

MASTER OF
ORION
CONQUER THE STARS



GAME MANUAL

Master of Orion

Game Manual



Conquer the Stars...

Current as of Patch v48.4.1

September 1, 2016

Version 1.0

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Introduction

Welcome, explorer! Are you ready to start your journey to conquer the stars and become the Master of Orion?

The iconic 4X strategy game that formed the blueprint for a whole generation of successors has been resurrected and upgraded. Stunningly enhanced for a new line of players, Master of Orion inherits and redefines the core elements of the original series of games, providing a graphically beautiful and deeply rewarding experience.

Master of Orion represents the rebirth of a new era of strategy gameplay featuring the latest multi-platform technology and graphical systems. Within the depths of space and on scattered worlds, will you take up the challenge and conquer the stars?

In your bid for domination you will lead one of an array of intergalactic races, each with a unique advisor and several advantages, technologies, and specialized ship designs. Explore an infinite number of galaxies, harness hundreds of unique technologies, design dozens of ships and build a variety of structures. Will you crush worlds, manipulate leaders, hoard resources, or do all of the above? In Master of Orion, you decide how to take control of the galaxy.

This guide provides you with the basics to start conquering the stars. From races and planets to game modes, core mechanics, tactics and more, you will learn all you need to know to eXplore the stars, eXpand your stellar empire, eXploit planetary resources, and eXterminate all who stand in your way.

DISCLAIMER: The information below is based on the most recent build. All gameplay, UI, or additional features of the game are subject to change.



ICARUS

By Kelsey Howard

Mara showed her clearance badge to the heavily armed guards, then placed it in the security scanner. Sliding metal doors opened slowly before her. Her presence in the lowest and most secure level of the Library of the Controller required direct approval from the leader of the Psilon Empire, the Controller of the Quanta. She had been nominated to join a top secret research committee by the Director of the Scientific Advisory Board the week before. Mara was stunned and she accepted the offer on the spot.

She entered a vast research room lined with detailed filing systems and dimly illuminated monitors. A few Psilons, old and pale as ghosts, silently paced the room, completely focused on their work. Mara approached the central desk where a Librarian sat, silently awaiting her request. "Call number?" The Librarian's voice was faint and soft, as if it had not been used for quite some time.

Mara swiftly handed the Librarian the encoded card she had been given back at Headquarters, with "ALPHA-ICARUS File 0012" emblazoned across it. The Librarian immediately began inputting commands into a compact terminal. A small robot rushed out from under the desk towards the stacks, quickly disappearing as it rounded a corner.

The highly classified information Mara had requested was the last intact account of the ICARUS discovery mission. ICARUS, or the Intergalactic Communication Resolution System, was already an ancient technology when it was found hundreds of years ago. Now it was so ingrained in modern civilization that it was regarded as an undeniably attribute of the universe, no different from gravity or time.

The "magic" of a universal translator which traveled seamlessly across electromagnetic fields, infesting and changing both electronic networks and the neuron pathways of biologicals, may have become normal over time, but the unsolved mystery of how this technology worked still eluded and haunted the Psilons.

Centuries of research had yielded no new information. Teams of scientists had come and gone, yet nothing more was known about the system than the day it was found. No one could explain why or how ICARUS was effortlessly translating hundreds of languages in real time. In fact, the

discussions of ICARUS's inner workings had been exiled to the realm of rumors and gossip between eccentric scholars.

Mara herself had heard the rumors, though she always kept her head down and focused on her work—which was always lauded for its brilliance. When asked, she had stated that she had no theories on ICARUS as she lacked access to data. Keeping her thoughts to herself on one of the most frustrating and longest-running Psilon research failures proved fortunate. It was this very dedication, work ethic, intelligence, and prudence that got her a place on the ICARUS Research Team.

With a slight whir, the tiny robot arrived back at the Librarian's desk carrying a small box. The Librarian picked it up and opened it carefully, pulling an antique audio device out along with some carefully preserved physical files. Mara took the materials to a secure room and sealed the door behind her.

The audio file was marked with bold text: “WARNING: HIGHLY CLASSIFIED INFORMATION REGARDING ICARUS SYSTEMS. INDIVIDUALS MUST HAVE QUASAR LEVEL CLEARANCE TO PROCEED.” Mara carefully removed the audio file from its protective casing and placed it in the audio player, waiting anxiously for the audio to begin.

The standard boilerplate precautions preceded the actual content. “The following transcription is a direct transcription of Erga, leader of the original team that discovered the ICARUS device. The following information is classified QUASAR and is not approved for reproduction or distribution by any means.” The Psilons, ever cautious and paranoid, took every legal precaution to protect their intellectual property.

The audio file clicked to life with the steady breathing of the Psilon on the other side filling the quiet listening room. The audio was so clear it was as if the person on the other side of the recording was in the room with her. This voice, reaching across time from hundreds of years ago, was doomed to have his story buried under strict security classifications for fear of others gleaning a clue to how ICARUS works.

The Interviewer speaks first, his low voice cold and detached. “This is the interrogation of Erga, lead field researcher with the Ampere Salvage Team.” There is a momentary pause and the sound of rustling papers. “Erga, begin your account of the recovery of the ICARUS device. Begin with planetary landing.”

The second voice enters the audio, clear and confident. Erga's logical and even-tempered tone marks him unmistakably as Psilon, even though this recording was made hundreds of years in the past. “When we first landed on the planet it appeared to be completely barren—void of any life or technology. Scouts had reported distant sightings of an isolated building that seemed suspicious. We had with us some hired mercenaries—mostly Sakkra, but a few Humans and Mrrshan as well.”

“We entered the building with no difficulty. It seemed to be some sort of deserted outlying facility. There were traces of ancient technology, but it seemed like the place had been cleaned out of anything of value long ago. The mercenaries seemed suspicious of what we would find, but the research team was naturally curious.”

Erga pauses and clears his throat. “We found an interior room behind heavy blast doors. Scanners indicated the whole room was heavily shielded and our scanners could not penetrate to the

interior. There were signs that others had tried to open the doors before, without success. The Sakkra mercenaries began to set charges of their new directed planar explosives.” The Interviewer pushes Erga forward after a long pause. “Is that when the technology began to work?”

“No. We blew the doors open and investigated the massive room inside. It was barren except for a small glowing node in the center of the room. We began to enact the standard isolation protocols for unknown tech, but when we radioed the mercenary team outside the facility doing patrols... that’s when we noticed it.”

The Interviewer interrupts politely, “You confirm that the short-range communication device activated the node?”

“To the best of my observational abilities, yes. As soon as we radioed the team we began to understand each other much more clearly. My knowledge of the Sakkra language is rudimentary at best, but I suddenly understood the Sakkra perfectly. I could tell he was speaking his native language, but I understood him without any struggle to translate. When I responded in our language, he understood me as well.”

“What happened next?” If the Interviewer is surprised, he is repressing the shock of the situation. He moves forward with the interrogation in a calm, efficient manner. “The main ship detected the communications chatter on the ground and radioed down. They began to panic when they suddenly were able to understand each other.” Erga pauses for a moment. “There were some casualties onboard among the mercenaries in the ensuing chaos when they all understood what was being said to each other.”

“This... ability traveled to the ship and spread across those onboard?”

“Yes. As we radioed out for assistance, the translation ability seemed to spread.” Erga speaks quickly, as if the thrill of experiencing first-hand new technology excites him. “It must be some sort of virus which transmits itself through electromagnetic waves or fields over great distance...” “This is confirmed information. The virus has reached the Sakkra and Mrrshan regions of space already and shows no signs of slowing. Any information collected from the site may prove crucial in understanding this mysterious device.”

“The site was completely isolated. It’s possible that no other advanced intelligent life has been in the area since the Orions abandoned the area.” Erga is reaching in his logic.

The Interviewer did not hesitate to shut down Erga’s wild speculation. “The Orions are little more than myth. It is unsound to make assumptions based on their rumored presence and technology.” “We gave the Controller the coordinates; you must have visited the site and seen the same.” Erga is beginning to sound tired. A known Psilon trait was that the pressure of the unknown could wear them down, rendering them catatonic for a time.

The Interviewer is quick to respond. “That is accurate. The site was as you stated. However, you will be held in custody along with the rest of your team until we can determine the exact nature of the device and how it works. The device itself will be moved to a more secure location.” Erga makes a slight sound of displeasure, but speaks calmly to the Interviewer. “I understand what you have to do.”

The audio file abruptly ended. Mara looked around for the documents associated with the audio file and pulled up the one she was looking for. The confinement records show nine Psilon, ten

Sakkra, seven Mrrshan, and three Humans to be contained after the incident. All died of old age in a secure prison. The file also stated that official letters were sent to the families explaining that an engine malfunction had destroyed the ship with the loss of all onboard. A quick scan of the other documents showed that the location of the device itself was not given.

Mara closed the files and looked up at the featureless ceiling of the secure room. Was it possible that she just signed up to solve the riddle that had haunted the Psilon scientific community for generations? The idea of fully understanding the device became dire as she played over in her mind the scant information she had heard and read.

She rubbed her eyes and recalled her training. Firsthand observational data is always more valuable than the stories and accounts of others. She had to see the device herself. That was the only answer.

Of course, the Psilon government had denied the existence of ICARUS's physical form. They rejected the idea that they had possession of such an unknowable and powerful device. Yet, as Mara was beginning to learn, there was a lot that the Psilon government was willing to keep under wraps in order to secure their research. She packed up the materials to hand back to the Librarian and set out to pick up a trail that had had centuries to grow cold.

For additional stories: <https://www.facebook.com/MasterofOrion.Official/notes>

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Technical Requirements

Windows

	MINIMUM	RECOMMENDED
OS	Windows 7/8/10 64 bit	Windows 7/8/10 64 bit Mac OS X 10.6–10.11
Processor	Intel Core 2 Duo 2.0 GHz or AMD Athlon X2 2.2 GHz	Intel i5 2.8GHz or AMD Athlon X4 3.0GHz
RAM	2 GB RAM	4 GB
Video Card	nVidia 240, ATI 4650, Intel Integrated HD4000 or better	NVidia 560, ATI 5870 or better
DirectX®	DirectX 9.0c (Shader Model 3.0)	DirectX 9.0c (Shader Model 3.0)
Free Disk Space	15 GB	15 GB
Sound Card	DirectX 9 Compatible	DirectX 9 Compatible
Video Memory	512 MB	1 GB

Mac OS X

	MINIMUM	RECOMMENDED
OS	Mac 10.6 – 10.11 (Snow Leopard – El Capitan)	Mac 10.6 – 10.11 (Snow Leopard – El Capitan)
Processor	Intel Core 2 Duo 2.0 GHz or AMD Athlon X2 2.2 GHz	Intel i5 2.8GHz or AMD Athlon X4 3.0GHz
RAM	2 GB RAM	4 GB
Video Card	nVidia 240, ATI 4650, Intel Integrated HD4000 or better	NVidia 560, ATI 5870 or better
Free Disk Space	15 GB	15 GB
Video Memory	512 MB	1 GB

Steam OS + Linux

	MINIMUM	RECOMMENDED
OS	Ubuntu 14.04 64-bit or newer, Steam OS	Ubuntu 14.04 64-bit or newer, Steam OS
Processor	Intel Core 2 Duo 2.0 GHz or AMD Athlon X2 2.2 GHz	Intel i5 2.8GHz or AMD Athlon X4 3.0GHz
RAM	2 GB RAM	4 GB
Video Card	nVidia 240, ATI 4650, Intel Integrated HD4000 or better	NVidia 560, ATI 5870 or better
Free Disk Space	15 GB	15 GB
Video Memory	512 MB	1 GB

Master of Orion will be available through Steam (<http://store.steampowered.com/>) and Good Old Games (<http://www.gog.com/>).

Game Menus

MAIN GAME MENU

The main menu allows you to choose a game mode and configure options.

- **SINGLE PLAYER:** Leads you to the single player, AI controlled opponent games. This is explained in detail, below.
- **MULTIPLAYER:** Allows you to find and join an existing game or create a multiplayer game. This is explained in detail, below.
- **OPTIONS:** Allows you to configure game settings to best suit your computer. This is explained in detail, below.
- **CREDITS:** Credits for all individuals involved in MoO development.
- **QUIT:** Quits game.



SINGLE PLAYER SCREEN

The functions of the single player screen are:

- **CONTINUE:** Continues the most recently saved game.
- **NEW GAME:** Creates a new game taking the player to additional screens, see SINGLE PLAYER/NEW GAME SCREEN, below.
- **QUICK MATCH:** Creates a new game designed for quick play: two races in a small galaxy.
- **TUTORIAL MATCH:** A small game between you and one AI race that teaches the basics of the game.
- **LOAD GAME:** Loads a previously saved game, see LOAD GAME, below.
- **BACK TO MAIN MENU:** Return to Main Menu.



