ons. If you select a modifiable weapon a Compose button will appear under its statistics. Pressing the button will open the Compose Screen.

On the Compose Screen, right-click a weapon’s add-on slot to see what add-ons (if any) from your stores can be attached to that slot. To attach an add-on, drag it onto the weapon’s add-on slot.

After you have modified the weapon, you must enter a name for the new weapon configuration. A default name appears at the bottom of the Compose Screen, but you can enter a new name if you so desire. Click the Set Name button to close the Compose Screen. The newly modified weapon now appears in your stores.

Item modes

Some items — especially weapons, can be used in more than one mode. For example, most assault rifles can be used either in ‘single shot’ or ‘burst shot’ mode (abbreviated to ‘single’ and ‘burst’). The item can, in theory, have any number of modes, but in reality most have only one or two. You cycle through available modes by pressing the ‘Weapon Mode’ button just above the weapon’s picture.

If you attach an add-on that is also a weapon (e.g. an under-barrel grenade launcher) its mode or modes will be added to that of the original weapon. So an assault rifle that originally had two modes (single and burst) will have three with a grenade launcher attached (single, burst, grenade).

Note that not all add-ons add a new weapon mode: e.g. a silencer only modifies certain stats of the weapon, but has no ‘mode’ of its own.
Combat

The tactical missions are where you are most likely to spend most of your time. It is therefore important to understand how the combat system works.

SAS

UFO: Aftershock uses the Simultaneous Action System (or SAS for short) for controlling your squad in combat. The basic premise of the system is a simple one: you have to plan a string of actions – go here, take the gun, fire at the enemy – for all your soldiers and then press the Run button. Your squad executes your orders until one of the following happens:

- One or more soldiers complete all planned actions.
- Some planned action cannot be completed (e.g., the enemy hides and it is no longer possible to attack it).
- Something important happens (e.g., a new enemy is spotted, a soldier is attacked, etc.)
- You pause the game.

Whatever the cause, the game stops running and the soldier ‘responsible’ for it (i.e., the one who completed the plan, whose plan was interrupted, or who spotted the enemy) informs you. You can now review all your plans, amend them as needed and then run the game again.

See the Options Screen to modify actions when the game pauses.

Possible orders

Most orders in the game can be entered either as a default order by right-clicking the target or by clicking the appropriate button on the command panel in the lower right corner of the screen. The meaning of the order is the same, regardless of the way it was entered. You may want to take a look at the table of Default Orders in the Controls section. It describes what order is issued under various circumstances.

No order: Wait vs. Watch

When you have more than one soldier at your disposal, it often happens that you only want some of your squad to take part in an action, while the rest wait. When this happens, give those units the Wait, or Watch order. Both work in a similar way – the soldier does nothing but observe his surroundings – the difference is that with the Watch order the soldier readies their weapon, thus shortening the time it would take to start firing, but prolonging the time it would take to start moving.

You should use Wait if you think you it is more likely the soldier will be moving and Watch when you think the soldier is more likely to be firing as the next command.

Drugs

Drugs include medikits and also stimulants. Medikits are easy to use and understand: they heal temporary damage (see section on Health and Injury), and with proper abilities also stun, or even permanent damage. Most specialized medikits cannot be used without a special ability.

Stimulants are drugs that can temporarily increase one of the soldier’s skills. When applied, an icon will appear over the soldier’s face notifying you of the fact.

Drones

Later in the game you gain the option to construct drones that you can add to your squad. To do so, select a drone core from the equipment list and then click Compose to open the Compose Screen. The first step is to select a drone chassis type — wheeled, tracked, walking, hover, or jet.

After you select a chassis type, you can add other components to the drone — weapons, scanners, and so on. When you have finished adding equipment to the drone, enter a name for the drone and click the Set Name button. The newly designed drone is added to your list of available equipment.

To add a drone to your squad, drag the drone into your squad, just as you would a soldier. To edit the drone’s equipment, select the drone on the equipment list and then click Compose.

Drone weapons have much more ammunition capacity than handheld weapons. However, drones cannot carry spare ammunition into battle, and soldiers cannot carry spare drone ammunition. Once their ammo supply is depleted, drones cannot fire their weapons. A drone’s ammo magazines are automatically reloaded when the drone returns to the Laputa (if there is a sufficient supply of ammo available).

