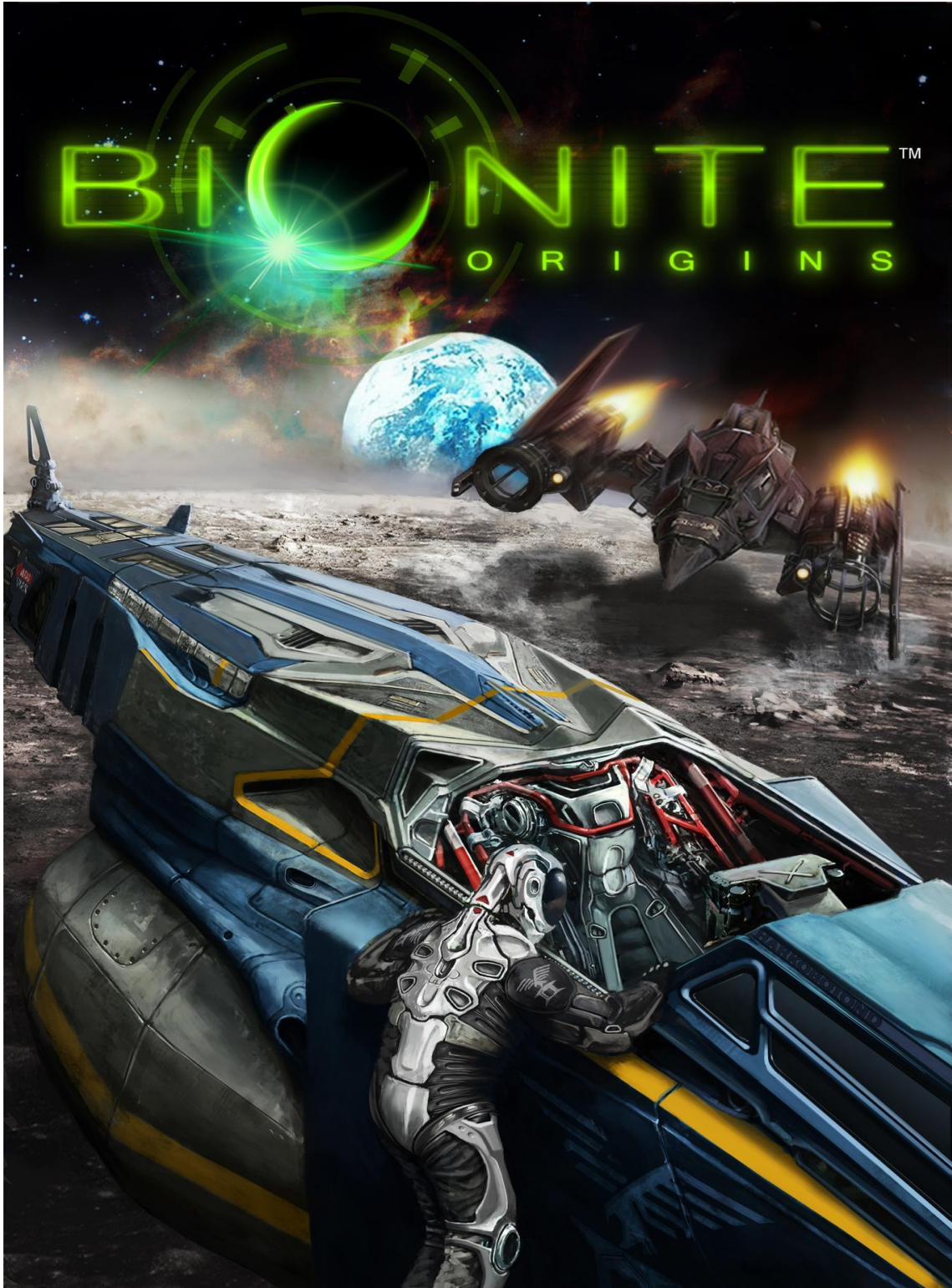


BIONITE: ORIGINS GAME MANUAL

Revision 11 - Updated 12/30/15



INSTALLING THE GAME

Get the game from Steam. Download and install the BIONITE-INSTALL .EXE file on your hard drive. Select the default folder or a location to install the software. If you have any problems installing or running the game, please contact John at: bioniteorigins@gmail.com.

HOW TO REPORT A BUG

If you think that you have encountered a bug and you wish to report it to the dev team, please post it on our Steam Discussion page. If you encounter any problems installing the game or it will not load on your PC or laptop, please contact the lead developer at John at: bioniteorigins@gmail.com. Please leave a detailed description of the problem you are having with the game, your O/S, and PC/laptop specs. We will attempt to resolve your problem immediately, however please give us 24 hours to research the problem and get back to you. Do not forget to leave your email address that we can contact you with a solution.

INFORMATION AND UPDATES

We publish current information about new development and game updates on our website at: WWW.BIONTIEGAME.COM. Please visit our website or our Facebook page to stay updated.

GAME RECCOMENDATIONS

While the game is on Steam Early Access, we are encouraging people to post suggestions and recommendations on our Steam Page under Discussion. If you have a suggestion to make the game better, easier to play, or just want to give us your opinion about the game, please make a post on our Steam Discussion Page. We want to hear from the community and make the revisions you guys want to see.

GAME SPECS

Bionite: Origins is a Windows based game that uses the Unreal Engine 3.0. The game is capable of running on Win10, Win8, Win7, Vista, and XP SP3. Although the game will run well on ATI video cards, we recommend using NVidia Graphics Cards for full detail rendering.

MINIMUM GAME SPECIFICATIONS (PC):	RECCOMENDED GAME SPECIFICATIONS (PC):
<ul style="list-style-type: none">• Windows XP Service Pack 3	<ul style="list-style-type: none">• Windows 7 or 10 64-bit
<ul style="list-style-type: none">• 2.0+ GHz processor	<ul style="list-style-type: none">• 2.0+ GHz multi-core processor
<ul style="list-style-type: none">• 2 Gb System RAM	<ul style="list-style-type: none">• 8 Gb System RAM
<ul style="list-style-type: none">• Card with shader model 3.0 support	<ul style="list-style-type: none">• NVIDIA 8000 series or higher graphics
<ul style="list-style-type: none">• Onboard sound	<ul style="list-style-type: none">• Sound card such as the SoundBlaster Live
<ul style="list-style-type: none">• Directx 9.0c	<ul style="list-style-type: none">• Directx 11.0
<ul style="list-style-type: none">• Minimum of 2.0Gb of Hard Drive Space to install game	

INTRODUCTION

Bionite: Origins is a Real Time Strategy / First Person Shooter Hybrid Game, also called an Action-Strategy Game. It consists of Real Time Strategy elements with first and third person views. Wingmen can be commanded from a satellite, first, and third person views. The game consists of vast outdoor landscape maps that take place on different planets within the Solar System. Bionite has two factions (Rebels and IMI). They are at war with each other for control of resources scattered on different planets, asteroids and moons. The game's mission is to destroy the Rebel Recycler before the Rebels destroy your Recycler.

Each faction requires one Commander. The Game starts with the Commander being positioned within the team Garage with a Recycler and a limited supply of Bionite Ore. The Commander must build specific structures to unlock more advanced units in the tech tree. All units/buildings require a rare mineral called Bionite. Gathering resources to produce Bionite will be important for the outcome of the game. The Commander will be the one responsible for supplying the faction with assets and to manage the assets for victory against the enemy.

Set your mouse sensitivity and screen resolution using the SETTINGS menu. If you are getting a 'bounce back' when turning the vehicle quickly, the mouse sensitivity is set too high and must be lowered. The game difficulty level can be set using the slider. The higher the slider is set, the more enemies will attack your base.

Skirmish Mode

Single player matches are one vs. one against the computer called 'Skirmish Mode'. In the Settings Menu you can select the level of difficulty. In the Login Menu you can select the faction you want to command. *Currently pilots can only command the IMI faction.* From the Main Menu, select the "Single Player" option. From the Single Player menu, select the map you wish to play, located at the top left of the screen, then select the START button on the bottom right. The game will load the Login Screen, then the Vehicle Select Screen. From the Vehicle Select Screen, select the vehicle you wish to pilot, then select START. Once the game starts, the player will start in the Garage with the Recycler Unit directly in front of your vehicle. The first thing to do is to deploy the Recycler so it can build other vehicles that provide defense, offense, resource gathering, and building construction.