SINGLE PLAYER/NEW GAME SCREEN

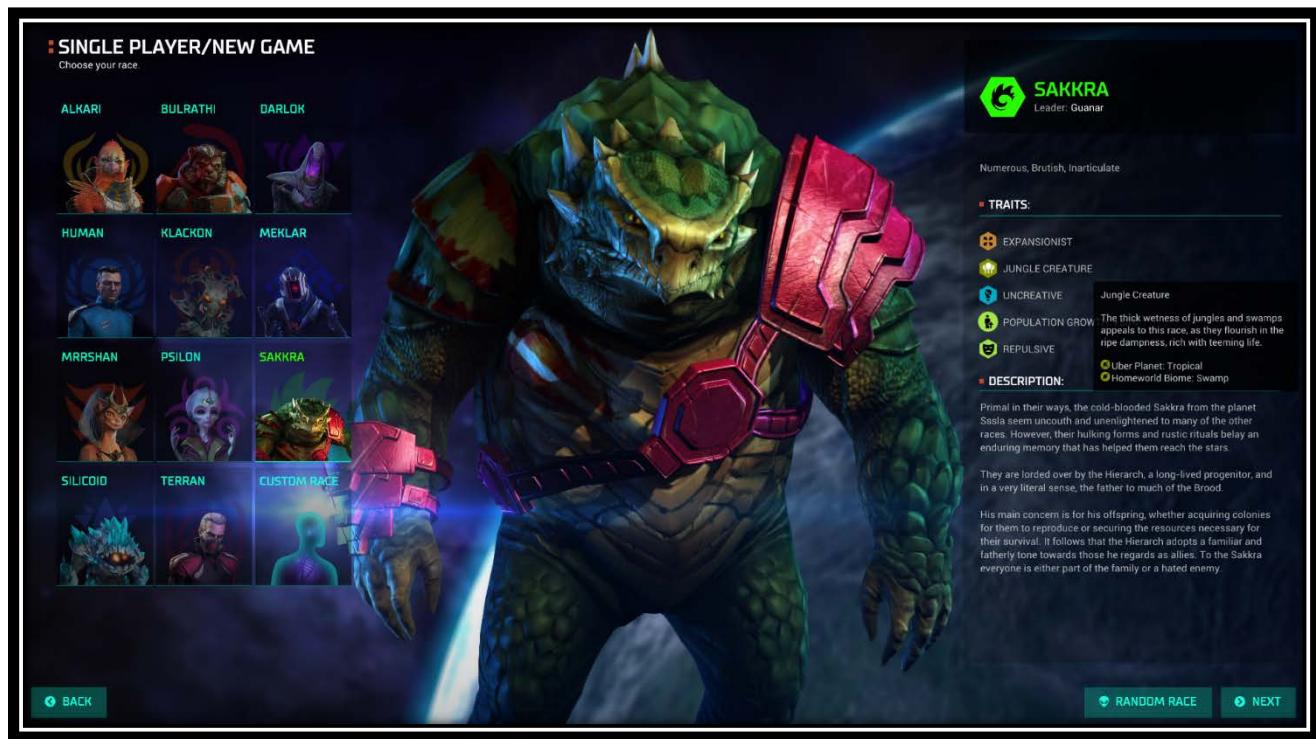
Clicking “**NEW GAME**” will start the process of generating a new game. The first screen will be your SINGLE PLAYER/NEW GAME screen. Here you will select the race for your new game.

Clicking on a Race's portrait will bring up the Leader, Traits and Description of the chosen race. You may also choose to customize a race by selecting the “**CUSTOM RACE**” button which will display the CUSTOM RACE sub-screen.

Hovering over a trait will bring up a short description describing the in-game effects.

Once a race is selected click the **NEXT** button to be taken to the NEW GAME/MATCH SETUP screen.

Selecting the “**RANDOM RACE**” feature will automatically send one to the NEW GAME/MATCH SETUP where your race will be unknown until game start. If you change your mind you may either click “**BACK**” to pick a race or click on your race portrait as explained in NEW GAME/MATCH SETUP screen, below.



CUSTOM RACE SCREEN

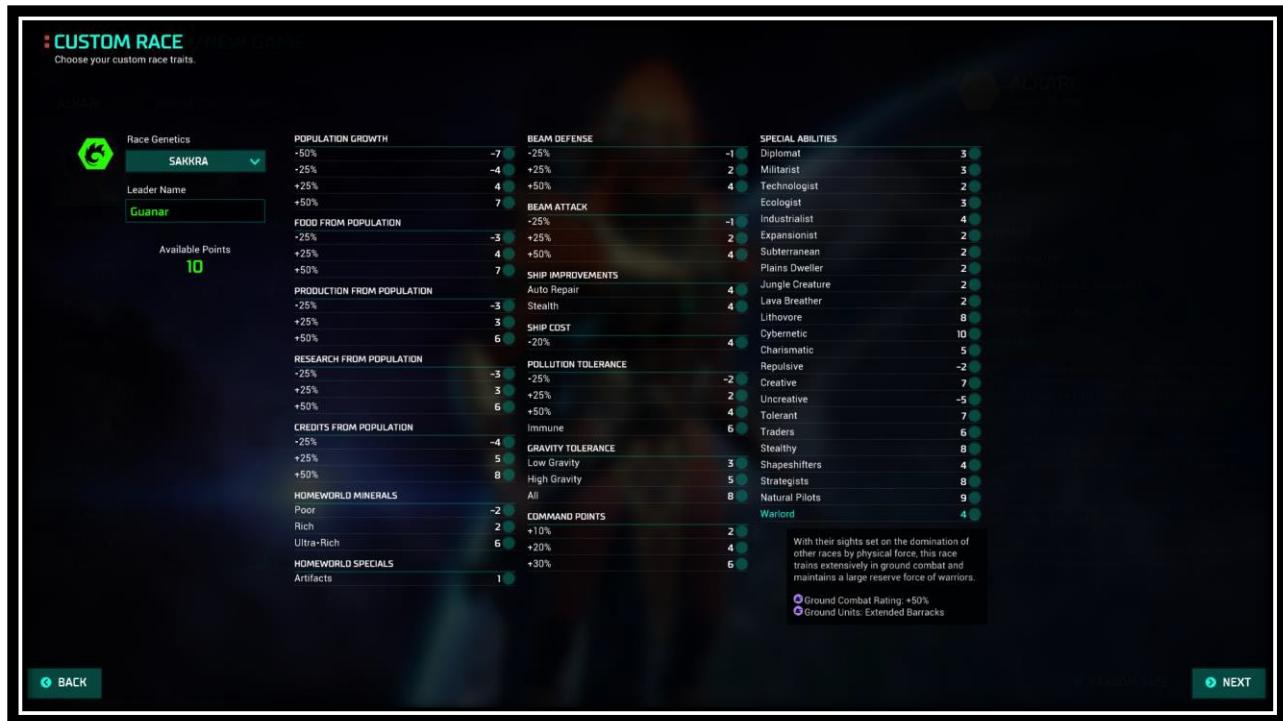
The CUSTOM RACE screen allows you to choose not only a race but their individual traits. You also have the option of changing your leader's name.

You start with 10 points available with which to choose your traits. Some traits provide a negative bonus which adds to your available points (i.e. choosing -25% Food from Population adds 3 points to your total). As your available points are used any trait you can no longer afford becomes unavailable.

Hovering over a trait will bring up a short description describing the in-game effects,

Any points not spent are lost. **NOTE:** Your available points cannot go negative.

When you are satisfied with your choices click the **NEXT** button to be taken to the NEW GAME/MATCH SETUP screen.



NEW GAME/MATCH SETUP SCREEN

In the NEW GAME/MATCH SETUP screen you may choose your AI opponents if you want to play against specific race(s) and customize the game settings. Once these have been selected click **START GAME** to launch the game. The functions and settings are:

Computer Opponents: The computer will select the opponent races at random upon game start. When you enter the game you will not know who is out there until you encounter them.

To change a computer opponent from random to a specific race hover over the race picture and click on the **“CHANGE RACE”** button. Select from the available races.

Game Settings: You may customize the following game settings:

- Galaxy Type: Choose from Circle, Spiral or Cluster galaxies. Galaxy type is a factor in determining the maximum number of available opponents.
- Galaxy Size: Choose from Small, Medium, Large or Huge depending on Galaxy

- Type. Galaxy size is a factor in determining the maximum number of available opponents.
- Galaxy Age: Choose from Young, Average or Old. Galaxy age determines not only star color but the types of planet biomes available.
- Starting Age: Select from Pre-Warp, Post-Warp or Advanced. The age determines how far up or down you begin on the tech tree as well as starting fleet composition.
- Difficulty Level: Choose from Very Easy, Easy, Normal, Hard, Very Hard and Extreme. Difficulty level determines how challenging the AI responds in game.
- AI Opponents: Select from 1 to maximum allowed opponents dependent on Galaxy Size to customize the number of opponents you will face.
- Game Pace: Pace will shorten or lengthen the time it takes to research, create population, build production, etc. This setting effects ALL races in the game equally.
- Big Bang Seed: This number represents that particular galactic set-up. If one has a favorite seed you can type the number into the box and the galaxy map will populate with that seed. Alternately you may click the **DICE** button to randomly generate another seed.

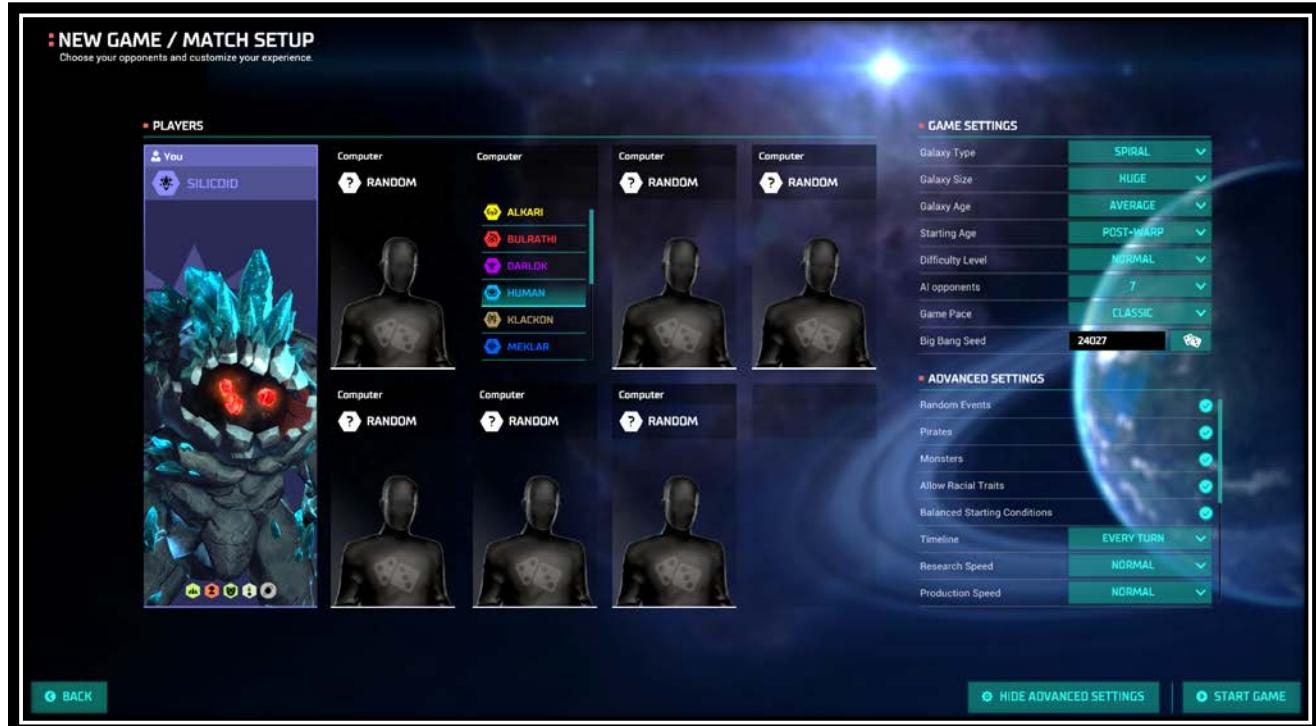
Advanced Settings: You may further customize your game by using the Advanced Settings. These settings may be displayed or hidden by clicking the “Show Advanced Settings” or “Hide Advanced Settings” button. The following settings may be set to be either On/Off or choose an option from the drop down menu. All Advanced Settings are pre-set to their default settings.

- Random Events: Toggle Random Events on/off.
- Pirates: Toggle Pirates on/off.
- Monsters: Toggle Monsters on/off.
- Allow Racial Traits: Toggle all Racial Traits, including the players, on/off.
- Balanced Starting Conditions: Toggle on/off for fully randomized race and planet locations.
- Timeline: Select frequency in turns that the Timeline saves at. If on “Disabled” this is an ironman mode as you will not be able to reset a bad decision barring a hard save.
- Research Speed: Select from drop down if you wish to speed up or slow down Research for all races in the match.
- Production Speed: Select from drop down if you wish to speed up or slow down Production for all races in the match.
- Population Growth Speed: Select from drop down if you wish to speed up or slow down Population Growth for all races in the match.
- Score Victory*: Toggle on/off and set a different Turn option, if desired.
- Diplomatic Victory: Toggle on/off.
- Technological Victory: Toggle on/off.
- Economic Victory: Toggle on/off.

*If Score Victory remains “On” you have the option of setting your own turn limit between 250 – 9999 turns. The default is 500 turns.

NOTE: Hovering over a setting in Advanced Settings will display a pop-up explaining what that setting does.

NOTE: The Conquest victory condition is a default that may not be toggled on/off.

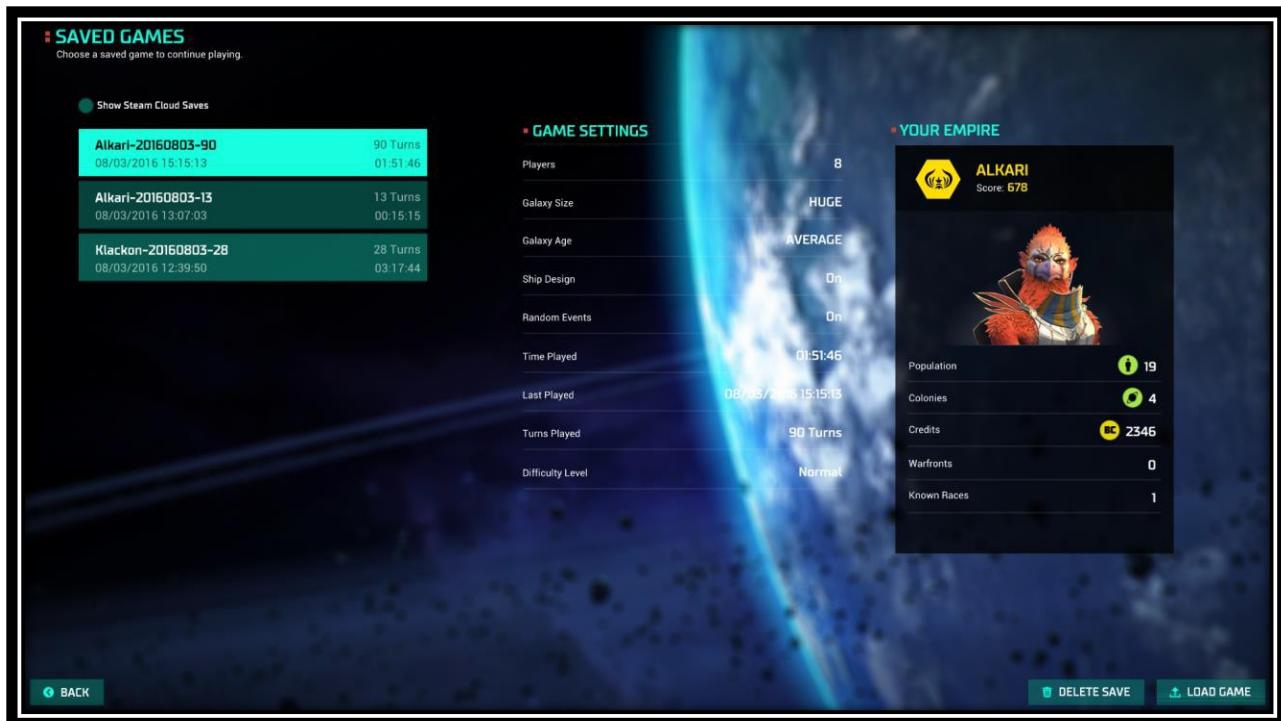


LOAD GAME SCREEN

Clicking **LOAD GAME** will bring you to the **SAVED GAMES** screen. All of your saved games are maintained here with the top game being the most recently saved game. The saved game clicked on will display your chosen settings and current empire status.