Psionic equipment

The psionics use a wide array of equipment that influences other units (both friend and enemy) yet which need not to be activated and consume no power. Such items are called modeless because they have no ‘item mode’.

When a soldier comes under the influence of such a device, an icon is displayed over his face panel (on the right) indicating the nature of the influence (a tooltip that appears when you move your mouse over the icon will clarify things). When this device influences an enemy, an icon can be seen on the information circle that appears when you move your mouse over them.
Movement and its modes

Right clicking on an empty space issues the Move order. A thin line of the soldier’s color will be traced to the destination square. You can use the movement button to plan movement to places currently occupied by the enemy (if you use your mouse in this case, you will issue the Attack order instead, as this is the default order for right-clicking an enemy).

There are three movement modes: crawl, walk and run. The first is the slowest and least conspicuous, while the third is the fastest and most noticeable. Walk is a sort of compromise between the two (crawling is really very slow).

The three movement modes are closely tied to the three stances: prone, crouch and stand. In order to change the movement mode you must change a soldier’s stance. Clicking the ‘Prone’ button for example orders the soldier to lie down and this will also make them crawl when moving. Crouch corresponds to walk and standing corresponds to running.

So, for example, if a soldier is prone at one end of a street and you want him to spring across it then kneel down and open fire, you press the ‘Stand’ button, then right-click the destination square, then click the ‘Crouch’ button before right-clicking the enemy.

The change of stance/movement mode is not retroactive – any planned movement orders will not be affected. If you plan a movement somewhere and then realize, that the soldier is going to crawl there, you have to cancel that order, switch the stance and plan the movement again.

To select the direction you want a soldier to face after they complete a movement order, right click the destination square and then drag the mouse in the direction you want the soldier to face when they reach the destination point.

Attack and aiming modes

Right clicking on an enemy issues the Attack order. A number will appear next to the target’s rectangle in the soldier’s color, showing the chance of hitting it. This chance is an estimate based on the current situation. The enemy will often move, so the actual chance to hit when the soldier fires his weapon may differ from what you see. The number will be constantly updated when the game runs.

When firing ranged weapons, there are two possible aiming modes: quick shot and aimed shot. Aimed shot mode results in the highest accuracy, but limits the number of times the weapon can be fired in an attack. Quick shot mode allows the soldier to fire more times, but reduces the soldier’s accuracy (there is a penalty –3 to the skill used for calculating chance to hit). Aiming mode is unrelated to weapon mode (single shot, burst shot, and so on), see Item modes.

When you order an attack on an enemy it will be repeated automatically as long as possible (i.e. either until the enemy moves out of range, or is out of combat) so there is generally no need for you to enter several attacks. There is nothing, however, that would prevent you from doing so: simply right-click the enemy several times and you will see a number in parenthesis next to the chance to hit. This is the number of planned attacks.

Use the buttons in the lower section of the command panel to change the aiming mode used by the selected soldier, or soldiers. Keep in mind that the new aiming mode only applies to the attacks planned after the mode is changed. To change the aiming mode of an attack that has already been planned, you must cancel the attack, change the aiming mode, and then plan the attack again.

If you do not plan anything after the last attack order, several planned attacks will behave exactly as one: the soldier will keep attacking as long as possible. However, it is possible and sometimes advisable to plan a couple of attacks and then something else. The soldier will then only perform the given number of attacks and then go to the next order regardless of the enemy’s state. You may want, for example, to move from cover, shoot an enemy and run back. This is very easy to enter: right-click the place you want to move to, right-click the enemy and finally right click the place you want the soldier to hide in.

Attack Unit vs. Attack Ground

It is important to understand the difference between the Attack Unit and Attack Ground commands. The former is always associated with an enemy unit and the soldier will always try to hit that unit, not the space it was standing on when the attack command was issued. The Attack Ground command, though, is associated with a single square. The soldier will try to hit that square regardless of who happens to be there, or in its vicinity.

The difference between Attack Unit and Attack Ground should not be confused with the difference between direct and indirect fire, or the difference between normal and area-effect weapons (see below).

Reload and equip

The most frequent equipment action is reloading the current weapon and as such it has its own button on the command panel. When you press it, the soldier will try to reload from his belt and if this is not possible, to reload from their backpack, with the same ammo type he was using before.