COMMAND SYSTEM EXPLANATION [F1-F10 Keys]

Bionite: Origins is a hybrid of First Person Shooter and Real Time Strategy game types. The pilot can command his team using the Command Interface located in the Multi-Functional Display (MFD) located in the bottom left of the screen. The MFD is only visible when the pilot is in third or satellite view or when not in the vehicle. When in third or satellite view or not in the

vehicle, use the BACKSPACE KEY to cycle through the MFD screens until the Command Menu comes up. When in the first person view and inside the vehicle, use the BACKSPACE KEY to toggle between the Command and Radar Views. The goal of the game is to destroy the enemy (Rebel Faction) team Recycler before the enemy destroys your Recycler. By commanding your wingmen to attack in a coordinated manner the enemy can be defeated. However, to avoid the enemy destroying your Recycler, a base will need to be constructed and defended.

The BACKSPACE KEY cycles/toggles Radar, Scrap, Power, Status, and Command Screens.

THE STATUS KEYS

There are two types of Status (or 'Stat') Keys: Building or Asset Stat Keys and Wingman Stat Keys. The Stat Keys monitor each building's, wingmen's, gun tower's, turret's, or utility vehicle's condition status. At the top of the screen, starting on the left, there will appear the Building Status Keys for each asset that exists. The Recycler, Constructor, Sat Tower, Power Station, Biosilo, Factory, Armory, Service Bay, Gun Tower, and Bunker each have a unique Asset Stat Key. Wingman Stat Keys group up to 6 vehicles into individual squads that can be selected for orders individually or as a group. The Wingman Stat Keys include all of the defensive units (eg turrets) and offensive vehicles (eg tanks) as well as the Scavenger and the Repair Drone. When using the Wingman Stat Keys, if there is a squad of vehicles built for command, the pilot can select each unit individually and deploy it independent of the rest of the squad, or use the SEVEN KEY to select all the units in the squad for simultaneous command. Once the vehicles are selected for orders use the command menu to issue orders to the wingmen. Units can be selected for orders using the "F Key" assigned to that squad (see below for key map) or by selecting the individual unit using the space bar and mouse.

USING THE SPACEBAR and MOUSE TO SELECT VEHICLES FOR ORDERS

The wingmen and utility vehicles can be selected for individual orders using the SPACE BAR and MOUSE. Vehicles can be selected for orders in the vehicle first person or third person view. Vehicles can also be selected for orders from the sat view or from outside the vehicle (pilot view). Using the space bar, first get close enough to see the vehicle you want to send orders to. Pilots must be able to see the vehicle they wish to select for orders. Once visualized, hold down the space bar and move the white circle that pops up over the vehicle you want to select for orders. When the vehicle is successfully selected for orders, the Friendly Target Reticule will appear on the vehicle selected. Friendly Target Reticules use the BLUE text under the target to describe the unit selected.

If the vehicle selected is a tank and *then* you select a location on the terrain; the vehicle will move to that location and wait for further orders. If you *then* select an enemy

vehicle, the wingman will attack that enemy. In order to select an enemy vehicle to attack, use the space bar and mouse to select the vehicle (just like how to select a friendly vehicle). Enemy Target Reticules use the RED text under the target to describe the unit.

If the vehicle selected is a turret and *then* you select a location on the terrain; the turret will move to that location and deploy.

If the vehicle selected is a Constructor and *then* you select a location on the terrain; the Constructor will drive to that location and build the asset selected in the Build Menu.

If the vehicle selected is a Scavenger and *then* you select an unoccupied BioPool to deploy over; the Scavenger will drive to that location and deploy into an Extractor.

If the vehicle selected is a Repair Drone and *then* you select a friendly asset or vehicle; the Repair Drone will drive to that friendly and repair it. The Repair Drone will continue to follow and repair the asset or vehicle selected until given new orders by the commander.

FABRICATING ASSETS/BUILDINGS

In order to build the variety of vehicles and buildings in Bionite, the commander is required to build a Main Base. A Constructor and at least one Scavenger are required to gather resources and build assets. Constructors and Scavengers are created using the Recycler. Once the Recycler is deployed the Build Menu will become available in the Command Menu by pressing the F1 Key. The Recycler can be deployed and undeployed. When in the undeployed state, the Recycler can be ordered to drive to different locations on the map or to follow the commander. This can be useful for protecting the Recycler from attack. The Recycler can only be deployed on level ground. Once deployed, the Recycler (if it has enough Bionite) can build a Constructor, Scavenger, Cobra Turret, or Bayonet Light Tank. The Recycler is the Main Asset (akin to the King in Chess) and once destroyed the game is over.

Use the F1 Key to select the Recycler for Orders

Constructors can only build assets on level ground. There cannot be any obstruction like a piece of BioOre, a rock, or another asset in the same area on the terrain as the asset to be built. This utility vehicle is responsible for fabricating all of the buildings, gun towers, and non-movable turrets (eg the Mortar Turret). Using the SPACEBAR and the MOUSE, the commander can locate areas on the terrain that can be built upon. When setting the location for the Constructor to build, HOLD the SPACEBAR down and point the MOUSE at the terrain. If done correctly, the WHITE arrow will appear above the location the MOUSE is pointing at on the terrain. If the arrow turns RED or stays red after the SPACEBAR is released, the Constructor will NOT be able to build at that location and a different location must be selected.

Once the location to build is placed, select the Constructor using the F4 KEY. The Constructor can be given the order to build or upgrade. If the order to *Upgrade* is given, the Constructor will drive over to the selected Extractor (deployed Scavenger) and upgrade its capacity to pump BioOre from the pool. If the order to *Build* is given, the Constructor will drive over to the selection location and build the asset selected in the Build menu. Remember: In order to build an asset, there must be enough Bionite in reserves to build that asset, see Table 1 below for a list of assets and the amount of Bionite required to build that asset.

Use the F4 Key to select the Constructor for Orders
The location for building must be selected FIRST using the WHITE arrow

MANAGEBLE RESOURCES

There are two manageable resources in the game; Bionite and power. Bionite is the refined mineral created from BioOre and is required to fabricate vehicles and buildings. Power Stations are needed to provide electricity (power) to the buildings, gun towers (eg Minotaur and Lancer), and some of the turrets (eg Mortar Turret). BioOre is the unrefined mineral ore that, when refined, becomes Bionite. In order to collect BioOre, the commander must build a Scavenger/Collector. Once collected, the BioOre is transported using a Hauler to the Distiller for refining into Bionite. The commander cannot build any vehicles or buildings without Bionite in the Silos. At the top of the screen, the Bio-Meter provides the commander with the current amount of Bionite in storage. When the match starts, the commander is provided with 200 units of Bionite, however that runs out quickly and must be replaced.

The Scavenger/Collector can harvest BioOre in one of two ways: scraping it from the planet surface (also called 'loose' Bionite), or drilling for it from within a geyser.

The amount of Bionite that can be stored depends on the number of BioSilos built. Each BioSio holds 100 units of Bionite. The maximum number of BioSilos that can be built is 10, with a total maximum supply of Bionite at 1000 units. BE CAREFUL! The enemy will try to destroy your BioSilos to reduce your capacity to build as much as possible, so defend these. BioSilos can be monitored for their health in the Stat Key located at the top left of the screen.

Use the F7 – F12 Keys to select the Scavengers within a Squad for Orders

Electrical power must also be managed by the commander. The enemy will try relentlessly to destroy as many Power Stations as possible (so guard them!). Without an adequate supply of power the Factory, Armory, Sat Tower, Bunker, Repair Station, and gun towers will not operate. A Constructor is needed to build the Power Stations with a maximum of 20 stations. In order to keep the power going, there must always be one more Power Station

than the total number of assets (i.e. buildings and gun towers) that require power. For example: If the commander has one Factory, two gun towers and the Satellite Tower built, then the total number of Power Stations needed to keep the power up is 5. Power Stations can be monitored for their health in the Stat Key located at the top left of the screen. The Power Meter is used to monitor the total amount of voltage output by the Power Stations. If the Power Meter indicator is pointing the red area there is no enough power to run all the assets that require power to operate. The arrow indicator must be in the green area in order for those assets to operate. The Power Meter is displayed in the MFD when in third, sat or pilot view. When in first person view from within the tank, the Power Meter is visible on the dash board.

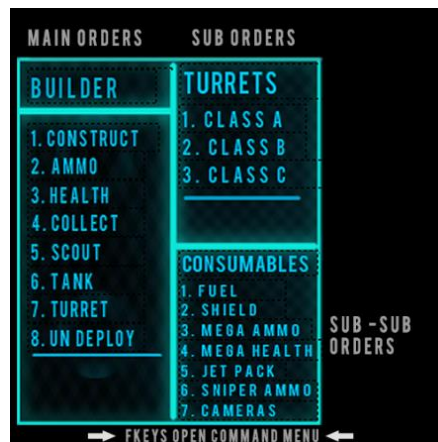
THE MULTIFUNCTIONAL DISPLAY UNIT (or MFD)

The Multifunctional Display Unit (or 'MFD') is the main panel for interfacing with the vehicle, the command system, and the resource management system when in third, sat, or pilot view. When inside the vehicle and in first person view, the MFD is not visible. The MFD also contains the Hull Damage Indicator (top right, explained below). The display screens within the MFD are accessed by pressing the BACKSPACE KEY.