If you have previously saved a game to the Steam Cloud a “**Show Steam Cloud Saves**” button is located above your local saved games. Toggling this will display your Steam Cloud saved game or, if off, all locally saved games.

To load a previously saved game click on the desired game to highlight it then click the **LOAD GAME** button. To delete a game highlight a game then click the **DELETE GAME** button.



Multiplayer

MULTIPLAYER SCREEN

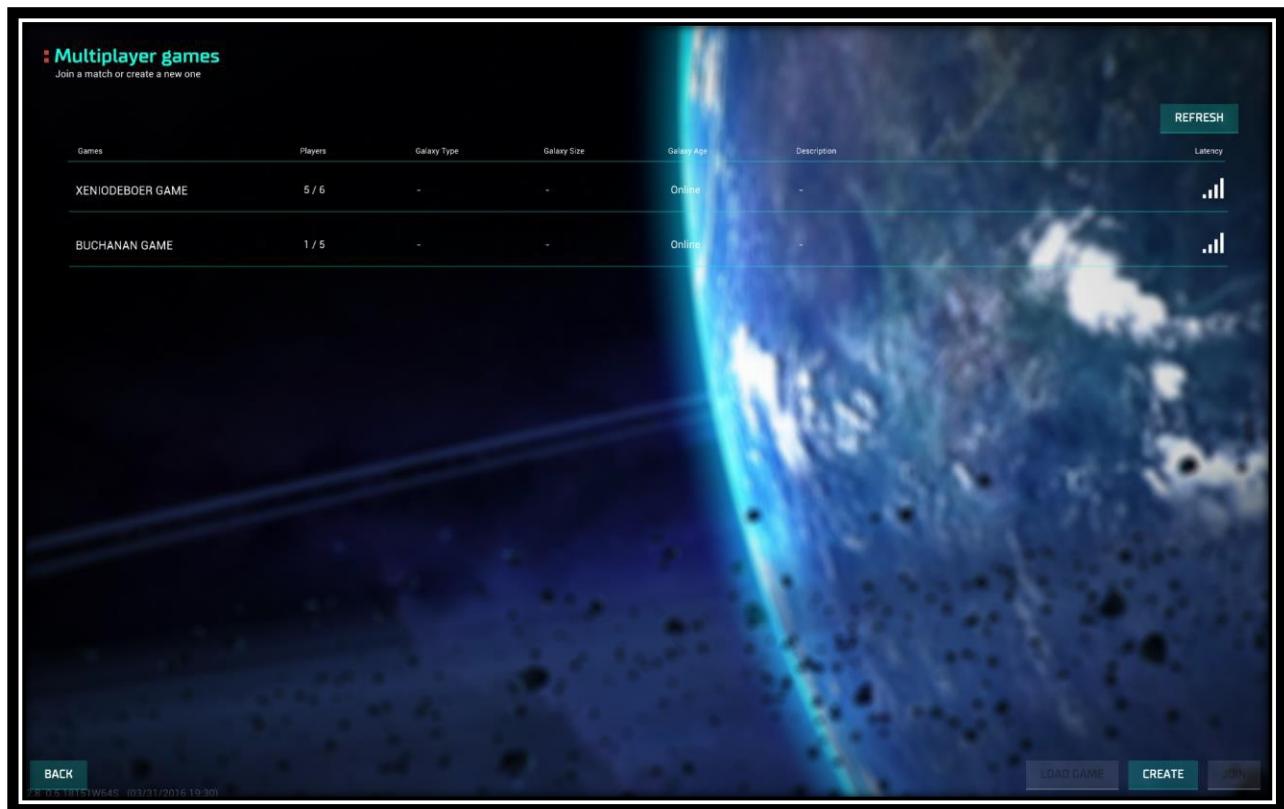
The multiplayer screen allows you to join an open multiplayer game, if available, or create one. The functions of the multiplayer screen are:

REFRESH: Refreshes screen to show current multiplayer games available to join.

LOAD GAME: Load a saved multiplayer game you had created.

CREATE: Create a new multiplayer game. This is detailed, below.

JOIN: To join a match click on the listed multiplayer game and then the **JOIN** button.



NEW ONLINE GAME SCREEN

To create your own multiplayer game' click the **CREATE** button in the lower right corner. The multiplayer creation screen will be displayed with the following functions:

GAME NAME: Name your multiplayer game. The default will be your in-game name.

HOST PRIVATE GAME: Checking this button makes the game private. Unchecking this box places the game in the public multiplayer listing.

ALLOW CUSTOM RACE: Checking this toggles on/off the ability of all players to create custom races.

GALAXY TYPE: Choose the type of galaxy for the game.

GALAXY AGE: Choose age of the galaxy.

GALAXY SIZE: Choose galaxy size. Note that galaxy size determines maximum available player slots.

PLAYER SLOTS: Choose the amount of players for your game.

CREATE GAME: This will create your multiplayer game and bring you too the **GAME SETTINGS** screen (See Single Player, above, for **GAME SETTINGS** explanation).

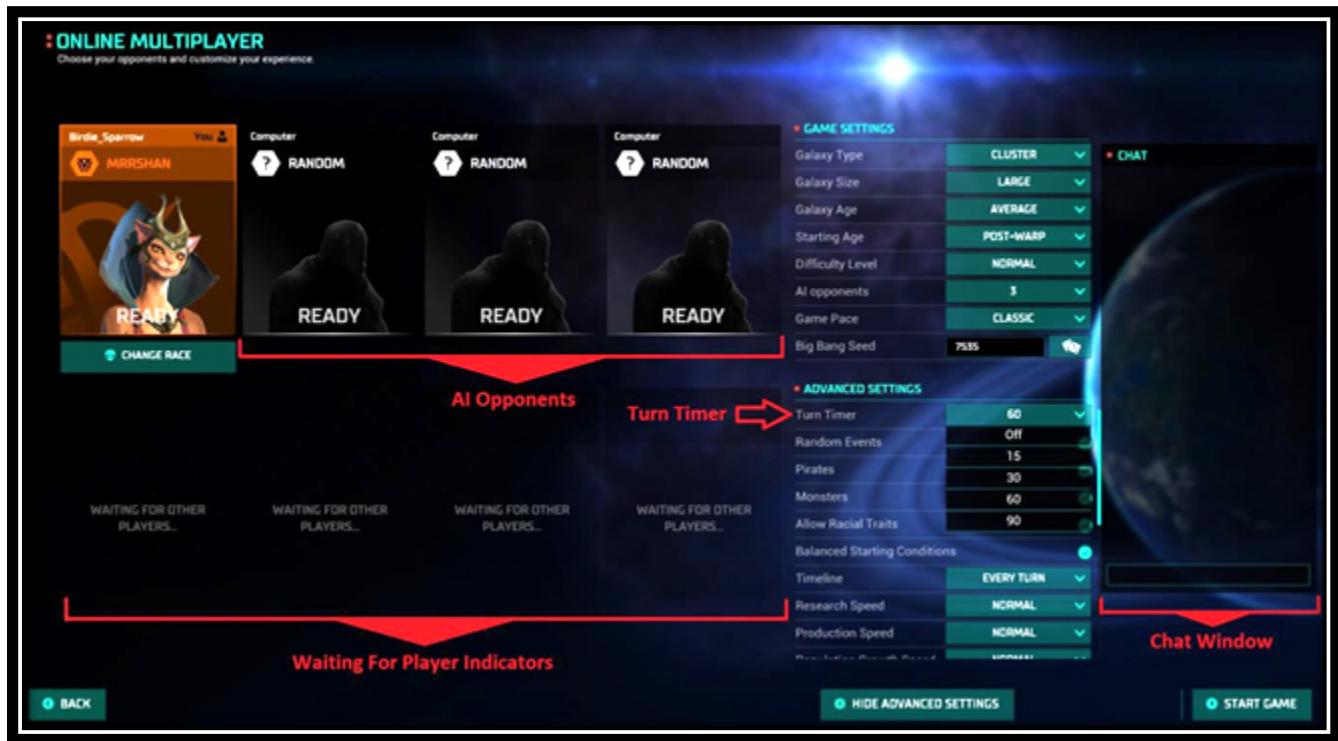


New Online Game Screen

ONLINE MULTIPLAYER SCREEN

This screen is similar to the NEW GAME/MATCH SETUP for single player. The only differences are the following:

- On the Race screens the Race cells will display a “Waiting for Player Indicator” until a player selects a Race. If any opponents are to be AI they will appear as “Ready” on the screen.
- AI Opponents – In multiplayer this can be set to zero.
- Turn Timer – The Turn Timer, located under the Advanced Settings, is how many seconds everyone gets once the first player is done and clicks “Ready” on his screen. The timer will appear at the top of the screen and begin the countdown. When it reaches zero the turn will end and advance to the next turn. The Turn Timer can be set to “Off”.
- Chat Window – The chat window will allow individuals to write to each other. A chat box will also be available within the game itself.



Options Screen

The Options screen contains the following settings to optimize your computer and game experience. Selection is via drop down menus, on/off buttons, sliders, or key mapping features:

Graphic Settings:

- Resolution
- Quality
- Antialiasing
- V-Sync
- Full Screen

Gameplay Settings:

- Disable GNN
- Disable Advisor Tips
- Mute Advisor
- Disable Camera Focus
- Enable Auto-Turn

Tactical Combat

- Start Battles on Pause
- Start Camera Mode
- On Pause Camera Mode
- Enable Admiral AI by Default
- Show Tactical Battle Setup

Audio Settings:

- Master
- SFX
- Voices
- Music

Control Settings (allows you to map any or all too specific keys):

- Control Type

Strategy Controls

- Empire Management
- Fleet Management
- Research Management
- Diplomacy
- Planets Management
- Path to Victory
- Settings
- Next Turn
- Planet Resources
- Skip Fleet
- Set Fleet to Guard

- Toggle Auto-Explore
- Colonize a Planet
- Build with Space Factory
- Unload Population
- Move Fleet
- Jump through Wormhole
- Destroy Planet
- Refit Ship
- Attack a target
- Set Fleet to Sleep
- Scrap Ship
- Toggle Auto-Turn

Tactical Controls

- Change Camera
- Hold Position
- Cease Fire
- Match Speed
- Pause
- Speed Up
- Slow Down
- Health Bar Mode
- Formation 1
- Formation 2
- Formation 3
- Formation 4
- Special 1
- Special 2
- Special 3
- Special 4
- Special 5
- Special 6

Camera

- Up
- Down
- Right
- Left
- Toggle Rotation/Movement

Interface Settings:

- Language
- Voices Language
- Subtitles Language
- Show Subtitles
- Show Enemy Fast Animation
- Show Player Fast Animation

Tactical Combat

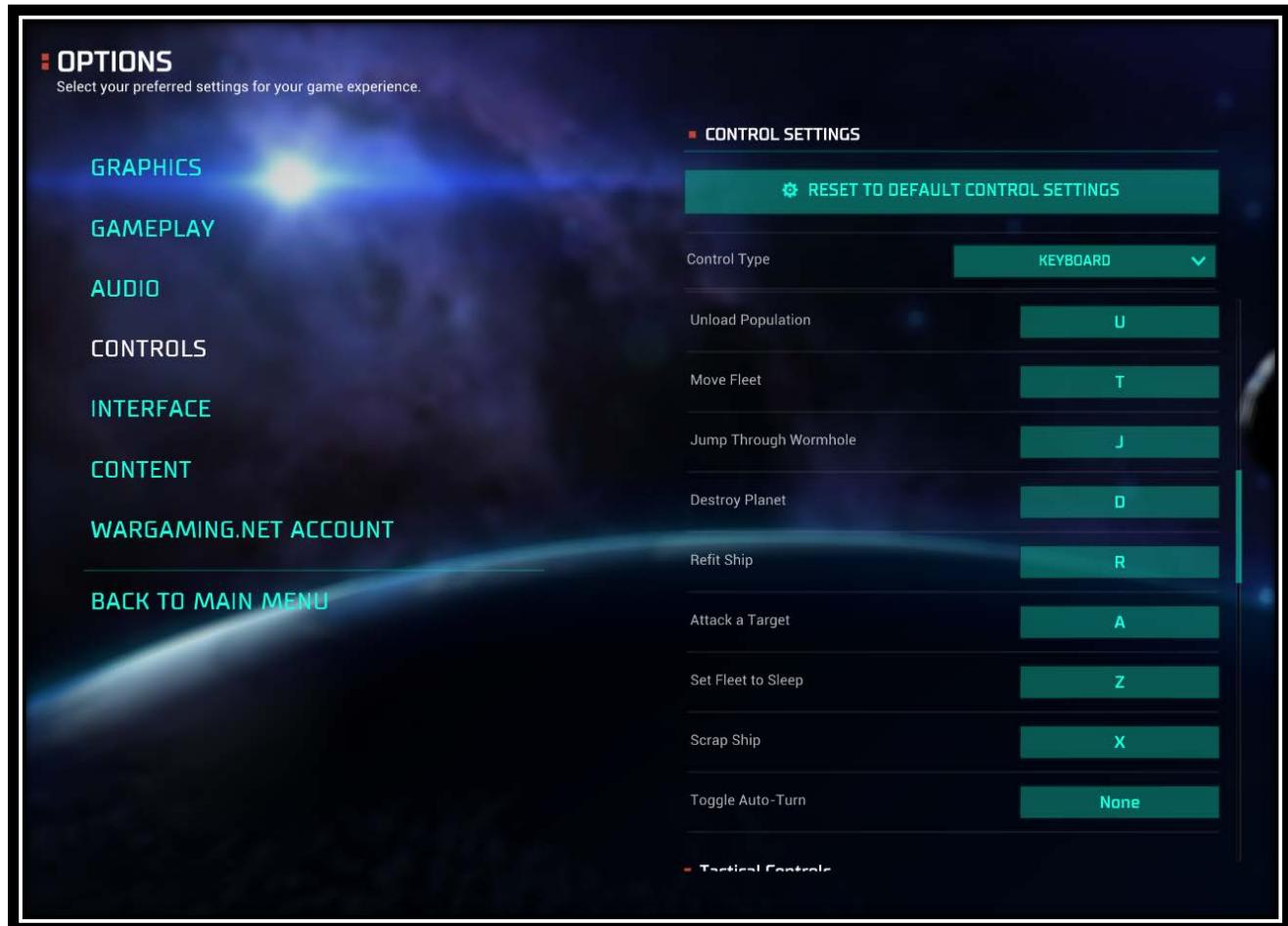
- Show Numeric Damage

- Show Health Bar

Content Settings:

- Retro Fleets

Wargaming.net Account: Takes you to Wargaming.net sign in screen.