All other equipment operation must be planned by entering the Equip Screen (either by right-clicking the soldier’s portrait, or by pressing the button on the toolbar). Here you rearrange the soldier’s possessions any way you want. You can also pick up any items lying on the ground.

All the rearrangements you make in the Equip Screen are only planned for the soldier – they will not actually take place until you run the game. ‘Planned’ equipment has a yellow background on the face panel to warn you that this is not the soldier’s current equipment.
**Tactical Mission**

- **Line of Sight button:** the areas that are not in the line of sight of any of your soldiers will be dark colored (use only when the game is paused)

- **Change the game speed**

- **Open the view mode drop down list:** the number of available viewing modes depends on the equipment and abilities of your soldiers.

- **Attacks planned on the enemy:** the numbers are color-coded to match the soldiers.

- **Soldier’s healthbar**

- **Soldier’s action progress bar:** this indicates the progress of an action (like aiming, or firing a weapon) where there is little visual feedback as to its progress (as opposed to walking, for example)

- **The message log:** follow the log to see why the game is paused, what was the outcome of an attack and other important information. The log can be resized dynamically.

- **Use these buttons to change the stance/movement mode of the selected soldier. The buttons below switch between aimed and quick shot.**
Basic ranged attack

All attacks are resolved by the following steps:

- **Determine Chance to hit**: depends on the weapon’s maximum and effective ranges, the attacker’s skill with the weapon, defender’s size, Dodge skill, speed and stance, distance between the two and the defender’s cover from the attacker’s point of view.
- **Determine Hit**: when the chance to hit is known, a random number is generated and compared with it. Depending on the result, the attacker scores either no hit, a normal hit, or critical hit. A Critical hit does triple normal damage. The damage is then adjusted by the attacker’s Enemy skill.
- **Calculate and Apply Damage**: when the total damage is calculated, the part absorbed by the defender’s armor is subtracted, depending on the type of damage. The type of damage also influences the split between stun, temporary and permanent damage. The damage is applied immediately; if the defender loses more than 30% percent of its total hit points, its plan is interrupted.
- **Apply special effects**: some weapons do not damage the target, but have different special effects (paralyze, confuse, etc.). Here the defender’s armor may influence the length of effect, or how difficult it will be for the defender to break it.

In the following paragraphs we shall indicate briefly how some special cases differ from this basic model.

Ground attack

Ground attack, i.e. an attack that targets a square as opposed to an enemy unit, differs in certain crucial respects. For one thing we assume that the attacker does not hit the intended target square and we must find out which square was actually hit. We have the following approach:

- **Calculate deviation**: we take a random number and use it to find the actual hit square within the distance calculated in the previous step. The squares closer to the intended target are more likely to be hit.
- **Calculate actual hit square**: A random number is applied to find the actual terrain square that is hit within the distance calculated in the previous step. Terrain squares closer to the intended target are more likely to be hit.
- **Apply damage**: if it is an area damage weapon, we calculate and apply damage to all units and structures in range (see below). If it is not, we only apply damage to structures on the actual hit square. It is not possible to hit a unit using ground attacks with a non-area effect weapon.

Throwing attack

Throwing attack is a Ground Attack with something that is thrown by hand, i.e. usually a hand grenade. This is a special case of Ground Attack (see above). The attack

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**Use**

In UFO: Aftershock, only doors are usable. To open a door, either right-click it, or press the Use button then click the door.

To use your non-combat equipment, simply use the Attack button: it changes based on what the selected soldier is carrying in their hands. For example, when a soldier is equipped with a medikit, the Attack button changes to a Heal button, and when the soldier is carrying a scanner, it changes to a Scan button. Regardless of the button’s function, it is always used in the same manner: click the button, and then click the target to plan the action.

**Canceling orders**

It often happens that you want to cancel the orders you entered: you might have simply made a mistake, or the situation evolved so that the old orders are no longer relevant. In any case there are several ways you can go about it.

There are two buttons on the command panel: Cancel Last Action (CE) and Cancel Plans (C). The former removes just the last order in the queue, while the latter removes them all. Both buttons only apply to the selected soldiers.

It is also possible to replace the order queue for the selected soldier when you hold down the Alt button while entering new order.