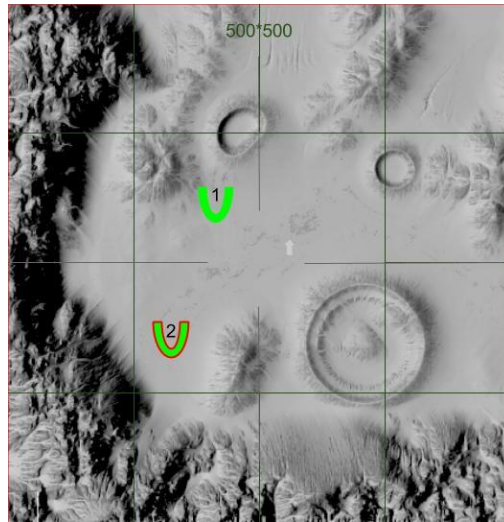
Use the BACKSPACE Key to cycle the MFD screens when in third, sat, or pilot view

**Use the BACKSPACE Key to toggle the Radar Screen and the Command screen
when inside the vehicle and in first person view**

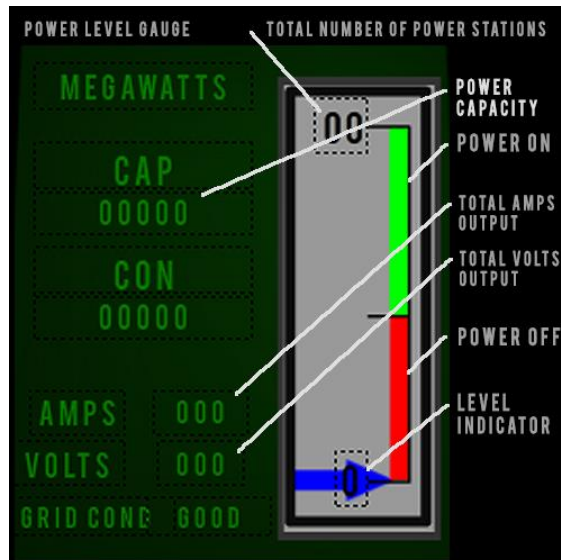
Command Screen - This is the user interface for issuing orders to wingmen, turrets, utility vehicles (eg the Constructor and the repair dron). Use this interface to fabricate new vehicles and for building weapons using the Armory. Starting with the 'F KEYS', select the asset or vehicle for command. Once selected, use the NUMBER KEYS (1-0) to select menu items. These menus clear by toggling the 'F KEYS'.



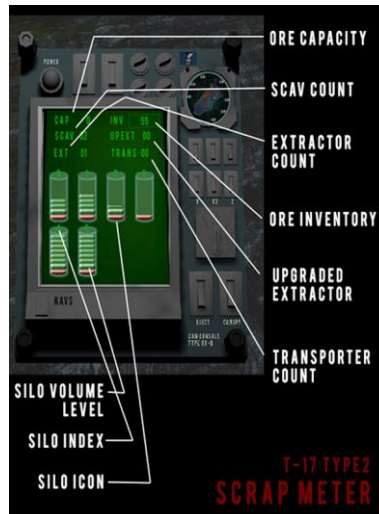
Radar Screen – This is the view from the Radar in orbit around the planet. This gives real time data to the pilot about their location and where friendly or enemy targets are located. (icons explained below)



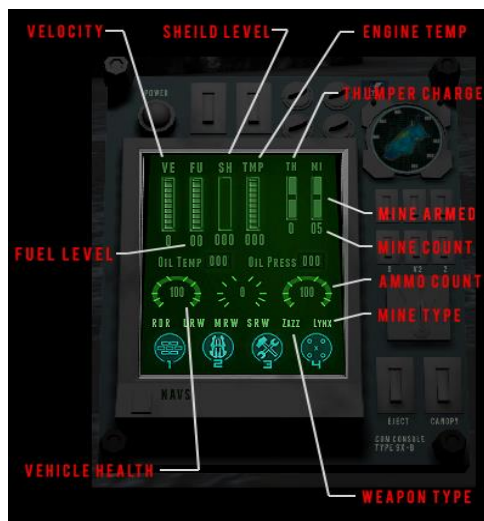
Power Meter Screen – This screen is used to see how much electricity is being generated by the Power Stations. When the Blue arrow is in the green area the power is on, when in the red area the power is off. The '00' in the top right indicates the total number of power stations operating (with health above 20). The total number of amps and volts generated and the total capacity in volts is measured and indicated.



Scrap Meter Screen – This screen is used to monitor the amount of scrap that is in inventory, the number of Scavengers/Extractors currently working, the number of Haulers working, and the condition of the Distiller. Also, this screen provides a readout of the amount of inventory in each BioSilo.



Vehicle Status Screen – This screen is used to monitor the status of the vehicle. It shows the standard vehicle statistics like health, ammo and weapons; however, it has many other gauges that provide information about the vehicle’s current condition. The vehicle status screen also displays the vehicles current velocity, the amount of turbo / jump jet, the shield condition, the engine temperature, and the oil temp and pressure. If the vehicle is equipped with a load out of mines, the type selected for deployment, the amount remaining in the minebay, and if the currently deployed mine is deployed are indicated. Also, if the vehicle has a Thumper Charge, the charger indicator is displayed.



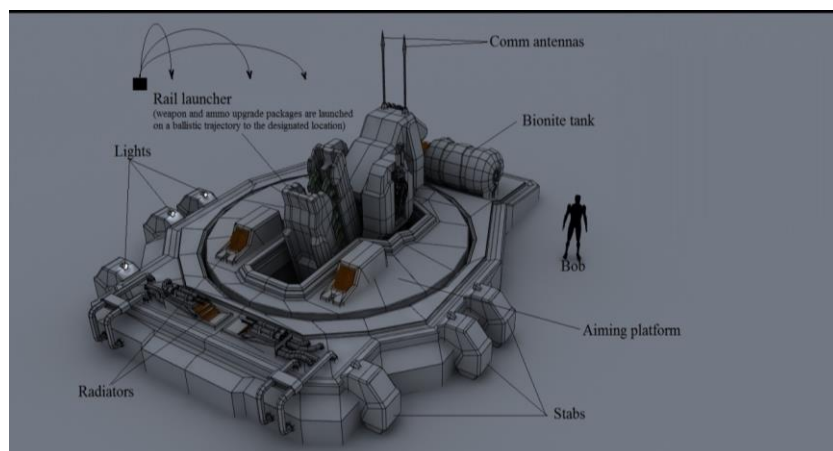
LIST OF ASSETS

Recycler: This is the Main Vehicle. It is responsible for building the Scavenger and the Constructor. It can also build the first tier vehicles which are the Bayonet, Longbow, and Cobra Turret. While undeployed, Recyclers are large, cumbersome hovercraft with no defenses other than their thick armor. Their internal Bionite tanks carry a limited supply to start up a new base. Recyclers are produced at specialized facilities or off-world due to their complex nature. They are irreplaceable if lost in the field. *If it is destroyed, the battle is over.*

Constructor: This is the second most important vehicle. It is responsible for building the Factory, Armory, Service Bay, Bunker, Satellite Tower, Gun Towers and the Mortar Turret. It can also upgrade Extractors into “Super” Extractors that have a greater capacity to pump BioOre from the geysers. Only one Constructor can exist at a time.

Factory: This building fabricates the second tier vehicles such as the Rhino, Kodiak, Archer, Repair Drone, and Diamondback Turret. Consisting of machinery that manufactures vehicles, Factories are built by the Constructor and require a workshop (part of the Factory). Factories have large warehouses and facilities that contain heavy equipment used for assembling vehicles. It is operated from control room and requires copious amounts of electricity to transform Bionite into vehicles.

Armory: This building creates new weapons and distributes health and ammo to the field. The commander must first place a location beacon, using the SPACEBAR and MOUSE, on the terrain *then* issue a command to the Armory to build. Items for building are selected using the command Menu, starting with the F3 KEY. Once built, the canister containing the health, ammo, or upgraded weapon is delivered via air mail to the location selected. (see diagram below).



Service Bay: This building is responsible for repairing damaged vehicles and operating the Repair Drone. In order to build a Repair Drone, the commander must first build the Service Bay. Pilots can drive their damaged vehicles onto the Service Bay ramp to receive repairs. Also the wingmen can be ordered to drive onto the Service Bay ramp for repair. The service bay has a limited capacity to repair vehicles per second; vehicles with low health can recover faster and more than one vehicle parked on the bay will share the repair. Two vehicles of the same type are repaired in twice the time it takes for one to be fully repaired. Multiple vehicles can be serviced at the same time but at a much slower rate.