Races

11 races are available in the MOO universe: Alkari, Bulrathi, Darlok, Human, Klackon, Meklar, Mrrshan, Psilon, Sakkra, Silicoid, and Terran*.

***Note:** Terrans are only available with the Collector's Edition or the Collectors Addition Upgrade.

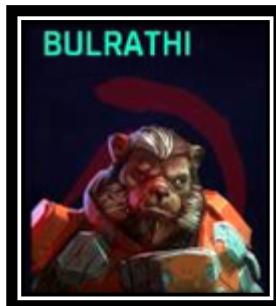


Lofty, Inflexible, Honorable

Traits

- NATURAL PILOTS - Beam Defense +50%, Beam Attack +25%, Ship Improvements: Travel Speed Bonus and Combat Speed Bonus
- HOMeworld SPECIALS: ARTIFACTS - Faster Research
- HOMeworld SIZE: LARGE - Supports Larger Population

The proud and noble Alkari strike fear within their enemies when their ships cross the sky. The Alkari are leaders and gifted combat specialists respected throughout the universe. As natural aviators, they bring their innate knowledge of flight into battle with confidence. Their rich military tradition has tempered their aggression into an unshakable code of honor in war.

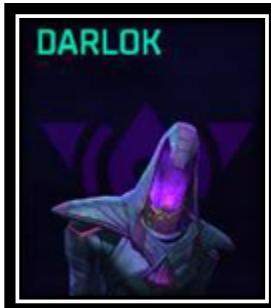


Headstrong, Territorial, Ferocious

Traits

- ECOLOGIST - Starting Tech: Biology, Pollution Tolerance: +25%
- HOMeworld MINERALS: RICH - Faster Production
- HOMeworld SIZE: LARGE - Supports Larger Population
- GRAVITY TOLERANCE - High Gravity: Not Affected by High Gravity
- GROUND COMBAT RATING - +50% To Ground Combat

The Bulrathi, unmatched in brawn and brute force, will use any advantage to attack their enemies. Peerless in hand-to-hand combat, only a fool would fight a Bulrathi on the ground if given a choice. While notorious for their gruff manners they are the champions of the weak and exploited. The Bulrathi also care deeply about their planets, focusing their scientific resources on terraforming technologies and pollution control.



Stealthy, Treacherous, Scavenging

Traits

- DIPLOMAT - Starting Tech: Government, Morale: +5%
- STEALTHY – Ship Improvements: Stealth, Missions Risk: -20% On Espionage
- SHAPESHIFTERS - Security +10%, Assimilation Power +25%

The ruthless, shapeshifting Darloks are the ultimate spies. They often rely on their exceptional

espionage network to give them a diplomatic, economic, and military advantage. The universal distrust they face has made them (and other races) paranoid in intergalactic relations. The Darloks will steal, sabotage, assassinate and manipulate their way into power due to this overwhelming distrust and loathing.



Diplomatic, Stubborn, Charismatic

Traits

- DIPLOMAT - Starting Tech: Government, Morale: +5%
- CHARISMATIC – Diplomacy: Improved Negotiations and Improved Disposition
- TRADERS – Trading: Trade Treaties Bonus and Trade Goods Bonus
- SECURITY - Espionage Security Lowered: -20%

The charismatic Humans have overcome millennia of internal divisions to present a unified face on the galactic stage. Humans enjoy friendly relations with all races, but when crossed they can become bitter enemies. While they pride themselves on diplomacy and honor, the Humans will fight to the death to protect what they believe in.

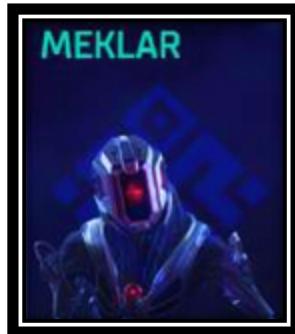


Tireless, Uncreative, Hive-Minded

Traits

- INDUSTRIALIST - Starting Tech: Physics, Production from Population: +25%
- SUBTERRANEAN - Uber Planet: Cavernous, Homeworld Biome: Arid
- UNCREATIVE – Tech: Uncreative, Research from Population: -25%
- FOOD FROM POPULATION – Generates Additional Food Per Population: +50%

The Klackon Hive is virtually free of all rebellion and resistance to social order. Klackon are born knowing all they need to know of the world and their place in it. Each individual fulfills a role in society which they were meant to perform without question. The concerns of inferior races are foreign to Klackon leading them to lack the ability to empathize with the plights of others.



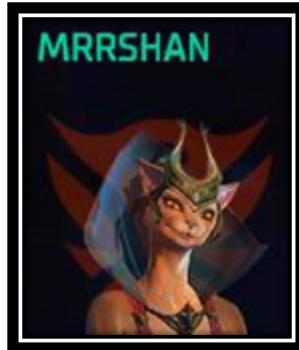
Industrious, Erratic, Unpredictable

Traits

- INDUSTRIALIST - Starting Tech: Physics, Production from Population: +25%
- CYBERNETIC - Food Consumption: -50%, Ship Improvements: Auto Repair

All Meklar are agents of a single cybernetic entity. The centralized Meklar consciousness offers a level of mechanical efficiency unparalleled in the universe, but makes them terrible at diplomatic efforts. As a result, they stay isolated on a small number of worlds, perfecting their

factories and furthering their secretive agendas.



Fearless, Warlike, Proud

Traits

- MILITARISTS - Starting Tech: Engineering, Ground Units: Improved Marine Training Rate
- PLAINS DWELLER - Uber Planet: Grassland, Homeworld Biome: Arid
- WARLORD - Ground Combat Rating: +50%, Ground Units: Extended Barracks
- DIPLOMACY – Improved Negotiations: Increased Chance of Accepting Deals

Descended from legendary hunters, the Mrrshan are the most unpredictable and vicious fighters in the universe. Decisive and confident, they will strike first and without mercy when threatened. Ruthless militarists, the Mrrshan make for honorable allies and devastating enemies. However, their mercurial temperament means a treaty with them needs to be backed up by strength.



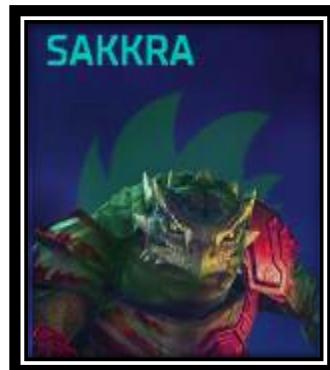
Brilliant, Unsympathetic, Creative

Traits

- TECHNOLOGIST - Starting Tech: Physics, Homeworld Special: Artifacts
- CREATIVE – Technology: Creative, Research from Population: +25%

- HOMeworld SIZE: SMALL – Supports a Limited Population
- GRAVITY TOLERANCE – Low Gravity: Not Affected by Low Gravity
- SECURITY - Espionage Security Lowered: -20%

Brilliant researchers who devote their lives to science, the Psilon are reclusive geniuses who are physically small and weak. Their peaceful nature is only shadowed by their crippling paranoia that other races will steal their research and technology. They are creative and efficient researchers who are gifted with all technologies.



Numerous, Brutish, Inarticulate

Traits

- EXPANSIONIST - Starting Tech: Engineering and Biology
- JUNGLE CREATURE - Uber Planet: Tropical, Homeworld Biome: Swamp
- UNCREATIVE – Tech: Uncreative, Research from Population: -25%
- POPULATION GROWTH – Faster Than Normal Growth: +25%
- REPULSIVE – Diplomacy: Worsen Negotiations and Worsen Disposition

The Sakkra are an aggressive race that must constantly conquer new planets to support their teeming population. They shun scientific and diplomatic pursuits in favor of aggressive expansionist philosophies. If they run out of room for peaceful expansion, they will not hesitate to attack anyone who stands in their way.

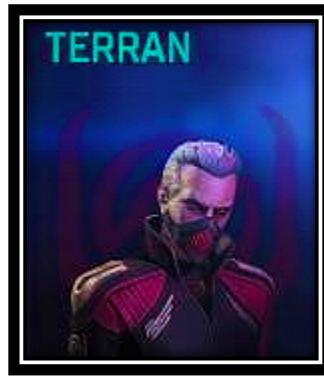


Resistant, Xenophobic, Withdrawn

Traits

- LITHOVORE - Food Consumption: None
- LAVA BREATHER - Uber Planet: Inferno, Homeworld Biome: Volcanic
- REPULSIVE – Diplomacy: Worsen Negotiations and Worsen Disposition
- TOLERANT - Gravity Does Not Affect
- HOMeworld SIZE: HUGE – Supports Very Large Population

Stern and stoic, the Silicoids are a repulsive race of mineral-based creatures which absorb the minerals from planets. They make the other races of the galaxy uneasy, even though the Silicoid's dreams of conquest are difficult with only a meager population to support them. Able to withstand high heat and gravity types the Silicoids can settle many worlds the other races find to be inhospitable.



Hard, Determined, Violent

Traits

- MILITARISTS - Starting Tech: Engineering, Ground Units: Improved Marine Training Rate

- STRATEGIST - Command Points: +20%, Ship Cost: -20%
- BEAM ATTACK – Beam Weapons Do More Damage: +25%
- MORALE – Morale Is Higher Than Normal: +15%

The Terrans, hidden and cast away in the dark regions of space for too long, have emerged with a vengeance to bring the galaxy to heel. They are race of warriors, trained from birth for the harshness of a universe being torn apart by wretched chaos in their view. The Terrans will no longer linger in the shadows, now is the time to strike to bring order and discipline to the galaxy.

Exploration

Your race begins with one planet, a small fleet and the desire to rule the galaxy. Your top priority is to expand your empire.

TYPES OF SHIP

You begin the game with four ships orbiting your home planet – two scouts and one each colony ship and frigate:

- **COLONY SHIP:** Allows you to settle an uninhabited planet; the ship is consumed when the colony is established
- **FRIGATE:** Basic combat ships that can keep pirates at bay during initial turns
- **SCOUT:** An unarmed light ship, useful for quickly exploring the galaxy

These ships provide the capacity to begin exploration and expansion. Every ship has the ability to scan planets, detect other races, and explore space.

NOTE: The above assumes a Starting Age of Post-Warp. In a Pre-Warp Starting Age you begin with no ships while the Advanced Starting Age you start with two scouts, two colony ships, and one each space factory, frigate, destroyer and cruiser.

SHIP/FLEET MOVEMENT

Before sending your ships into the unknown, you need to know how to move them. The mouse controls for the main galactic screen are simple:

- **Left Mouse Button:** Hold to pan around the galaxy; click on a fleet to select it
- **Wheel:** Zoom in and out of the galactic map
- **Right Mouse Button:** Assign a destination for a fleet

To select a ship or fleet to move, left click on the fleet and the fleet window will appear with all ships in that fleet displayed.



If you want to move the entire fleet, you do not need to do anything within the Fleet screen.

If you want to send only a part of the fleet, left click in the fleet window on the ship or ships you want to move. Only the selected ship(s) will move, while the rest stay behind.

Once a fleet is selected, you can hover over a prospective destination to see how many turns the fleet would take to get there. The fleet will move at the speed of the slowest ship.

Multiple fleets at a location can be viewed by clicking the Fleet tabs.



FLEET MERGE

The current method of merging fleets is as follows:

- Make sure the fleets you want to merge are on the same jump point or orbiting the same colony or planet.
- Using the Fleet Tabs select each fleet then select either Guard or Sleep. These will merge the fleets.
- You may immediately move these merged fleets provided no fleet that was merged had moved that turn.

FLEET TRACKING

Zooming out will allow you to see where all of your fleets are. Clicking on a fleet will display the fleet composition as well as allow you to move. The fleets of other races, if in detection range, will also be displayed (clicking on them will also show their fleet composition). You may also view all of your fleets, but not move them, by selecting your fleet control button.