Lastly, it should be pointed out that it is never possible to cancel the action that is currently in progress. If, for example, a soldier is reloading his gun, he must finish the reloading before he can do anything else.

**Issuing Combat Orders**

In UFO: Aftershock you will usually wish to give your soldiers more than one order at a time, you want to plan a sequence of orders, the order queue. This works automatically: after you enter the first order, the next order is queued after it and so on. You can always cancel the orders by pressing C, or by clicking either of the Cancel buttons.

When you run a game and then select a soldier, the first order you give him will erase the old order queue (if there is one) and will become the first order of the new one. This is quite natural as you usually select a soldier when you want to change his orders. However, you can force an added order into the queue by pressing the Shift key when issuing that order.

**Attack resolution**

At the heart of every tactical combat game is the system for attack resolution: what influences the chance to hit, how the damage is calculated, etc. Without going into the actual formulas, here are underlying principles.
correspond to the attacking soldier’s color, indicate the chance of this other target being hit instead of the intended target. The possibility of hitting targets other than the intended target is known as friendly fire.

Friendly fire is calculated for all units, including your soldiers. So, if you see a percentage in brackets over one of your own soldiers, there is a chance that that soldier could be hit by friendly fire if the planned attack is executed.

Detection

The essence of tactical combat is to see without being seen. In UFO: Aftershock there are many ways in which to detect enemies and also many ways to be detected.

All your soldiers are able to locate the enemy visually and aurally. This is to say, every soldier can see and hear the enemy. There are other modes of detection that require special equipment: psionic, infrared, night vision, movement and heartbeat. Psionic detection is an in-born capability of Psionics, so they do not need special equipment for this.

When one of your soldiers sees the enemy, it simply appears on the map. However, if an enemy is spotted in any other manner, a special marker is displayed on the map to indicate the enemy’s location.

If you are able to identify the enemy, the enemy’s position is indicated with a red exclamation mark (!). If you are unable to identify the enemy, the enemy’s position is indicated with a yellow question mark (?). Click an enemy position marker to display the radial info. The lower part of the icon shows you how you are detecting the enemy.

If you are able to identify an enemy detected by any means other than sight, the enemy’s position is indicated with a red exclamation mark (!). If you are unable to identify the enemy, the enemy’s position is indicated with a yellow question mark (?). Click an enemy position marker to display the radial info for that enemy. An indicator at the lower part of the icon shows you how you are detecting the enemy.

Melee attacks

Melee attack is resolved in a different manner from ranged attacks (described above). The resolution follows these steps:

Melee attacks are resolved as follows:

• Calculate Attacker’s strength: this depends on the weapon’s Accuracy and the attacker’s Close combat skill.

• Calculate Defender’s strength: this depends either on his Dodge Skill and speed (if he has no weapon), or on his weapon’s Accuracy and Close Combat Skill (if he has one).

• Determine chance to hit: this depends on the ratio of attacker’s and defender’s strength.

• Damage is resolved as normal.

The attacker must stand next to the target to be able to engage in melee combat.

Friendly fire

Occasionally, you might see numbers in brackets over other units in the vicinity of the planned target of an attack. These numbers, which are color coded to correspond to the attacking soldier’s color, indicate the chance of this other target being hit instead of the intended target. The possibility of hitting targets other than the intended target is known as friendly fire.

Friendly fire is calculated for all units, including your soldiers. So, if you see a percentage in brackets over one of your own soldiers, there is a chance that that soldier could be hit by friendly fire if the planned attack is executed.
Infra vision is the ability to perceive heat emissions. In this manner, it can spot warm-blooded organisms and also machines. Also, most weapons and equipment emit heat when used and this is easily spotted with infra vision.

The basic visibility range is the same in night and daytime missions but is lower than that of normal seeing.

Night
Night visors use image enhancement technologies to increase image contrast in darkness. Night vision is only useful in nighttime missions, where it negates the lower visibility range: a soldier with night visor goggles can see as far as in a normal daytime mission. Night vision has no effect in daytime missions.

Heartbeat and Movement
Heartbeat and movement detection are only available through special active scanners. This means that these devices must be equipped in hand and used (click the Attack button — it now reads ‘Scan’). Once activated, the scanner will check all possible targets and highlight those that are within its range. The markers will stay in place for five seconds, before disappearing again. In principle, these scanners work very much like hearing.