Bunker: The Bunker is used for communicating with the Satellite through the Satellite Tower. A Satellite Tower is required to create the uplink to the Satellite located in low planet orbit. When inside the Bunker the commander has the 'Satellite View' and can place Locator Beacons and Navigation Beacons on the terrain. Commands can be issued to the wingmen and utility vehicles from within the Bunker.

Power Station: These buildings are critical to maintaining power for all assets requiring electricity to operate. The maximum number of Power Stations is 20.

Scavenger: These utility vehicles are needed to harvest or scavenge BioOre, and are only fabricated by the Recycler. They move slowly and are vulnerable to attack by the enemy. The enemy will hunt for these vehicles to slow the commander's ability to create new offensive and defensive vehicles. (STRATEGIC NOTE: it's a good idea to provide an armed escort for these vehicles, to protect them from the enemy.) Once harvested, the BioOre is transported to the Distiller for processing into Bionite. Scavengers can be placed over a BioOre geyser and once deployed, become Extractors.

Extractor: These assets are deployed Scavengers. In order to mine an underground BioOre deposit the pilot will need to place a Scavenger on a geyser (also called a 'BioPool'). Once the order is given for a Scavenger to deploy, the vehicle will drive to the nearest unoccupied BioPool and transform into an Extractor. Extraction rates vary depending on the depth of the BioPool and if the Extractor is upgraded into a Super Extractor. Super Extractors pump BioOre 2x faster than a regular Extractor.

Satellite Tower: The Satellite Tower is required to communicate with the Satellite in low-planet orbit. If destroyed, the sat uplink will be severed and inoperable until a new one is built.

Repair Drone: The Repair Drone is a specialized utility vehicle that can repair vehicles and assets in the field. The commander can order them to follow and repair selected vehicles. Repair Drones can also be ordered or remain at the main base to repair damaged asset automatically.

Hauler: This vehicle is used to transport BioOre to the Distiller for processing into Bionite. It runs automatically once built and does not need commanded.

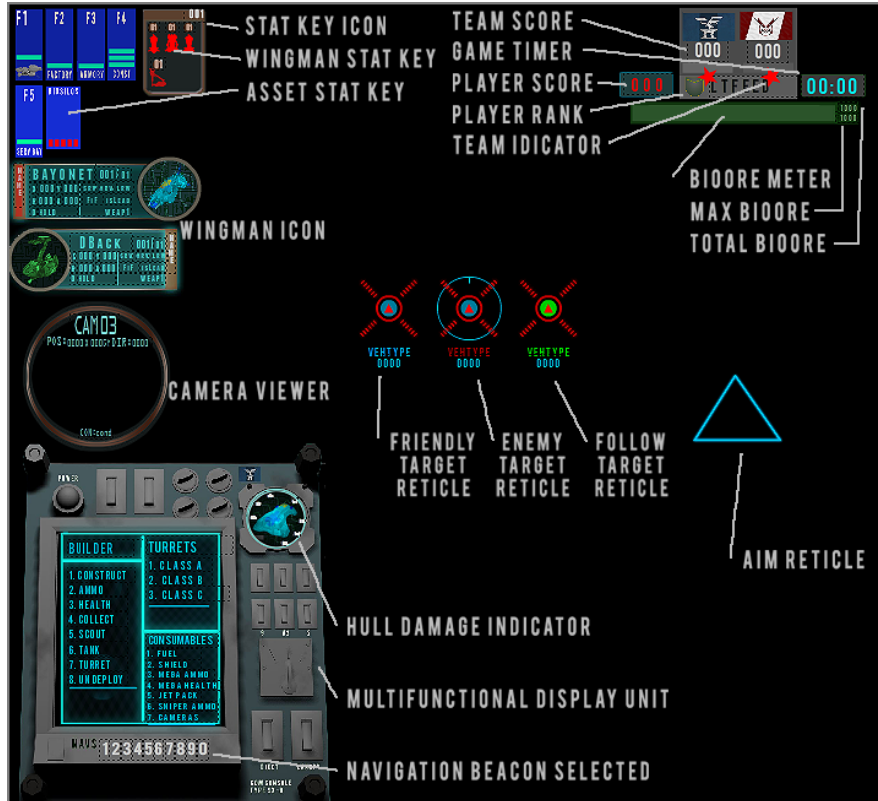
Distiller: This asset is a key building because it supplies the Recycler, Factory, and Armory with Bionite. Distillers are pre-fabricated, run automatically, and cannot be destroyed.

Gun Towers / Mortar Turrets: These assets are used for defending the Main Base and any Forward Bases. The Minotaur, Lancer, and the Mortar Turret must be built by a Constructor on level terrain with no obstructions. Gun Towers require power to operate as well as a functioning Bunker. There is no adjacency requirement for the towers and mortar turrets to the Bunker. Gun Towers and Mortar Turrets are autonomous and do not require a sat link. Mortar Turrets do not require a separate power source to operate. Gun Towers and mortar turrets are stationary, once placed they cannot be moved.

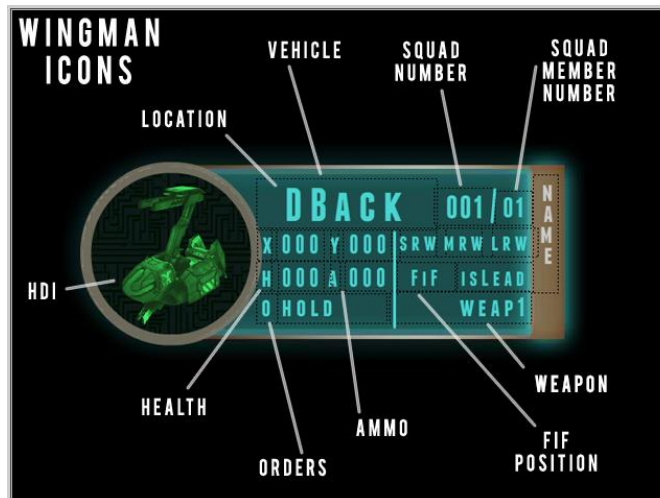
BioSilo: Refined and concentrated Bionite, produced in the Distiller, are stored in the BioSilos. BioSilos can be damaged and destroyed. Once a BioSilo is damaged below 20% it no longer functions and cannot provide any Bionite to the Recycler, Factory, or Armory.

HEADS UP DISPLAY (HUD)

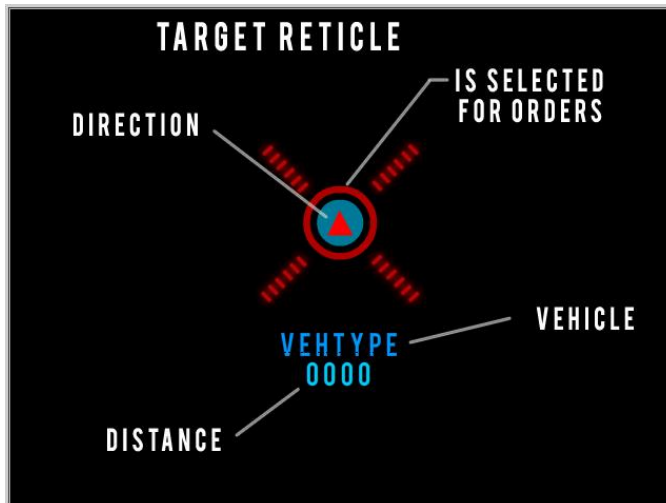
The Heads Up Display (or 'HUD') contains all of the vital information about your vehicle, wingmen, and assets. The HUD also displays the player and team score, player callsign and rank, ore meter, and game timer. In addition to the MFD, the HUD also displays the current condition of each wingman, utility vehicle, and building in the Stat Keys.