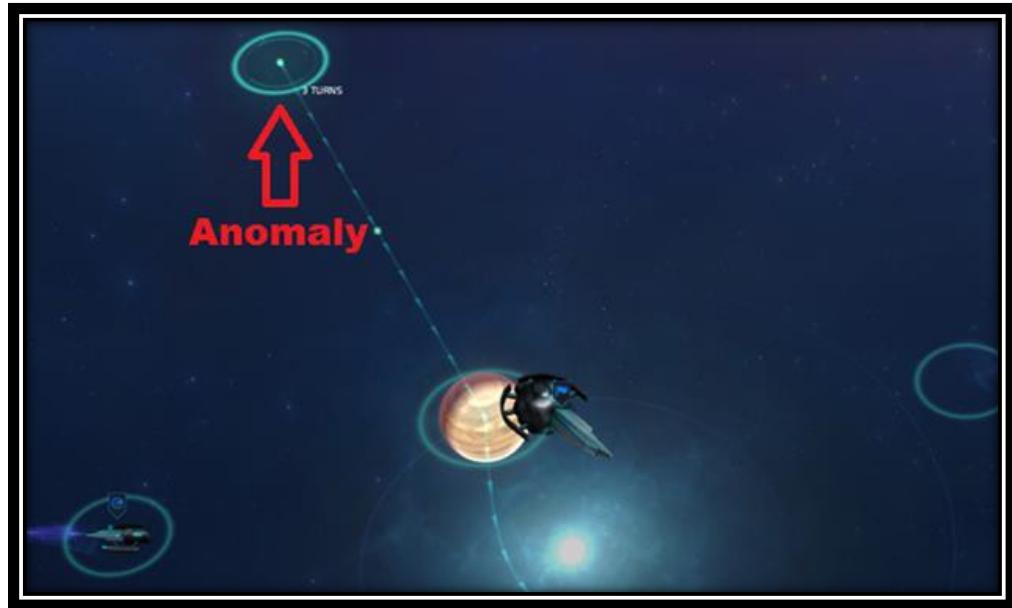


DISCOVERIES

The galaxy contains many mysterious objects to be discovered:

Anomalies

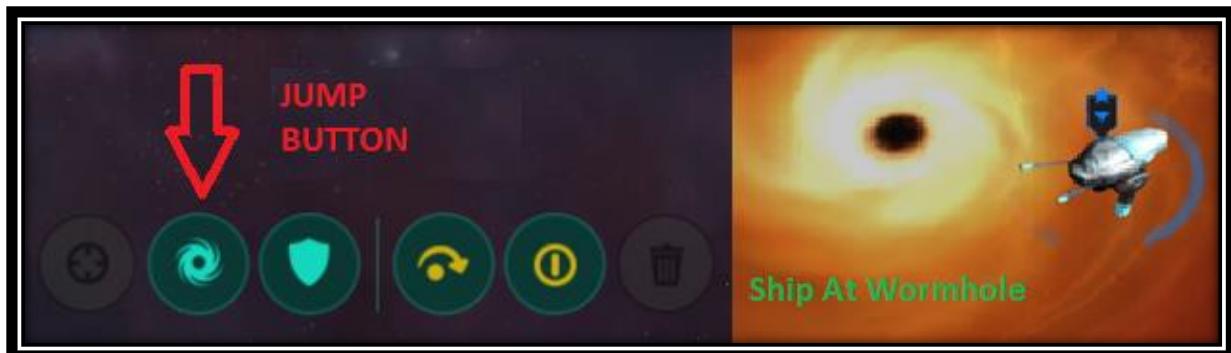
These will appear as green, pulsating points in space. A ship can be sent to an anomaly. Once the ship arrives, you will learn what the anomaly is and receive its benefits: credits, advanced technologies, derelict ships, and more.



Wormhole

Wormholes are rare stellar phenomena. Each wormhole links to another wormhole within the galaxy. Ships moving through these travel instantly to its counterpart. When selected for travel, the destination wormhole will be highlighted. These phenomena can be of strategic importance, especially ones located close to or within your empire!

When one of your ships is stationed at a wormhole, the “Jump” button will become available. Clicking it will send the ship to the linked wormhole.

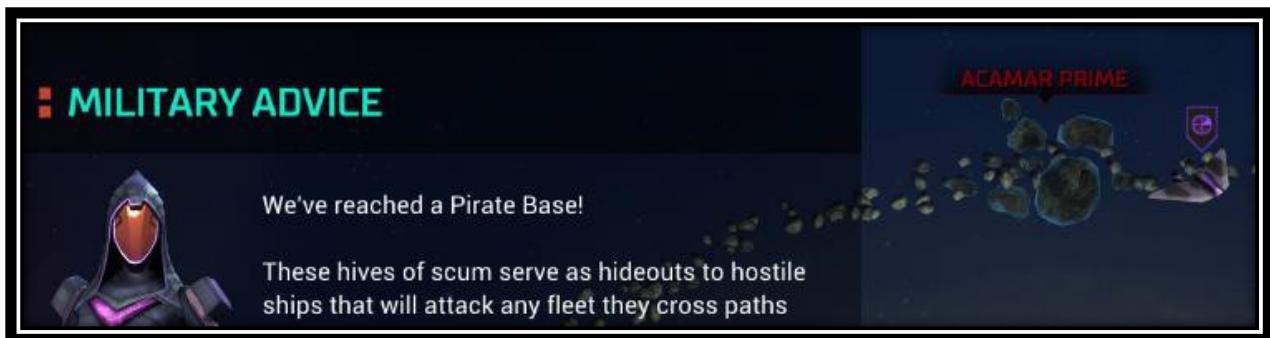


Electromagnetic Disturbances

As your ships approach a planetary system, you will occasionally receive a notification that an electromagnetic disturbance has been detected. The planet where these disturbances are detected will be briefly highlighted and an audio tone will sound.

Pirate Bases

Pirates, the scourge of space, establish bases in asteroid belts or on out-of-the way planets. If not destroyed they can grow in power, sending out more and stronger ships over time. Destruction of the base will often yield some small benefits.



Planetary Systems

In most cases you will find a planetary system at the end of a wormhole. From a distance you can readily see a planet's relative size as well as any moons, but to receive more detailed information you will have to actually orbit the planet. Technology may exist to shorten this system exploration process.

Hovering your mouse over an explored planet will cause a pop-up to appear. This pop-up will display a snapshot of the planet's essential data. This same data is displayed when you click on



the “**Planet**” button in your Empire Command row.

Space Monsters

Lurking in the vast blackness of space there exist strange, gigantic lifeforms with insatiable appetites. These space monsters come in a variety of forms and strengths. Moving in to take a closer look at one may be the last thing your crew does before being devoured. You must determine if staying in a system used as a lair for such a creature is worth the risk. Until destroyed such creatures will tend to attack any trespasser foolish enough to remain in their system.



Spacefaring Races

Eventually you will meet other races. When contact is made, the emperor of that race will make himself/herself/itself known. Interactions with your fellow galactic rulers can then be accessed through the Diplomacy screen. While you may be able to continue exploring your neighbor’s territory if you wish, keep in mind that other races can be fickle. You could find your ships, or even colonies, trapped behind enemy lines to be destroyed or seized.

OBSTACLES TO EXPLORATION

The galaxy is free for you to roam—until you run into another advanced race. The other spacefaring races may block entrance into their territory by placing ships on guard duty or by building battle stations. If you run into this situation, four options are open to you:

- Destroy blockading forces (which will lead to war)
- Negotiate an open border treaty
- Remain at the warp point and risk attack
- Retreat

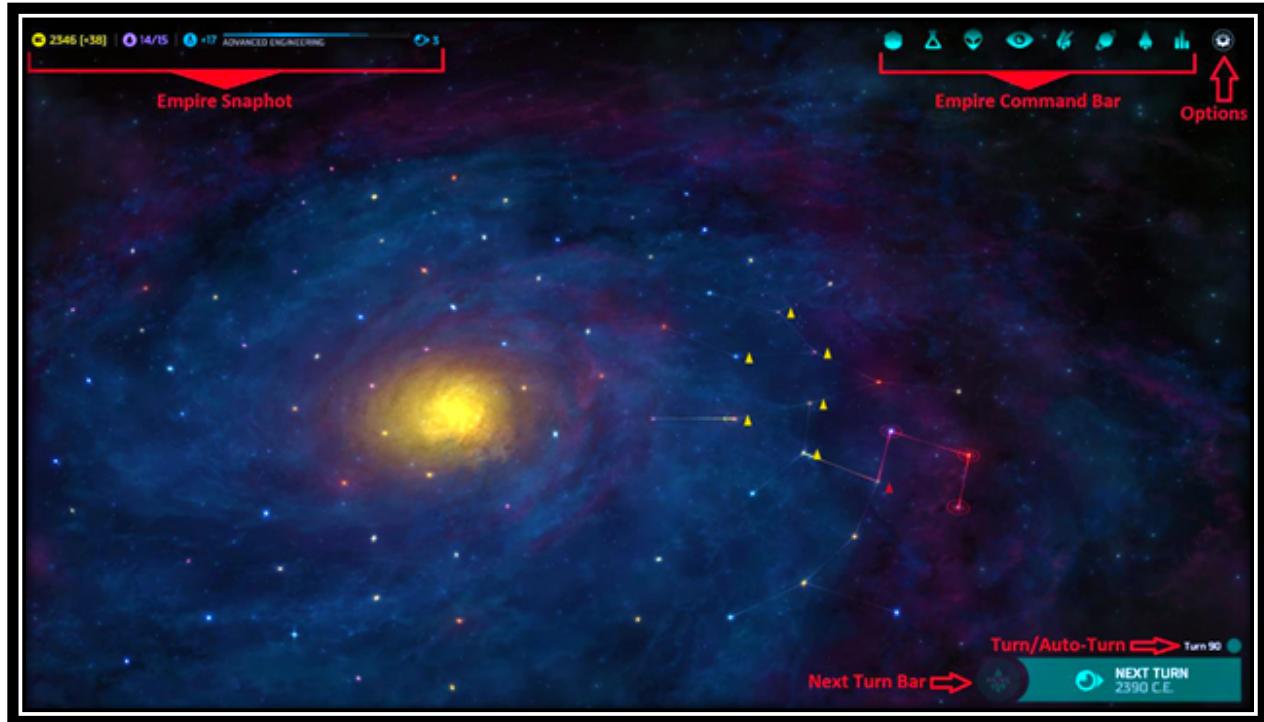
NOTE: If you succeed in obtaining an open border treaty, be careful; when the treaty lapses or if it is cancelled by either side, all of your ships within the other race’s territory may be trapped there. Remember that, while such a treaty is in force, the other race will have full access to your empire as well.

Pirates and space monsters can also present a threat to your plans. They can pounce on weaker ships and destroy them. Space monsters tend to attack any ship that enters their system and remains in their lair. Either of these events could bring a premature end to your exploration of the galaxy.

Managing Your Empire

GALAXY SCREEN

The Galaxy Screen has all of the information and functions needed to manage your empire. These are described in more detail below:



EMPIRE SNAPSHOT

The Empire Snapshot gives you a brief overview of the current status of critical, empire wide information as follows:

- Yellow – This shows you information related to the BC (Billions of Credits) of your empire. The first number is the current total of BCs in your treasury. The second, in parentheses, shows the surplus or drain for that turn in BCs factoring in all maintenance and taxes.

If the second number is in **RED** that indicates how many BCs will be deducted from your treasury that turn. Note that if you do not have enough BCs to cover a deduction your advisor will begin to scrap ships or structures to make up the shortfall.

- Purple – These are the number of CP (Command Points) used and the current maximum. Every military structure and every ship costs a number of CPs. Once the

maximum is reached your empire will automatically pay a per turn BC cost for maintenance. CPs maximums may be increased through building structures and advanced technologies.

- Blue – The research bar displays the technology currently being researched, the current amount of research points, and the number of turns additional turns before completion. The bar itself displays the amount already researched as a solid bar and that turns contribution to completion as a translucent bar.

Hovering over each snapshot location will cause a detailed drop down to occur. The drop down will break down all factors related to how the total shown was arrived at.

BC 2346 [+38] | 14/15 | +17 ADVANCED ENGINEERING | 3

Empire Snapshot

BC 38 [+19] | 1 | +2 Biology

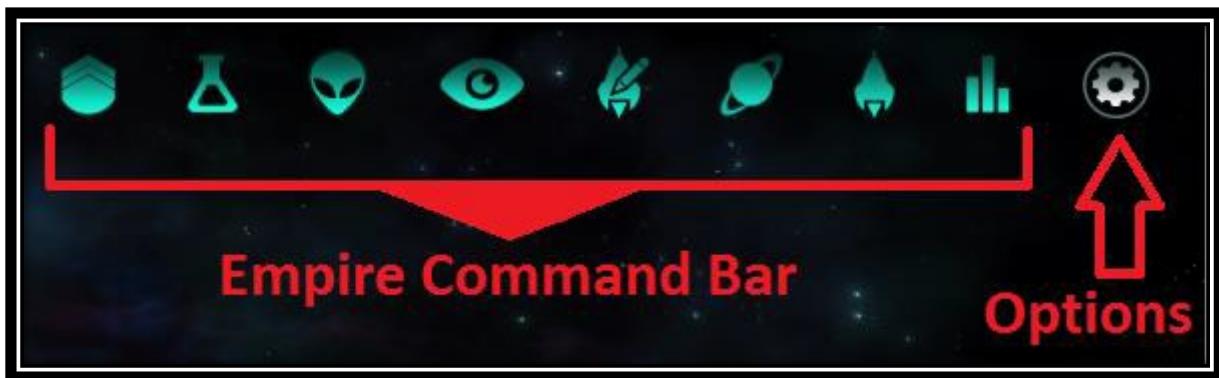
Snapshot Drop Down

\$ Credits are used to maintain and speed up the production of Ships and Buildings .									
\$ Credits come from Population taxes, and from special Buildings .									
Colonies <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 30%;">Income</td> <td style="width: 10%; text-align: right;">43</td> </tr> <tr> <td>Structure Upkeep</td> <td style="text-align: right;">-4</td> </tr> <tr> <td>Colony Logistics Cost</td> <td style="text-align: right;">0</td> </tr> <tr> <td>Subtotal Colonies</td> <td style="text-align: right;">39</td> </tr> </tbody> </table>		Income	43	Structure Upkeep	-4	Colony Logistics Cost	0	Subtotal Colonies	39
Income	43								
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Developments <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 30%;">Upkeep</td> <td style="width: 10%; text-align: right;">0</td> </tr> <tr> <td>Starbase Logistics Cost</td> <td style="text-align: right;">0</td> </tr> <tr> <td>Subtotal Developments</td> <td style="text-align: right;">0</td> </tr> </tbody> </table>		Upkeep	0	Starbase Logistics Cost	0	Subtotal Developments	0		
Upkeep	0								
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Total 19									

EMPIRE COMMAND BAR

The Empire Command Bar can be found on every screen so you do not have to click back to the Galaxy map. When clicking out of an Empire Command screen you will be returned to the previous screen. The Empire Command Bar will be explained in more depth later in this guide but the buttons are the following from left to right:

- Empire
- Research
- Diplomacy
- Espionage
- Blueprints
- Planets
- Fleets
- Path to Victory
- Options



TURN BAR

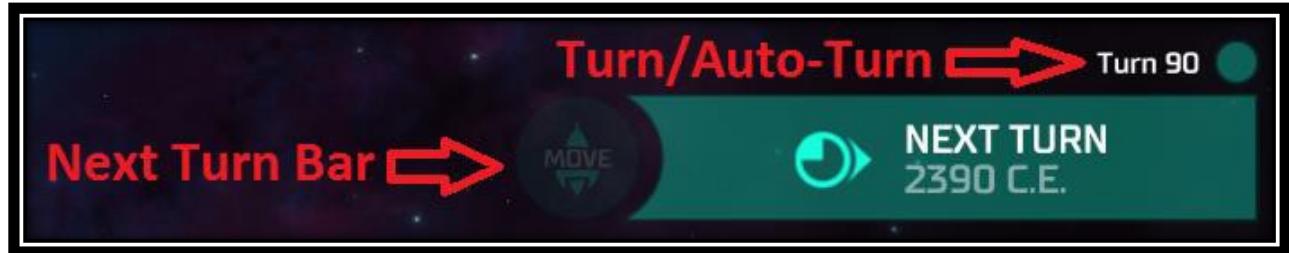
The Turn Bars provide several functions besides advancing to the next turn as follows:

- Turn/Auto-Turn – Clicking the button next to your current turn number will enable/disable the Auto-Turn feature.