Heartbeat
Heartbeat scanners detect biological processes — heartbeat, respiration, and so on — in combat situations. The basic range of a heartbeat scanner is substantially larger than that of hearing. The effectiveness of this type of detection depends on the race of the target.

Movement
Movement scanner (also called Doppler scanner), this detects moving targets.

Missions
We have already covered the most important aspects of playing and winning tactical missions — see sections on Combat, Detection and also on Squad and Items. This section deals with the remaining aspects of the missions.

Deployment
Most missions start with deployment. Your squad arrives at the scene in the alien landing craft and before the mission starts you usually have the opportunity to select a landing site for your capsule. Translucent icons of the capsule mark the available landing sites. Move the mouse over an icon to highlight it. Click to select the landing site. When selected, the landing site icon turns green.

There are missions when you don’t arrive via the capsule at all and in these missions you cannot choose your deployment site.
Capture objective

In some missions your objective will be to capture an enemy. To do this, you must first stun them; that is, injure them so much they pass out (but not so much that they are incapacitated). Then you must be close to the enemy when they come to again. If this happen, the enemy will appear in your squad and you can control them as you do your other men.

The captive, however, has no weapon and it is impossible to equip him with one. You must also bring one less soldier into the mission than the full capacity of the capsule, so that you can take the captive back!

Protect objective

In other missions your objective is to protect a group of civilians. You start in the same area as the civilians and they start moving in the direction of their destination. One of them is their leader: you can control him or her as you do your soldiers. The civilians follow their leader (if possible) and it is your task to get them to the destination with as few losses as possible.

Linked missions

Some tactical missions are what we call linked missions, i.e. two different missions in one. The objective in the first phase of the mission is to reach the exit area. You then enter the next part of the linked mission by pressing the Next area button on the toolbar. Once you get to the next area, there is no going back.

Aborting missions

You can abort a tactical mission at any time before you fulfill the objectives. The mission then counts as lost, but you may be able to save all, or some of your men in this manner. Only the men in the capsule will be saved.

Picking Up objects

There may be some interesting equipment in the mission, e.g. the weapons of the enemies you killed. You can pick those items up manually during the course of the mission, or you can have the game do it for you. At the end of each mission, the game determines the items you would have been able to recover and adds them to your supplies.
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It will help us to provide you with support in a fast, efficient way.

**Information Required:**

Computer model (CPU, CDROM, RAM, Video/Sound card, DirectX version, Windows version).

In order to get this information, please go to “Run” in your Windows Start menu and type ‘dxdiag’ in the command line then press the enter key. The DirectX diagnostic program will start.

This will show you all the relevant driver files installed on your system. In order to receive a text file of this information, please click the button ‘Save All Information’.

You can then save a text file with all the information we require on your hard drive. You will then be able to send this information to us via e-mail.

**Contacts:**

Via e-mail at: support@cenega.co.uk.

Please use the email address provided. All support enquiries to the company address, or phone number(s) cannot be answered by our staff.

For more information and updates please visit:

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Still pictures, or images may cause permanent picture-tube damage, or mark the phosphor of the cathode ray tube. Avoid repeated or extended use of video games on large-screen projection televisions.

**EPILEPSY WARNING**

Please read before using this game or allowing your children to use it. Some people are susceptible to epileptic seizures, or loss of consciousness when exposed to certain flashing lights, or light patterns in everyday life. Such people may have a seizure while watching television images, or playing certain video games. This may happen even if the person has no medical history of epilepsy, or has never had an epileptic seizure. If you, or anyone in your family has ever had symptoms related to epilepsy (seizures, or loss of consciousness) when exposed to flashing lights, consult your doctor prior to playing. We advise that parents should monitor the use of video games by their children. If you, or your child should experience any of the following symptoms: dizziness, blurred vision, eye, or muscle twitches, loss of consciousness, disorientation, any involuntary movement, or convolution while playing a video game, discontinue use IMMEDIATELY and consult your doctor.

**Precautions During Use**

- Do not stand too close to the screen. Sit a good distance away from the screen, as far away as the length of the cable allows.
- Preferably play the game on a small screen.
- Avoid playing if you are tired or have not had much sleep.
- Make sure that the room in which you are playing is well lit.
- Rest for at least 10 to 15 minutes per hour while playing a video game.
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