WINGMAN ICONS

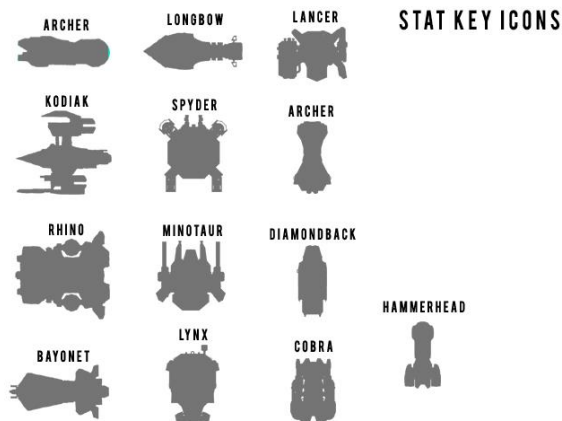
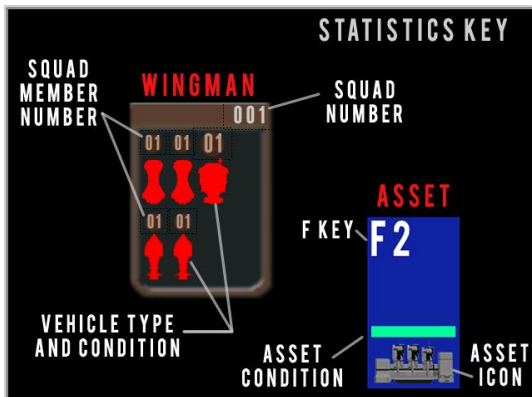


TARGETING RETICLES



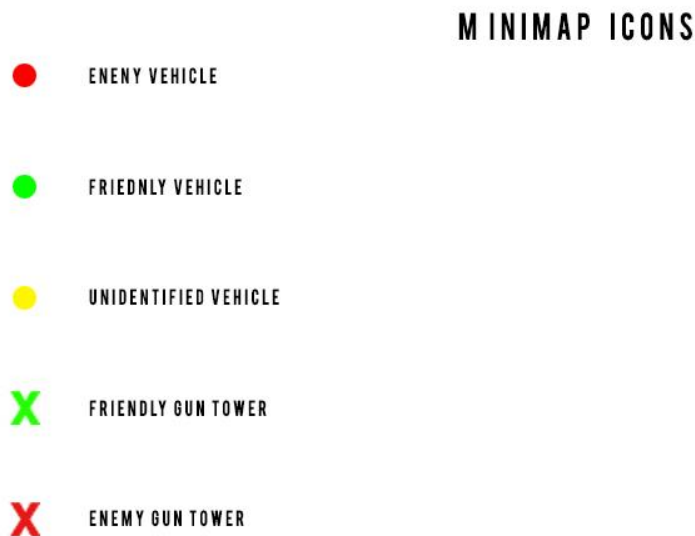
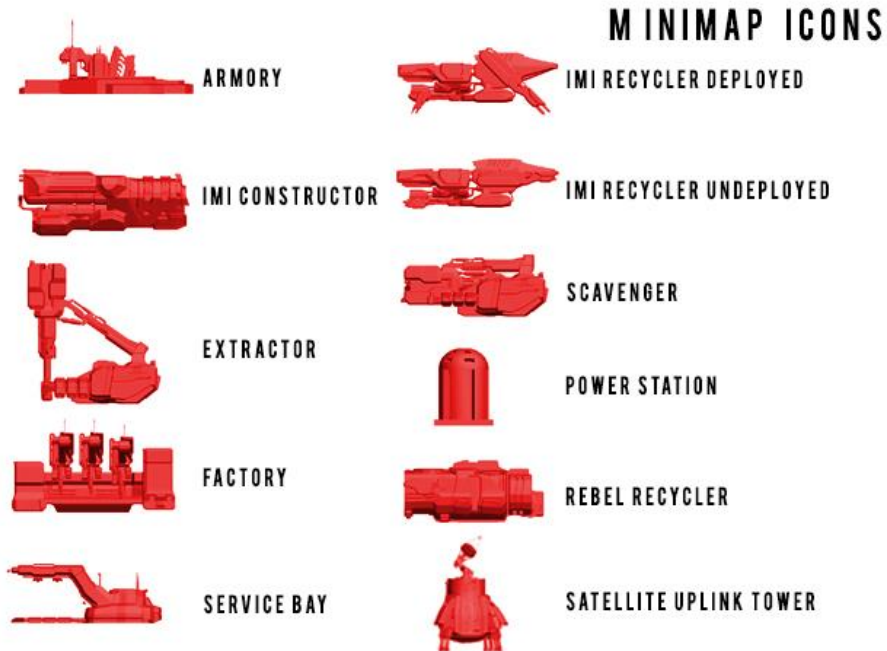
STATISTICS KEYS

The Statistics Keys (or Stat Keys) are used to monitor the members of your team. There are two types of Stat Keys; wingmen and support (or asset). The commander can create up to 5 wingman squads with 6 vehicles in each squad. A wingman stat key is created for each squad and a squad member icon (Stat Key Icons below) is added for each Gun Tower, turret, and/or tank. Once a squad member icon has been created, it monitors the condition of the wingman's vehicle: Green = full health, Red = low health. The Support or Asset Keys are used to monitor the condition of fabrication vehicles and buildings. Wingmen can be moved from one squad to another existing squad or an empty squad can be created to add vehicles. Custom Squads are created using the Command Menu. After selecting a vehicle in the Command Menu, select the order to move to a different squad. If the commander wants to create a custom squad, select create empty key, then select the vehicle to move into that key (squad).



RADAR (MINIMAP) SCREEN ICONS

Radar (or MiniMap) Icons are used to pinpoint the location of assets and vehicles on the battlefield. These icons appear in the Radar Screen located in the MFD. When the pilot is within 50 meters of any asset or tank, it is identified as either enemy or friend. Generally speaking the enemy is represented by a RED icon and team members are represented by a GREEN or YELLOW icon.



SATELLITE VIEW

The commander can issue commands from the satellite view when using a console located within the Bunker. When inside the Bunker and using the sat view, the commander will be looking straight down on the terrain from a camera located on the geosynchronous satellite in low orbit. The camera view can be moved in all directions using the WASD KEYS. It can also be zoomed in using the LEFT ARROW key and zoomed out using the RIGHT ARROW key. The commander can place beacons on the terrain using the SPACEBAR and MOUSE, select vehicles for orders, and issue commands.

Use the WASD and LEFT / RIGHT Arrow Keys to move the camera in Sat View

CAMERAS

All vehicles carry portable live surveillance TV-cameras. The camera can be dropped from the ship on to the ground using the K KEY. The live pictures from the camera are visible on the HUD. Cameras can be selected by calling the control menu using the C KEY. Cameras can be turned on and off and destroyed using the command menu.

Pilots can have up to 6 cameras placed on the battlefield at one time. Cameras can be damaged and destroyed. A damaged camera will upload data, however it will contain artifacts and missing packets. A destroyed camera will show an >inoperable< in the viewing screen. All cameras are numbered based on the order they were dropped. A camera will drop on the terrain and an icon will appear in the Radar Screen.

Use the K Key to drop a camera on the terrain
Use the C Key to control the cameras in the Command Menu

WEAPONS

Military vehicles and turrets are equipped with interchangeable weapons. Each vehicle can have different weapons depending on their role in battle. The pilot can change upgrade their vehicle's weapons using the Armory. These are the available weapons for the vehicles, however not every weapon is available for each vehicle:

GUNS – These are weapons designed for close combat. Guns generally do light damage however the rate of fire is very high. Guns have an effective range is up to 50 meters. Projectiles can be lasers or bullets and include: guns, miniguns, and chain guns. All vehicles can have at least one gun weapon.

CANNONS – These weapons are designed for medium range combat. Cannons can do more damage than Guns, however the rate of fire is much slower. Cannon based weapons have an effective range of up to 100 meters. Cannon projectiles can be EMP, kinetic shell, or plasma. Only heavy class weapons can carry Cannon, such as the Lynx or the Rhino.

ROCKETS / MISSILES – These weapons are designed for long range combat with other vehicles and for destroying buildings. Rockets and missiles are self-propelled, however rockets are unguided systems and missiles are guided. Rockets have an effective range of up to 200 meters, and do medium damage to enemy vehicles. Rockets can be fired in groups or one at a time with a rate of fire of one per 10 – 15 seconds, giving time for the weapon system to reload and rearm the ordinance. Missiles have an effective range of up to 1000 meters. Missiles cannot detonate on targets that are too close because they need time to arm after launch (unlike rockets that are already armed upon launch). Missiles can lock on to a target, follow it until it detonates, and can hit targets that are not within visual range. Missiles are fire and forget weapons. Active sensors contained guide the missile to its target, which are vulnerable to countermeasures contained in vehicle and mines. Some varieties of missiles contain field scramblers that cause decoherence in most vehicle shielding systems. Missiles do the most damage to vehicles and buildings, and can have special payloads that include EMP's. Some missiles are specialized for destroying buildings, others (like the EMP) are fore disabling vehicles without destroying them. The rate of fire for missiles is very slow, approximately one per 30 – 60 seconds. Only the Kodiak Heavy Tank can carry missiles and rockets, whereas the Longbow can carry only rockets. The Rocket Turret is equipped with rockets and the Missile Gun Tower is equipped with EMP Missiles.