If Auto-Turn is on the button will light with a check mark inside and the words “Auto-Turn Enabled” will appear next to the current turn number. Auto-Turn will automatically advance your turns until a condition requiring your attention occurs (i.e. a ship reaches a destination, research completes, etc.)

- Next Turn Bar – This bar has two features: the extra “MOVE” and “NEXT TURN” buttons.

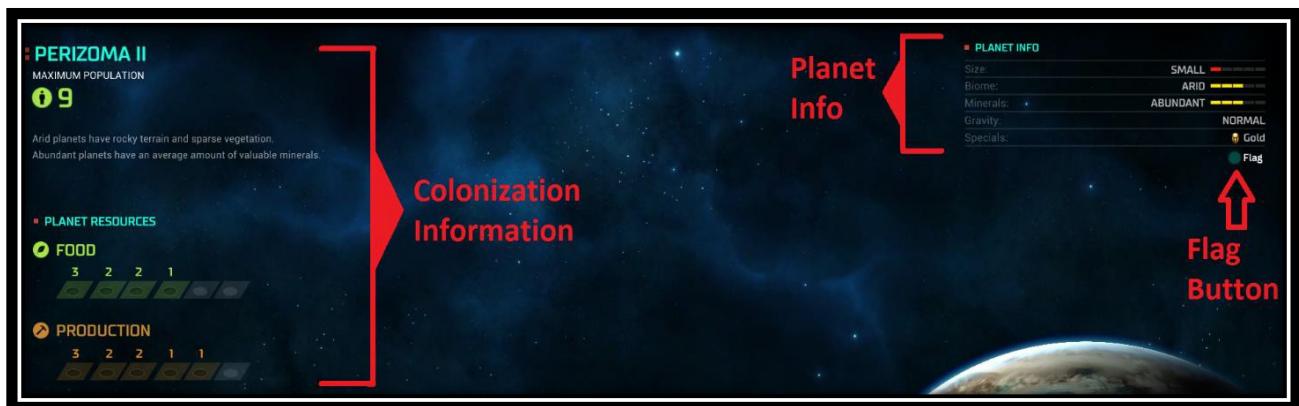
- MOVE – When this button is lit a selected ship or fleet may take an extra move that turn. Note that once used it will take time for this ability to regenerate.
- NEXT TURN – Once all conditions are meant to advance to the next turn clicking this button will begin that process.



Colony Management

Having discovered a new planet, you need information—its size, biome, minerals, gravity, and special traits—to decide whether or not to colonize. Once you have explored a planet, clicking on it will bring up more detailed information to aid in your decision. This information consists of:

- **Colonization Information:** On the left you will receive data on maximum population, a description that includes bonuses (positive or negative), and planetary resource status. Note that this information is raw data which does not take into account racial bonuses or technology slots.
- **Planet Information:** On the upper right will be the information on the planet itself. Colored bars are used to indicate the overall suitability for colonization. Gravity and Specials information is also displayed.
- **Flag Button:** If you discover a planet you want to find again quickly then click the “Flag Button”. Within the “Planet” button of the Empire Command row you may sort by flagged planets.



PLANET INFORMATION

Size

A planet's size affects one characteristic: maximum planetary population. All other factors being equal, the larger the planet, the more population it can support. Large populations can provide more credits, production, and research output—although this may not necessarily be the case, due to other planetary conditions.

- **Giant:** Reserved for gas giants, planets of this size may not be colonized unless terraformed.

- **Huge:** The largest planet you can colonize
- **Large:** The second-largest colonizable planet in the game
- **Medium:** A standard-size planet, generally around the size of Earth
- **Small:** The smallest category of planets but still viable, especially if other characteristics are favorable

Biome

Biome is the overall ecology of a planet; biome affects food production. Some races benefit from colonizing preferred biomes. In descending order of advantage, the following biomes exist:

- **Class A**
 - **Gaia:** Rare “Garden of Eden” worlds with extraordinarily rich ecosystems.
- **Class B**
 - **Ocean:** Planets mostly covered with water but having a thriving marine-based ecosystem.
 - **Terran:** These worlds have abundant flora, fauna, and water supplies.
- **Class C**
 - **Swamp:** Heavily layered with dense, jungle-like marshes.
 - **Arid:** Rocky terrain and sparse vegetation. More temperate than Desert.
- **Class D**
 - **Desert:** Harsh weather and little water are their predominant features.
 - **Tundra:** Frigid environments featuring permafrost and harsh weather.
- **Class F**
 - **Barren:** Barren planets with a breathable atmosphere.
 - **Radiated:** They do not have atmosphere due to their star’s emissions.
 - **Toxic:** Totally inhospitable environments. One small bonus is that this biome is immune to pollution.
- **Gas Giant:** With advanced technology, these planets can be compressed into a Class F “Barren” biome.

Minerals

Minerals are the lifeblood of production. The richer the veins of ore the higher your planet’s production output will be. The mineral levels and their effects on production are:

- **Ultra-Rich:** Rare and overflowing with useful deposits (+/+ Production)
- **Rich:** A lithosphere rich in minerals (+ Production)
- **Abundant:** Average mineral deposits (Standard Production)
- **Poor:** Some mineral content, but production will struggle (- Production)
- **Ultra-Poor:** Very low density of heavy minerals (-/- Production)

Gravity

Another characteristic that will affect your colony is the planet's gravity. Some races have traits that can mitigate the effects of high or low gravity. The gravity types are:

- Low (Reduces production by 50%)
- Normal (No production modifier)
- High (Reduces production by 50%)

Specials

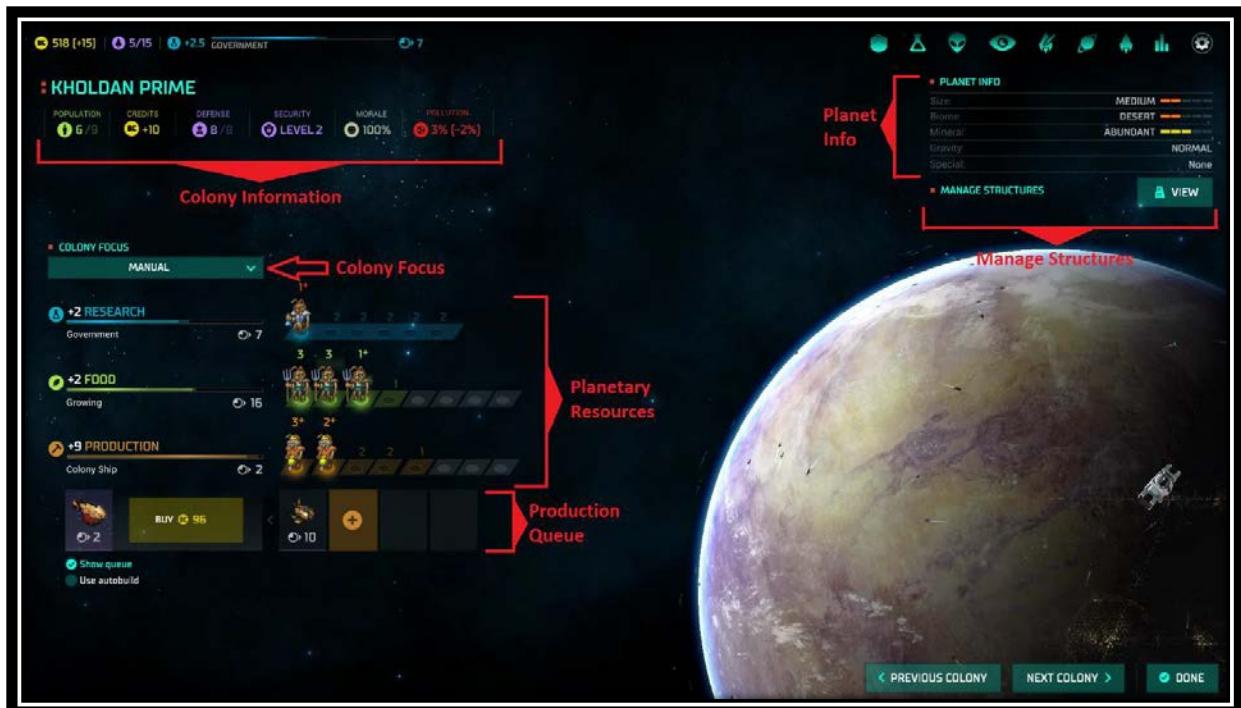
The planets of the galaxy sometimes contain special resources that can give a boost to the colonies: **Gold**, **Artifacts**, **Dark Quartz**, etc. For example, Gold increases the credit (BC) generation, Artifacts provide a research boost, and so on. These benefits apply to that planet ONLY - they do not affect any other planets or the Empire as a whole. Special resources will be shown at the bottom of the planetary information pop-up screens and can be hovered on within the planetary screen to bring up a pop-up explaining the benefits.

Factory ships can build specialized structures that generate extra credits or research points. For asteroid belts a factory ship can build either a research center or an asteroid mine. Gas giants may only have credit generating harvesters built on them. In order to build these structures a colony must have been established on a planet in that system.



COLONY SCREEN

Once you have colonized a planet the colony screen has all of the information and functions needed to manage the colonies in your empire. These are described in more detail below.



COLONY INFORMATION BAR

The colony information bar shows you in a snapshot important information related to this colony. The provided information is:

- Population – Current population and current maximum population limit
- Credits – How many credits this colony currently produces. This can be a negative indicating that many credits are deducted from the treasury every turn.
- Defense – Current and maximum allowed ground defenses
- Security – Defense against espionage. The higher the security level the better the defense.
- Morale – Percentage of your population willing to work. Below 100% risks having population go on strike.
- Pollution – Percentage of current pollution on planet. Once pollution reaches 100% the planets biome degrades resulting in lost production, food and potential colonist deaths.

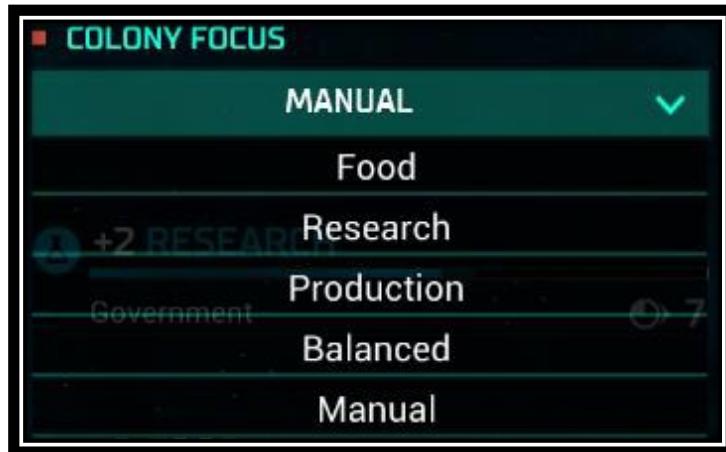


COLONY FOCUS

The Colony Focus drop down menu allows you to select how you wish to set-up your planetary resources. Your colonists will be placed according to the selected focus as follows:

- Food – Colonists will be placed with an emphasis on Food.
- Research – Colonists will be placed with an emphasis on Research.
- Production – Colonists will be placed with an emphasis on Production.
- Balanced – Colonists will be placed as evenly as possible among resources.
- Manual – You must place colonists amongst resources.

Each colony may have their own individual colony focus. As an example, a world with ultra-rich minerals could be placed on Production to make sure the bulk of the population produces structures or ships at a high rate.



PLANETARY RESOURCES BARS

A planet has three categories of output: food, production and research. Output is generated primarily by the colonists placed in the resource cell modified by racial traits, structures, and

consumption. The total output is then displayed as a positive (or sometimes in the case of food a negative) number next to the resource symbol.

A number will be displayed over each cell with a colonist. This number indicates the total resource being generated for that cell. In the case of fractional generation due to modifiers a “+” sign will appear. Hovering over that colonist will cause a pop-up to appear displaying the total output for that individual cell.

NOTE: If the number above the colonist is the same color as the resource this indicates a positive output. If the number is **RED** then that cell is producing less than its optimal resource (usually do to racial traits though certain events can also affect a resource).

Hovering over a resource bar will cause a pop-up to appear. This pop-up will inform you what the resource does, what will affect it, and the current break down of how the total is determined.

Cells that are **GREY** are not currently usable. Advanced technologies can be used to unlock these cells.



A small clock symbol located under each resource bar indicates how many turns remain to finish the current task:

- **RESEARCH** is the time to completion of the current technology being researched
- **FOOD** indicates when your next unit of population will become available. Food should be kept at zero or above – a negative number means you population is starving and will begin to die off.
- **PRODUCTION** is the number of turns remaining until the current project in queue is completed



NOTE: If you have reached maximum population a “**Full**” statement will appear on the Food

line. You may not proceed to the next turn if any planet is not assigned Production or your empire has no Research project. A “**Nothing being researched/produced**” may appear as a reminder and these areas must be selected prior to turn end.

PRODUCTION QUEUE

Production allows a planet’s workforce to construct structures, ships, and projects. The Production menu will show all available options to you. Note that some options are planet dependent and may not be shown (e.g., a structure requiring a moon will not be displayed if your planet has no moon). Also any structure currently built will also not be shown – only Projects and Ships may be built multiple times.

Click on an empty Production Queue box to bring up a screen of all currently available Structures, Ships, and Projects available for that colony. You may also sort by clicking the drop down menu and selecting the type of item. Arranged across the top are buttons that when clicked will display only those items related to the selected type.

Clicking on an item will bring up a detailed explanation on the right side of the selection screen. Once you have selected the item you wish to build simply click on the “**BUILD**” button in the lower right corner to add it to the Production Queue.

You may have up to five items selected. The first item will begin and the other four will be produced in the order selected. As one item finishes, the next will begin automatically. If the queue is empty you will be reminded to select a new item for production. .

If you wish to shorten the production time of the item currently being built and have the credits you may click the “**BUY**” button. This will instantly build the item which will be available at the beginning of the next turn. There is no partial buy-out – this is all or nothing. However, the buy-out price drops every turn as the item gets closer to completion.

To change the order of items, left-click and drag an item to the new queue location. Drop it in the new location- the other item will shift automatically

To cancel an item, hover over the item to be canceled and click on the “X” in the upper right corner of the item.

NOTE: If you cancel an item that has had production applied to it then you lose all production on that item. However, if you change the order of items any production applied is not lost and when that item reaches the build location production will begin where it left off.



MANAGE STRUCTURES

To view the structures currently built on your colony click the “VIEW” button on the main Colony Screen. This will take you to a new screen that will show your planet as a whole along with the structure selection buttons of the Manage Structures area.



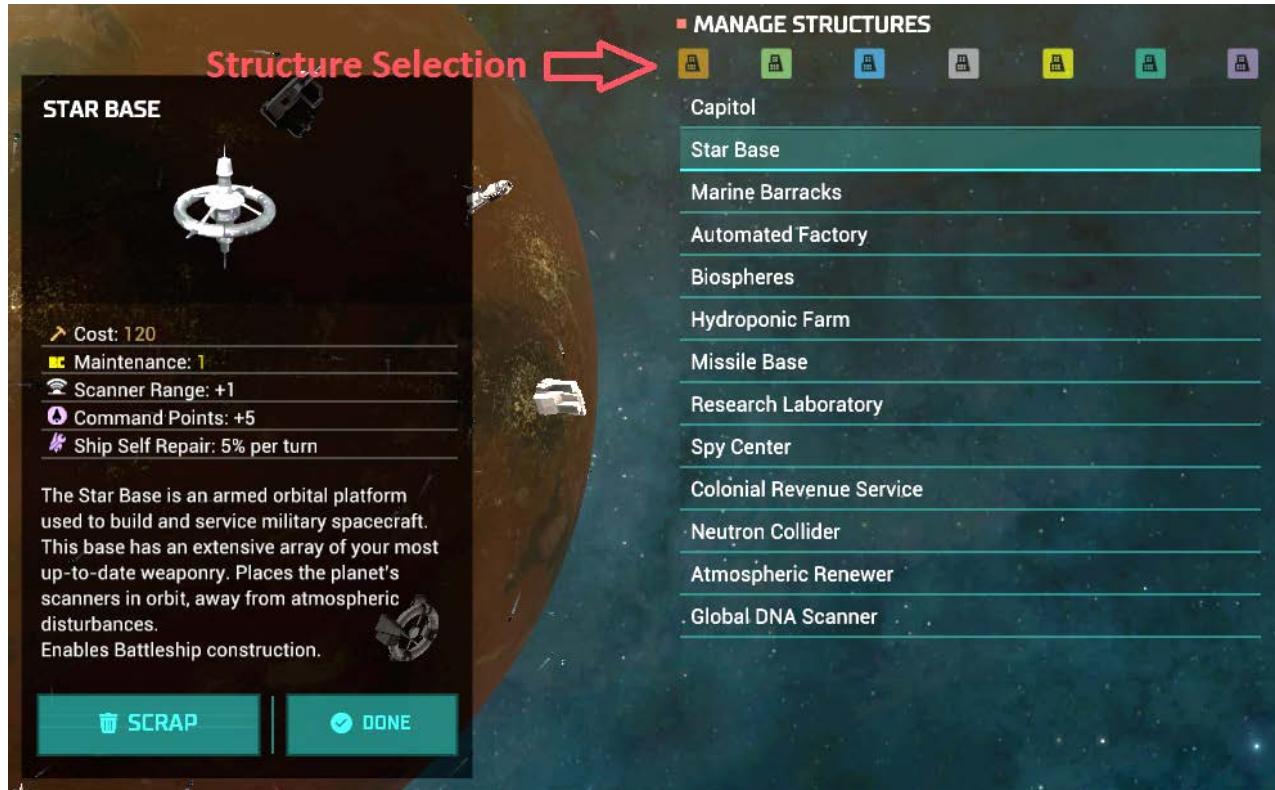
The structure selection buttons are color coded as follows:

- Orange – Production
- Green – Food
- Blue – Research
- White – Morale
- Yellow – Credits

- Aqua - Pollution Control
- Purple – Military

By clicking these you may sort through the various structures which will be displayed below the buttons. Clicking on a structure name will bring that structure to the fore and display its information box. The information box also allows you to scrap that structure.

NOTE: Make sure you wish to scrap a structure. Clicking “**SCRAP**” will instantly scrap the structure. You will not receive a confirmation box for this action.



POLLUTION

As your colony develops, pollution will become a concern for most planets. If left unchecked, pollution will cause the biome to degrade, lower your population’s morale, and even cause some population to die off. However, you will receive advanced warning about this crisis. Your advisor will alert you when pollution is becoming critical. Pollution levels can also be seen the Galaxy, Colony and Empire management screens



Cleaning up pollution can be accomplished in two ways:

- By selecting “**Pollution Clean-Up**” (you can choose this option in the production menu under “**Projects**”) which uses the colonies production to cleanse the current pollution. When completed, this project will automatically shut off and the next item in the queue will start.
- By researching advanced technologies such as an atmospheric renewer. Initially, these technologies will provide a small reduction in the percentage of pollution generated. More advanced technologies will increase this percentage up to a 100% reduction.





COLONIST MORALE

Your colonists must be kept happy if you want them to remain productive. When a unit of population becomes unhappy they go on strike. When this happens they will no longer produce resource points. A number of factors can cause colonists to go on strike: high taxes, pollution, conquest by another race, etc.



Bringing striking colonists back to positive morale will require your intervention. You can lower your tax rate, or build structures that generate a bonus to morale (most often but not always denoted by a happy face in the corner). For conquered populations, the passage of time combined with other morale-enhancing options will eventually make them productive.



Research points are applied to the current technology being researched by your empire. The more colonists assigned to research from each of the planets in your empire, the quicker your research will be completed. Any research bonus from technology is also added in. The bar will display the current research bonus, the technology symbol, a bar indicating current completion, and turns to completion.

NOTE: Research is the only colony resource function that affects your empire as a whole, yet provides no direct benefit to the colony itself (barring a system-wide disaster...)



Empire Command Bar

The Empire Command Bar can be found on every screen so you do not have to click back to the Galaxy map. When clicking out of an Empire Command screen you will be returned to the previous screen. The Empire Command Bar is composed of the following buttons from left to right:

- Empire
- Research
- Diplomacy
- Espionage
- Blueprints
- Planets
- Fleets
- Path to Victory
- Options



EMPIRE BUTTON

The Empire button will drop you into the Empire Management screen. This screen provides an overview and functionality of every colony in your empire.

- Total Empire Overview – The Total Empire Overview gives you information and functions regarding your empire as a whole. This shows you the total population with how many population is on strike, total colonies, current BC and BC generation, and the current research project with research points and turns to completion.

There are also two drop down menus. The Tax Rate allows you to set how many BCs are generated each turn per population (3 BCs is the default). The Empire Focus allows

you to set your population focus on an empire wide scale.

NOTE: You may go set individual planets to their own unique focus apart from the general empire wide focus.

- Colony Overview Bar – The Colony Overview Bar provides a powerful means of receiving information and functionalities on all colonies in your empire. Selecting a planet will cause a drop down that provides information on the planet, the ability to change that planets focus and the current build queue. From left to right the Colony Overview Bar is as follows:
 - Planet Graphic – Shows the graphic of the planet your colony is on. Clicking on the planet will take you to that colony screen.
 - Population – Displays the total Population/Maximum Population for that colony.
 - Striking Population – Displays the amount of Population on strike.
 - BC – Indicates how many BCs the colony is producing or requires.
 - Ground Defenses – Displays total Ground Defense/Maximum Ground Defense units.
 - Security Level – Current Security Level to detect spies at that colony. Security levels have a range from 1 (lowest) to 5 (highest).
 - Morale – Current Morale of the population at that colony.
 - Pollution – Current Pollution level for that colony.
 - Food – Current Food modifier.*
 - Research – Current Research modifier.*
 - Production – Current Production modifier.*
 - Production Queue – Displays current item being built and the ability to “Buy Out” the current item being built. If expanded this will also display other items in queue, the ability to place more items in queue, and to click “Autobuild” on/off.
 - Flag – You may opt to flag some of the colonies. If the “Show Only Flagged” button is turned on then only those colonies selected to be flagged will be displayed.

***NOTE:** If expanded the “Focus” drop down will be displayed. You may change that colonies resource focus from the drop down.

The screenshot shows the Empire Management interface with the following details:

- Empire Management** header with **ALKARI** and **Capital: Altair II**.
- Empire Focus** set to **BALANCED**.
- Colonies** section:
 - SHAGHAR II**: Population 23/23, Colonies 0/4, Credits 3164+73, Tax Rate 3 BC PER POP. UNIT, Research +18, Focus **BALANCED**.
 - RHOMBUS PRIME**: Population 2/11, Colonies 0/4, Credits 3164+73, Tax Rate 3 BC PER POP. UNIT, Research +18, Focus **BALANCED**.
 - GURION III**: Population 9/16, Colonies 0/4, Credits 3164+73, Tax Rate 3 BC PER POP. UNIT, Research +18, Focus **BALANCED**.
 - ALTAIR II**: Population 11/15, Colonies 0/4, Credits 3164+73, Tax Rate 3 BC PER POP. UNIT, Research +18, Focus **BALANCED**.
- Production** section for each colony:
 - SHAGHAR II**: RESEARCH LABORATORY (Buy 184)
 - RHOMBUS PRIME**: BIOSPHERES (Buy 72)
 - GURION III**: HYDROPONIC FARM (Buy 55)
 - ALTAIR II**: COLONY SHIP III (Buy 895, Autobuild)
- Empire Focus** dropdown set to **BALANCED**.
- Total Empire Overview** and **Colony Overview Bar** buttons at the bottom.

RESEARCH BUTTON

The Research button will take you to the main Research screen. Research is described in more detail in the Research section.



DIPLOMACY BUTTON

The Diplomacy button will take you to the main Diplomacy screen. Diplomacy is described in more detail in the Diplomacy section.



ESPIONAGE BUTTON

The Espionage button will take you to the main Espionage screen. Espionage is described in more detail in the Espionage section.



BLUEPRINTS BUTTON

The Blueprints button will take you to Blueprints screen where you may customize your ships. Ship customization will be described in more detail in the Blueprints schedule.



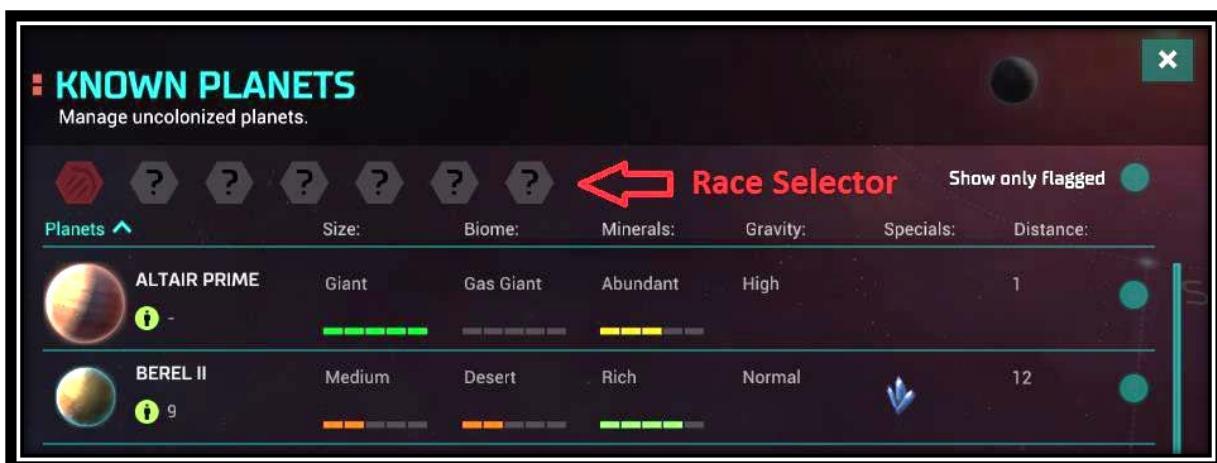
PLANETS BUTTON

The Planets button brings up a screen displaying every planet you have NOT colonized to include the known planets of other races. If a planet has not been explored, it will not appear on the list. The following information and functions are available on this screen:

- Race Selector – Any race you have had contact with will have their symbol displayed here. Selecting a race symbol will cause their planets to appear with their symbol in the planet list below.
- Planet Information – All planets (to include asteroid fields) not colonized by you will appear here. **NOTE:** Gas giants and asteroid belts with harvesters and mines built on them will still appear here. From left to right the information or functions displayed are:
 - Planet Graphic – The planet graphic is displayed here along with the planet name. Clicking on the planet will move you to that planet.
 - Population Total – The population total for that planet is displayed.
 - Planet Information – The Size, Biome, Minerals, Gravity, and Special (if any) are displayed.
 - Distance – The current turns required to reach this planet from your homeworld.
 - Flag – You may click on these buttons to flag any planets of interest. You may then sort by flagged planets by clicking the “**Show Only Flagged**” button.

As a further means to assist you in sorting through the known planets you may click on any of the headers. This will cause the planets to sort according to your interests. As an example if you wish to find a planet with high mineral content clicking the “**Minerals**” heading will sort the planets between high and low content depending on how you choose the arrow. Sorting may only be done by one heading at a time – you cannot choose ‘**Minerals**’ and ‘**Size**’ together for example.

You may also sort by race to determine what planets are currently colonized by the other races. Click the race symbol in the “**Race Selector**” bar to bring their planets to the top. If you have not yet encountered a particular race their symbol will not be on the selector bar.



FLEETS BUTTON

The Fleets button allows you to manage your fleets. The information and functions for the Fleet screen from left to right is as follows:

- Type – Displays badge type of the most powerful ship in the fleet. Any other ships with that fleet are shown as badges stacked behind the main ship.
- Location – Displays current location of the fleet. If at a planet only the planet name is displayed. If at a jump point the location will say “X to Y”.
- Status – Displays the status of the fleet whether it is on Guard, Sleep, etc. If the ship is moving it will have a status of “Moving” with time to arrival at its destination displayed.
- Attack – Total Attack power of the fleet.
- Defense – Total Defense power of the fleet.
- Total Military Power – This displays the total Attack and Defense of all current fleets.

Clicking on a fleet will bring you to that fleet on the galactic map. You may also sort your fleets by clicking on the headings. The direction of the arrow will determine if the fleets are sorted from weakest to strongest in Attack or vice-versa for example. Only one sort can be active at a time – they cannot be combined.