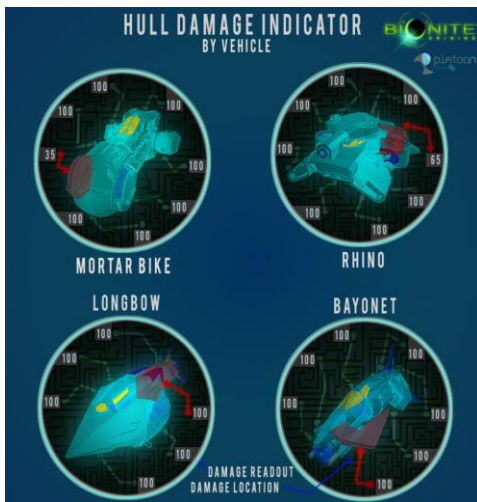
MORTARS – Mortar weapons are designed for medium range combat with other vehicles and for damaging buildings. Mortar weapons are especially effective on Extractors. These weapons have an effective range of up to 140 meters, and do light to medium damage upon direct impact. Mortars do not need to directly impact the target to inflict damage, with the amount of damage decreasing exponentially with distance. The rate of fire is relatively fast, however because they are a relatively large ordinance, not many can be carried in the magazine at one time. Mortar projectiles are exclusive to the Archer (mortar bike) and it can only carry a maximum of 25.

MINES - Each vehicle is equipped with between 3 and 20 deployable mines, depending on the vehicle type. Light vehicles can carry only a total of 6 mines (3 of two types). Medium vehicles can carry up to 12 mines (6 of two types or 4 of three types). Heavies can carry up to 20 mines of up to 4 types. Mines are deployed using the M KEY and changed using the N KEY. There are currently 3 types of mines that can only be equipped using the Armory; Womine, Mortar, and Impulse. All mines are detonated by proximity to electricity / magnetism. The Womine is a

proximity mine that detonates when a vehicle is within 60'. The Mortar mine also works based on proximity, however, when it detonates it releases up to 20 mortars in a 360 degree radius with a 50 foot range. The Impulse mine detonates based on proximity that, when detonated releases a large gravity pulse that damages everything within 100 feet.

Use the M Key to deploy the Mine and the N key to switch mines

HULL DAMAGE INDICATOR (HDI)



The Hull Damage Indicator or “HDI” is a real time readout of the overall condition of the vehicle. It provides information about the integrity of the vehicle’s hull, which is critical to maintaining an operating environment within the vehicle. The HDI monitors each critical location on the vehicle that protects a vital part of the vehicle’s mechanics. For example, the rear quadrant of the vehicle contains the shield generator. If during battle that area is damaged below its integrity threshold (10%) it will no longer provide protection. If the hull falls below its integrity threshold, then that area of the vehicle is vulnerable to damage. If the rear of the vehicle is damaged, then the vehicle shielding will not function until it is repaired. If too much damage is inflicted on the vehicle’s hull, the vehicle will stop functioning and trigger the ESCAPE SEQUENCE. Once initiated the pilot is ejected from the vehicle. If too much damage is done to the vehicle the vehicle will explode, killing the pilot.

NAVIGATION BEACONS

The commander can place up to 10 navigation beacons on the terrain for use by the wingmen. Navigation beacons are different than the Location Beacon used with the SPACEBAR and MOUSE. The navigation system is a good way to order wingmen to go to specific locations and defend or set up a base. In order to place a navigation beacon on the ground, hold down the X KEY and use the MOUSE to select a location on the landscape. Once the X KEY is released a navigation beacon will appear with an indicator number. Navigation beacons are selected using the 1-0 KEYS *when not using the command menu*.

When inside the vehicle and in third person view, or inside the Bunker using the satellite view, or as the pilot outside the vehicle, the numbers for selecting the navigation beacons appear on the MFD located at the bottom. When inside the vehicle and in first person view, the numbers for the navigation beacons appear on the dash board.

IMPORTANT NOTE: When issuing go to location orders to wingmen, always place the navigation or location beacon first using the X KEY or the SPACEBAR. When using the Navigation System, individual navigation beacons are selected using the 1-0 KEYS. Selected navigation beacons' corresponding numbers on the MFD or the dash board will be highlighted; which means that it is the selected beacon for the wingman's destination. Wingmen can be ordered to go to navigation beacon locations just by selecting the navigation beacon indicator (1-0 KEYS). When using the Location Beacon a different destination can be selected by moving the Location Beacon. To remove navigation beacons first select the beacon using the Command Menu then use the DELETE KEY to remove it.

Hold down the X KEY and use the MOUSE to place a Navigation Beacon

TECHNICAL TREE

The Tech Tree in Bionite starts with the Recycler. The recycler is the only asset that cannot be replaced and once destroyed the game is over. The recycler builds two key assets, the Scavenger and the Constructor. The Scavenger is responsible for harvesting BioOre for use in fabricating and the constructor is responsible for fabricating new assets and upgrading existing assets. When deployed over a BioPool, the Scavenger becomes an Extractor which is capable of pumping BioOre directly from a geyser. The Constructor is required for upgrading the Extractor into a 'super' Extractor that has an enhanced capability to pump at a higher volume. The Factory, BioSilo, Power Station, Repair Dock, Armory, Service Bay, Bunker, Gun Towers, and the Sat Tower can only be built by the Constructor. Fabricating building requires enough BioOre in reserves. Operating buildings requires power supplied by the Power Stations.

The Armory requires that a Factory exists in order to be built or operate. The Service Bay also requires the Factory for construction and operation.

The Factory fabricates the advanced vehicles, turrets and the repair drone. A repair drone can only be built if the service bay is operating. If the service bay is destroyed, the repair drones will not function until it is repaired or replaced.

In addition to power, the Bunker requires a Satellite Tower to create an uplink to the Satellite. The commander will not be able to use the Sat View unless the Sat Tower is working and there is enough power to run both the Bunker and the Sat Tower.

SWITCHING VEHICLES

While on the battlefield, pilots can change exchange vehicles with wingmen. Wingmen can be ordered to "PICK ME UP". Once this order is issued the wingman pilot will drive out to the commander's location and exit the vehicle. In order to get into the vehicle, the pilot must first exit the vehicle currently in using the I KEY. Once exited, the pilot must collide with the empty vehicle to enter it.

EXITING / PAUSING THE GAME

The game can be paused at any time during play by pressing the ESC key. Once the pause menu appears, the pilot can choose to respawn, rejoin, or exit. RESPAWN restarts the match, REJOIN places the pilot back in the game, and EXIT quits the game.

MATCH OVER / DECLARATION OF WINNER

At the end of the match a winner is declared on the scoreboard. If the enemy destroys the players Recycler, the Rebels are declared as winners of the match. If the player destroys the enemy Recycler, the IMI is declared as the winner of the match. The player's high score and lowest game time is recorded and displayed as the "High Score" or "Lowest Time".

Once the match ends, the game restarts the next map in the rotation. If the current score is higher than the recorded high score, then the current score will be recorded.

RANKING SYSTEM

Players are ranked based on experience points. Starting at Private, players can achieve higher ranks by destroying enemy assets and winning matches. When the Game Difficulty setting (in the main menu) is set higher, players achieve more experience for winning matches. There are currently 9 ranks a player can achieve, with the top badge being the General Ranks.

TABLE 1. Scrap Amounts

Asset	Scrap Count	Vehicle	Scrap Count
Factory	80	Constructor	20
Armory	50	Scavenger	25
Sat Tower	65	Bayonet	20
Bunker	40	Rhino	50
Power Station	25	Longbow	25
BioSilo	25	HammerHead	25
Service Bay	60	Cobra Turret	20
Lancer Tower	50	DBack Turret	25
Minotaur Tower	40	Lynx	25
Mortar Turret	25	Spyder Turret	25
Repair Drone	20	HammerHead	25
Ammo / Health	5	Archer	25
Weapon	5	Kodiak	25
		Weapon	5

VEHICLES

MILITARY HOVER UNITS



BAYONET - Light Assault / Recon

Crew: 1 pilot
 Length: 9.43 m
 Wingspan: 4.05 m
 Height: 5.63 m
 Power Plants: 1 x Brat & Wiener 100 or -220 afterburning turbofans
 Thrust with: 23,770 lbf for -220(105.7 kN for -220) each
 Fuel capacity: 6,100 kg internal
 Turbo / Jump Jet: Turbo
 Max Speed: 118 km/h
 Combat range: 30 km for interdiction mission
 Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
 Built by: Recycler
 Hard Points: Guns, Missiles
 Countermeasures: Mine, Shield, Flares
 Bionite required : 20



RHINO – Heavy Assault

Crew: 1 pilot
 Length: 15.28 m
 Wingspan: 5.45 m
 Height: 8.63 m
 Power Plants: Twin x Brat & Wiener 100 or -220 afterburning turbofans
 Turbo / Jump Jet: Jump Jet
 Fuel capacity: 12,100 kg internal
 Max Speed: 42 km/h
 Combat range: 20 km for interdiction mission
 Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
 Built by: Factory
 Hard Points: Guns, Cannon, Mortar
 Countermeasures: Mine, Shield, Flares
 Bionite required: 50
 Ramming Damage: 20 at full speed



KODIAK – Mobile Rocket / Missile Platform

Crew: 1 pilot
 Length: 10.46 m
 Wingspan: 8.09 m
 Height: 15.11 m
 Powerplants: 1 x Brat & Wiener 100 or -220 afterburning turbofans
 Thrust with: 23,770 lbf for -220(105.7 kN for -220) each
 Fuel capacity: 8,200 kg internal
 MaxSpeed: 64 km/h
 Turbo / Jump Jet: Turbo
 Combat range: 20 km for interdiction mission
 Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
 Built by: Factory
 Hardpoints: Rockets, Missiles, Dual Guns
 Countermeasures: Mine, Shield, Flares
 Bionite required: 25



HAMMERHEAD - Light Assault / Recon Lazer Tank

Crew: 1 pilot
Length: 8.93 m
Wingspan: 1.75 m
Height: 2.08 m
Powerplants: 1 × Brat & Wiener 100 or -220 afterburning turbofans
Thrust with: 23,770 lbf for -220(105.7 kN for -220) each
Fuel capacity: 6,100 kg internal
MaxSpeed: 150 km/h
Turbo / Jump Jet: Turbo
Combat range: 30 km for interdiction mission
Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
Built by: Factory
Hardpoints: Guns
Countermeasures: Mine, Flares
Bionite required: 25



Longbow - Medium Assault

Crew: 1 pilot
Length: 11.71 m
Wingspan: 4.17 m
Height: 5.29 m
Powerplants: 1 × Brat & Wiener 100 or -220 afterburning turbofans
Thrust with: 23,770 lbf
Fuel capacity: 6,100 kg internal
MaxSpeed: 110 km/h
Turbo / Jump Jet: Turbo
Combat range: 30 km for interdiction mission
Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
Built by: Recycler
Hardpoints: Dual Gun, Dual Cannon
Countermeasures: Mine, Shield, Flares
Bionite required: 25



ARCHER – Mortar Bike

Crew: 1 pilot
Length: 7.97 m
Wingspan: 3.05 m
Height: 3.86 m
Powerplants: 1 × Brat & Wiener 100 or -220 afterburning turbofans
Thrust with: 23,770 lbf for -220(105.7 kN for -220) each
Fuel capacity: 6,100 kg internal
MaxSpeed: 150 km/h
Turbo / Jump Jet: Turbo
Combat range: 30 km for interdiction mission
Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
Built by: Factory
Hardpoints: Dual Mortar, Dual Gun
Countermeasures: Mine, Shield, Flares
Bionite required: 25



LYNX - Heavy Assault

Crew: 1 pilot
 Length: 9.43 m
 Wingspan: 4.05 m
 Height: 5.63 m
 Powerplants: 1 x Brat & Wiener 100 or -220 afterburning turbofans
 Thrust with: 23,770 lbf for -220(105.7 kN for -220) each
 Fuel capacity: 6,100 kg internal
 MaxSpeed: 90 km/h
 Turbo / Jump Jet: Turbo
 Combat range: 20 km for interdiction mission
 Avionics: Pulse Rdr, Target Tracking Rdr, Navigation Beacon, Weather
 Built by: Factory
 Hardpoints: Dual Guns, MAG Cannon
 Countermeasures: Mine, Shield, Flares
 Bionite required: 25

MILITARY FIXED UNITS



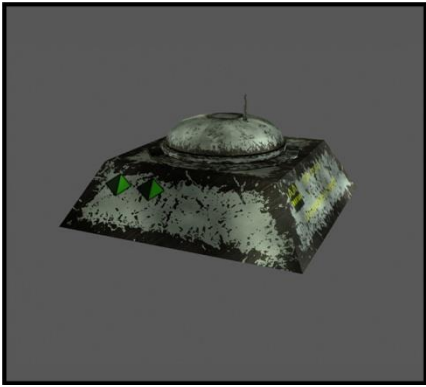

COBRA TURRET

Faction: IMI
 Length: 9.77 m
 Width: 3.7 m
 Height: 2.37 m
 Top speed: 9 km/h
 Range: 5 km
 Weapon : Dual MiniGun
 Weight: 11.7 t
 Caliber: 120 mm
 Crew: 2 (gunner, driver)
 Bionite required: 20
 Built by: Recycler









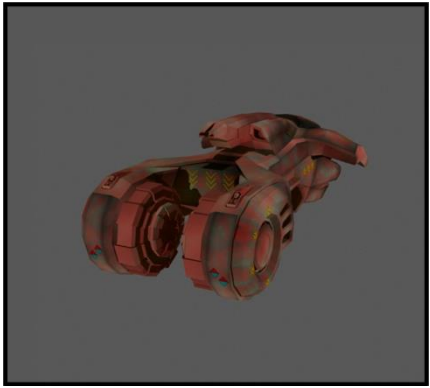

DIAMONDBACK TURRET

Length: 9.77 m
 Width: 3.7 m
 Height: 2.37 m
 Top speed: 15 km/h
 Range: 5 km
 Weapon : Dual NeedleGun
 Weight: 11.7 t
 Caliber: 120 mm
 Crew: 3 (commander, gunner, driver)
 Bionite required: 25
 Built by: Factory

	<p>SPYDER TURRET</p> <p>Length: 9.77 m Width: 3.7 m Height: 2.37 m Top speed: 13 km/h Range: 5 km Weapon : Dual Mini Cannon Weight: 11.7 t Caliber: 120 mm Crew: 1(pilot only) Bionite required: 25 Built by: Factory</p>
	<p>MORTAR TURRET (stationary)</p> <p>Length: 9.77 m Width: 3.7 m Height: 2.37 m Weapon: Dual Mortar Weight: 9.7 t Main armament: high velocity mortar barrels Crew: none, autonomous targeting Bionite required: 25 Built by: Constructor</p>
	<p>LANCER GUN TOWER</p> <p>Faction: IMI Length: 9.77 m Width: 3.7 m Height: 2.37 m Range: 25 m Weapon: Single Laser Weight: 9.7 t Main armament: Super sized rail gun barrel Crew: none, autonomous Bionite required: 50 Power Consump: 24KW Built by: Constructor</p>
	<p>MINOTAUR GUN TOWER</p> <p>Faction: IMI Length: 9.77 m Width: 3.7 m Height: 2.37 m Range: 25 m Weapon: Dual Cannon Weight: 9.7 t Main armament: 505 mm, 24Kv Plasma Crew: none, autonomous Bionite required: 40 Power Consump: 24KW Built by: Constructor</p>

UTILITY VEHICLES

	<p>RECYCLER – Rebel</p> <p>Crew: 1 pilot Length: 15.28 m Height: 8.63 m Propulsion: Fuel capacity: 22,120 kg internal Top Speed: 25 km/h</p>
	<p>RECYCLER – IMI</p> <p>Crew: 1 pilot Length: 15.28 m Height: 8.63 m Propulsion: Fuel capacity: 12,100 kg internal Top Speed: 25 km/h</p>
	<p>SCAVENGER</p> <p>Crew: 1 pilot Length: 15.28 m Width: 5.45 m Height: 8.63 m Propulsion: Fuel capacity: 9,200 kg internal Top Speed: 19 km/h Built by: Builder Bionite required: 25</p>
	<p>EXTRACTOR</p> <p>Crew: 1 drill operator Length: 15.28 m Width: 5.45 m Height: 8.63 m Fuel capacity: 9,200 kg internal Bionite required: 0</p>

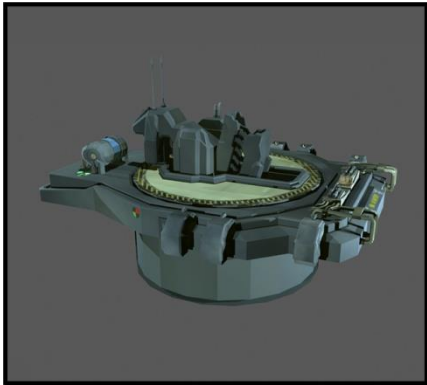
	<p>CONSTRUCTOR/BUILDER – IMI</p> <p>Crew: 2 (pilot, operator) Length: 15.28 m Width: 5.45 m Height: 8.63 m Propulsion: Fuel capacity: 12,100 kg internal Top Speed: 34 km/h Built by: Builder Bionite required: 20</p>
	<p>CONSTRUCTOR/BUILDER – Rebel</p> <p>Crew: 2 (pilot, operator) Length: 15.28 m Wingspan: 5.45 m Height: 8.63 m Propulsion: Fuel capacity: 12,100 kg internal Top Speed: 31 km/h Built by: Builder Bionite required: 20</p>
	<p>REPAIR DRONE</p> <p>Crew: Autonomous Length: 15.28 m Wingspan: 5.45 m Height: 8.63 m Propulsion: Fuel capacity: 12,100 kg internal Top Speed: 40 km/h Built by: Factory Required: Service Bay Bionite required: 20</p>
	<p>HAULER</p> <p>Crew: 1 driver Length: 15.28 m Wingspan: 5.45 m Height: 8.63 m Propulsion: 1800 Hp cat plant Fuel capacity: 12,100 kg internal Top Speed: 15 km/h Bionite required: 0</p>

BUILDINGS



FACTORY

Built by: Constructor
Required: Power
Power consumption: 24KW
Bionite required: 80



ARMORY / ARSENAL

Built by: Constructor
Required: Power
Power Consumption: 24KW
Bionite Required: 50



BUNKER

Built by: Constructor
Required: Power, Satellite Tower
Power Consumption: 24KW
Bionite Required: 40



POWER STATION

Built by: Constructor
Required: none
Power Consumption: 24KW
Bionite Required: 25



SATELLITE TOWER

Built by:	Constructor
Required:	Power
Power Consumption:	24KW
Bionite Required:	65



SERVICE BAY

Built by:	Constructor
Required:	Power
Power Consumption:	24KW
Bionite Required:	60



BIOSILO

Built by:	Constructor
Required:	none
Storage capacity:	3 T
Pumps:	60,000 l/min
Pressure:	9 bar
Bionite Required:	25

LIST OF WINGMAN COMMANDS

Wingmen (all armored vehicles):

Follow:	Commander Vehicle Selected
Go To Location:	Navigation Beacon Location Beacon
Attack	Selected Enemy
Fly in Formation (FiF):	Pattern Alpha Pattern Beta Pattern Cappa Pattern Delta
Hunt:	Recon Hunt in Quadrant Roam and Kill Hunt for Scavenger/Extractor Hunt for Constructor Hunt for Recycler Hunt while FiF
Defend:	Commander Selected Asset At Navigation Beacon At Base
Misc:	Hold Pick Me Up Reassign Destroy

Scavenger /Collector:

Follow:	Commander Vehicle Selected
Go To Location:	Navigation Beacon Location Beacon

Scavenge	
Deploy	
Undeploy	
Misc:	Hold Destroy

Repair Drone:

Follow:	Commander Vehicle Selected
Go To Location:	Navigation Beacon Location Beacon
Repair:	Commander Selected Asset
Misc:	Hold Reassign Destroy

Constructor:

Follow:	Commander Vehicle Selected
Go To Location:	Navigation Beacon Location Beacon
Build at Location	
Upgrade Extractor	
Misc:	Hold Destroy

Recycler:

Follow:	Commander Vehicle Selected
Go To Location:	Navigation Beacon Location Beacon
Deploy	
Undeploy	
Fabricate	
Hold	

Turrets:

Follow:	Commander Vehicle Selected
Go To Location:	Navigation Beacon Location Beacon
Defend	
Deploy	
Undeploy	
Misc:	Hold Reassign Destroy

KEYS

General Ship Controls

WASD = movement

1-0 number keys = Select Navigation Beacon (*when not ordering bots*)

Home = Home View to center

Up Arrow = turn View Left

Down Arrow = turn View Right

Mouse Wheel = rotate pitch Mortar Barrel

T = Toggle Enemy Targeting

B = Toggle Friends Targeting

G = Toggle open / close Barrels (*Longbow, HammerHead only*)

E = Turbo / Jump Jet for Rhino

U = Pulse (*Rhino / Kodiak / HammerHead only*)

V = change view

X = drop navigation beacon at location selected with spacebar.

SpaceBar = Used with mouse to select wingmen and enemies for orders, **or** location on landscape for constructor to build, **or** turrets to deploy.

Right Mouse = change weapon

BackSpace = cycle MFD screens / toggle Command and Radar screens

K = Drop Camera at current location selected with spaceBar

M = Drop a Mine at current location selected with spaceBar

Q = Zoom

J = Toggle Night Vision

I = Eject from Vehicle

L = Vehicle Horn

Satellite View Controls

WASD = movement

Left Arrow = move camera closer (down)

Right Arrow = move camera away (up)

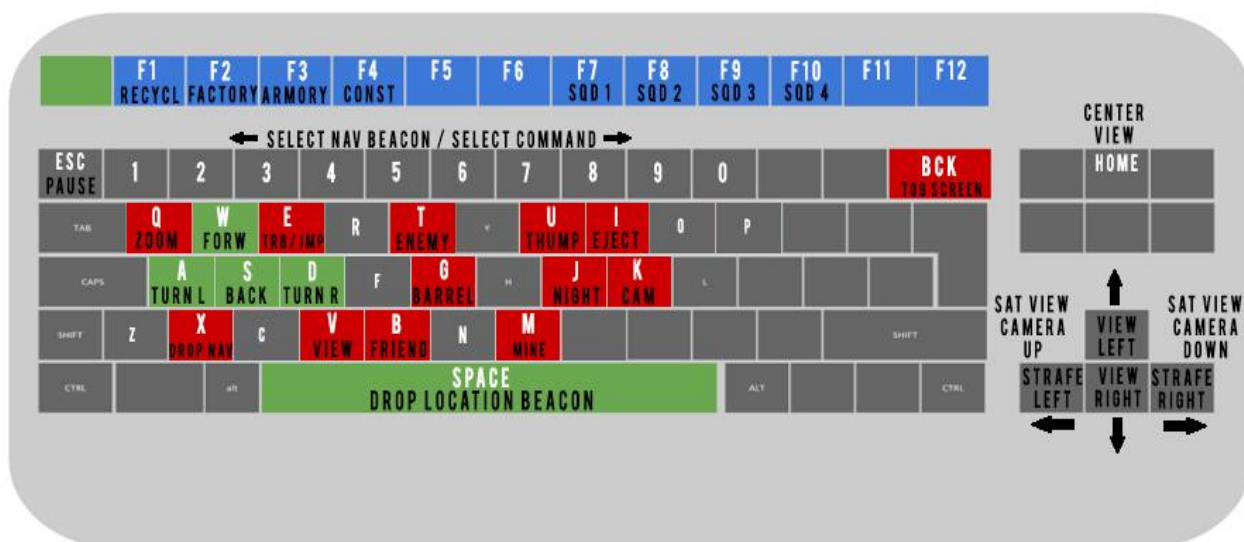
Squad Orders and Command Keys

Select a squad using the keys below then use the number keys 1-0 to select menu items.

The menus toggle using the same key (open/close).

F1 = select Recycler	F7 = select squad One
F2 = select Factory	F8 = select squad Two
F3 = select Armory	F9 = select squad Three
F4 = select Constructor	F10 = select squad Four
	F12 = select Squad Five

KEY MAP



BIONITE: ORIGINS DEVELOPMENT TEAM

The game is developed by a small group of developers located around the world, called Platoon Studios.

North America Team

John Grisnik "LtFEED"

Brennan Johns "Driving Park"

European Team

Vlad Negau "NoS"

Micha Zimmerman "EMZE"

"Hotshot"

AustralAsia Team

Jonathan and Benjamin Krebs "CptT's"

GAME DEVELOPMENT HISTORY and FUTURE

Bionite: Origins started over 6 years ago on a forum called "BZ3:Genesis". That forum existed until 2012 and was a where all of the developers met and the game creation started. Near the end of 2012 we did a Kickstarter campaign that was successfully funded by the gaming community. Without the support of the community on Kickstarter, Bionite would not exist. Over the years, we have had releases on Desura and our own store front (SendOwl) that were Multiplayer Siege mode, and the first release of SinglePlayer Strat mode. This being our first game developed under Platoon Studios, we had our share of difficulty and trouble with creating a finished product. Now that we are on Steam, we are looking to the future and are already working on more content, more features, game elements and game modes. Our next major release will be Multiplayer and SinglePlayer turn based missions. In about 3 to 4 month, the first Multitplayer release will be completed and ready for the community. Our goal for Multiplayer is Strat Mode that can be played with one commander on each team and up to 32 pilots on each side. We are also working on Coop Mode for the Multiplayer release that will allow up to 16 players to compete against

the computer in Skirmish Mode. Shortly after the Multiplayer release, we will release a series of SinglePlayer turn based missions that revolve around the Bionite backstory. We are planning by the beginning of 2017 to be upgrading the game to a new engine, most likely the CryEngine.