FLEETS				
Manage your fleets.				
Type	Location	Status	Attack	Defense
	 DUNATIS TO ETANA	Guarding	 28	 38
	 GURION TO HORNE	Arriving 0:1	 29	 29

PATH TO VICTORY BUTTON

The Path to Victory button will take you to the Path to Victory screen where you may see how you are progressing against the other races in the selected victory conditions. The Path to Victory screen is further detailed, below.

PATH TO VICTORY

SCORE

Excel in every aspect of galactic empire management to become the best.

MRRSHAN (8)

Military Score	2258
Technologic Score	2400
Economic Score	1112
Diplomatic Score	1500
TOTAL SCORE	7270

Requirements: Have the best overall score before the turn limit!

CONQUEST VICTORY
Become the ruler of the galaxy by crushing your enemies into oblivion.

1	UNKNOWN	Power: 50629
2	UNKNOWN	Power: 49749
3	MEKLAR	Power: 39749
4	MRRSHAN	Power: 37787
5	UNKNOWN	Power: 36876
6	UNKNOWN	Power: 30028
7	UNKNOWN	Power: 28617
8	UNKNOWN	Power: 27090

TECHNOLOGICAL VICTORY
Push your scientists through the technological path and build the ultimate machine to transcend this universe.

1	MEKLAR	Total Research: 33
2	UNKNOWN	Total Research: 31
3	UNKNOWN	Total Research: 27
4	UNKNOWN	Total Research: 26
5	UNKNOWN	Total Research: 25
6	UNKNOWN	Total Research: 24
7	UNKNOWN	Total Research: 24
8	MRRSHAN	Total Research: 24

ECONOMIC VICTORY
Fill your coffers and claim economic supremacy by controlling the Galactic Monetary Fund.

1	UNKNOWN	GGP Share: 15.55%
2	UNKNOWN	GGP Share: 13.63%
3	UNKNOWN	GGP Share: 12.84%
4	UNKNOWN	GGP Share: 12.73%
5	MEKLAR	GGP Share: 12.40%
6	UNKNOWN	GGP Share: 11.42%
7	UNKNOWN	GGP Share: 11.23%
8	MRRSHAN	GGP Share: 10.66%

DIPLOMATIC VICTORY
Pull the diplomatic strings of the Galaxy and become the Supreme Chancellor.

1	UNKNOWN	Votes: 56
2	UNKNOWN	Votes: 51
3	UNKNOWN	Votes: 50
4	UNKNOWN	Votes: 50
5	MEKLAR	Votes: 40
6	UNKNOWN	Votes: 40
7	UNKNOWN	Votes: 37
8	MRRSHAN	Votes: 30

Remaining Turns: 301

[VIEW TIMELINE GRAPH](#) | [DONE](#)

Economy

CREDITS

The BC (Billion Credit) is the foundation of Master of Orion's economy. They are needed to maintain structures and fleets (if you do not have enough Command Points), pay tribute or bribes to other races, and rapidly advance production when required. BC generation can vary from turn to turn as your empire grows or contracts — trade treaties, taxation levels, maintenance costs, economic structures, etc., all play a part.

If your economy goes into the negative, your advisor will begin to scrap ships and structures that cannot be supported (you will be told when this occurs and what was scrapped). The best way to avoid this is by maintaining both a positive income each turn and a credit reserve. The reserve will help you make it through periods of high maintenance costs but low production, such as when you are sending a large combat fleet a long distance to attack an opponent.

TAXES

Taxes affect all colonies in your empire at the same rate. The BC amounts generated are per population unit. Tax rates are set on your Empire Management screen which can range from 0 BC to 5 BC per population unit. As you adjust the tax rate, you can see how the new rate will affect your overall per-turn credit generation as well as how each planet will be affected as it relates to morale and population on strike.

TECHNOLOGY

Technologies help your economy by providing simple credit boosts, reductions to the cost of structure and ship buy-outs, and, at the highest stage, a 100% increase to credits generated by your entire empire.

These technologies are located mainly on the top technology line and can be easily identified by their yellow symbol (though not every BC generating technology is yellow!).

Example: The technology on the left is Economic in nature and provides +1 BC per population on the planet it is constructed on as well as a flat +5 BC on top of that. The technology on the left is a Production technology which would aid in making Buy Outs less expensive due to the decrease in required Production thus saving you BCs over time.



TRADE TREATIES

When your empire begins to meet other races, one option in your diplomatic relations is a Trade Treaty. These treaties last 20 turns, with your empire receiving credits every turn. Once the treaty runs out, your advisor will provide a report indicating how many BCs in total were generated—which can run into the thousands!

NOTE: Keep in mind that the other race is also receiving credits (and if war is declared all treaties are immediately canceled).

PRODUCTION

Another way to generate credits is to put your Production colonists to work producing trade goods. To do this choose “**Trade Goods**” under your production Build screen and place it in queue. This will turn 50% of the planet’s production value into credits (which is much better than letting that production sit idle).

NOTE: The “**Trade Goods**” project is the ONLY Production item that will continue to produce BCs for as long as it remains in the first spot in Queue. It is an ongoing project that will not allow the building of any other items currently in queue. “**Trade Goods**” must be either physically moved within the queue or when another item is selected it will automatically remove from Queue. The next item in line will then move into the Build location.



MAINTENANCE

Every structure and ship within your empire costs credits to maintain. This maintenance is automatic, requiring no decisions on your part. Ships tend to be costly, especially as more technology is added, increasing their maintenance cost. However, ships covered by command points generate no maintenance costs. So in order to keep fleets from being a drain on your economy maintain an appropriate amount of Command Points.



BUY OUT

If you decide that you need that new ship or structure NOW instead of 12 turns later, you can spend credits to speed things up. The item currently being produced in the production queue can simply be bought if you have the credits available. Once bought out, the structure or ship will be available the following turn. This is an all-or-nothing action—you cannot partially pay for the item to decrease its production time by a few turns.

To buy out something in the production queue, simply click the “BUY” button located next to the item in the first build slot (you may also Buy Out an item from your Empire screen). If the buy-out number is greyed out you do not have enough credits to pay for the item. Note that as your colonists build the item the buy-out price will drop each turn.



Bribes

Sometimes, in diplomatic negotiations, the other side will request BCs to accept your propositions. Having a pile of credits can help grease these diplomatic wheels if what you desire is worth the price being asked. This decision must be weighed against the fact that the other empire will receive those credits. You will have no way of knowing what the credits will be used for: to buy out some toxic condensers or build that Titan that will spearhead the attack on your empire.

The reverse of the above is you may also ask for BCs as either an annual or one-time payment during negotiations. If you are diplomatically savvy the other race may agree to these counter-offers.

Example Below: To accept a Non-Aggression pact the other race required an annual tribute of 77 BC for 20 turns and a one-time payment of 1482 BC (as well as other requirements). Only you can decide if these requirements or demands are worth the treaty you requested.



Diplomacy

MAIN DIPLOMACY SCREEN

Whenever you encounter another spacefaring race, their leader will contact you. Leaders dispositions upon first meeting can range from guarded to affable depending on a number of initial factors. After this first contact, diplomatic relations may be initiated by either side. For you to initiate a diplomatic conversation you must click into the Diplomacy screen.

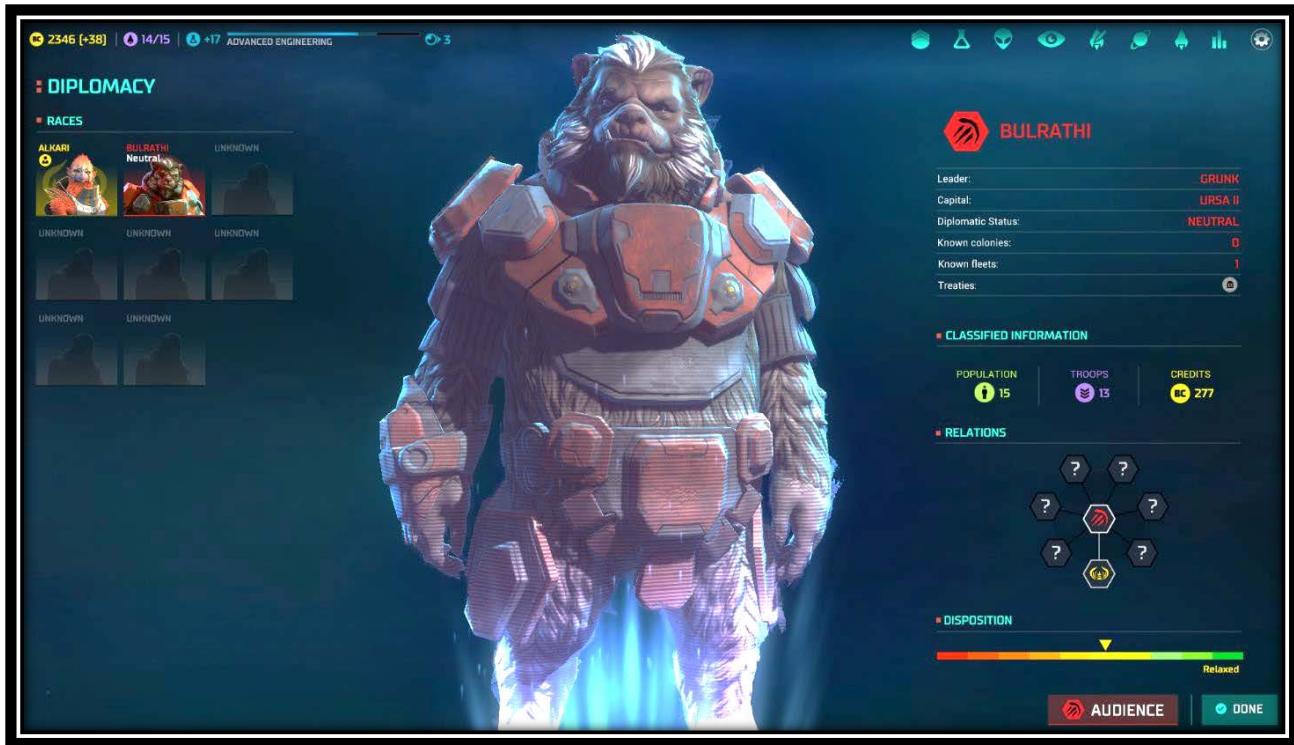
Click the “**Diplomacy**” button located on the Empire Command Bar. This will bring up your Diplomacy screen and display the following options:

- Race Selection: All races you have currently discovered will be on the left side. The pictures of leaders will be displayed along with their current disposition. Clicking on the leader will bring up more detailed information on the selected race as well as the “Audience” button to begin negotiations (although you can be ignored).
- Race Wheel: Hovering over the race symbol will bring a pop-up screen to the fore. This screen will show that race’s current disposition to your empire in a colored bar. Below that will be a list of any treaties currently in effect between your empires.



AUDIENCE SCREEN

To request an audience with another leader' select their portrait on the Race Selection area to be taken to the Audience Screen. That leader will then appear along with basic information on their empire to include known classified information. A disposition bar will also be displayed. Clicking the “AUDIENCE” button will take you to the Individual Diplomacy screen where you may make treaties, establish embassies, ask for tribute, etc.



INDIVIDUAL DIPLOMACY SCREEN

Once in the Individual Diplomacy screen you have a number of option as follows:

- Declare war: Go to war with the selected race. This will instantly cancel all current treaties.
- Negotiations: Establish embassies, sign various treaties, give or request tribute, etc.
- Declarations: Send statements to that leader (e.g., “Do not colonize close to us”). They may or may not agree to the request.
- Repeal Treaties: All treaties currently in force with that race will be displayed. You may select treaties and cancel them as you see fit.
- Goodbye: Brings you back to the Main Diplomacy screen.

Many of your options will be limited until both leaders agree to create an embassy. It is difficult to negotiate trade treaties, offer an Alliance, or even request the end to a war without an embassy. Note that even with an embassy some diplomatic requests can still remain unavailable. This is due to that race's disposition to you not being high enough to warrant consideration of a particular request (e.g., a race who views you as "Guarded" will not even consider a formal Alliance with you).

NOTE: In order to put forth a request for an Embassy you must unlock the technology "Xeno Diplomacy" under "Xeno Relations" which is located on the Government research line.

When you enter negotiations anything that appears on the RIGHT side of the Trade Table is what you are offering to the other race. Anything listed on the LEFT side of the Trade Table is what you are asking the other race to give to you. If the other race initiated contact they will have their initial offer in the Trade Table which you can add/delete items.

When you initiate the Trade Table you may add or delete any item in the Diplomacy Trade area. If you select BCs you will be prompted to put in the amounts you wish to give or receive. When exchanging technologies you select the technologies you wish to give and/or receive from a drop down menu.

Once you are happy with the Trade Table click the "**Propose**" button. The other leader will either accept or reject the current proposal.

If you truly want the deal to go off click "**What Would Make This Work?**" to see the counter offer from the other leader. You may accept, modify or reject this offer. Clicking "Propose" on an unmodified proposal will automatically accept the deal. Clicking "**Back**" will clear the Trade Table.

NOTE: If you only put items on the LEFT side of the trade table the "**PROPOSE**" button instead becomes "**DEMAND**". Be very careful using this – strong races are not easily cowed and a refusal on a demand will cause a loss in diplomatic standing.



GALACTIC COUNCIL

After the two races with the highest total population discover all the other races, Galactic Council meetings will begin. During this phase, the spacefaring races will try to come to an agreement by electing a leader who will unify the galaxy in peace and prosperity.

Each civilization's leader will cast their vote. They can either vote for one of the two nominated candidates or abstain. Each race has a number of votes based on total population. Spacefaring races are more likely to vote for you if they have a positive disposition toward you.

This is where the ground work for your diplomatic efforts will begin to tell. Races that become green in the Disposition Bar will potentially vote for you if asked (or bribed). When the Galactic Counsel becomes active a "Vote for X" becomes available under the Negotiations button allowing you to secure votes for the next time the council meets. You must secure the votes for your ascension to lead the Council – but be warned even if bribed some races do not stay bribed for long!

Empire Defense

SPACE DEFENSES

Ships

Your main force in defending your empire could be a single ship or a fleet of ships. Ships (or fleets) have a defensive command that, when used, will take them out of the automatic reminder system—so do not forget about those ships! This command is called “Guard”.

Guard: This command is identified with a shield symbol. A fleet set to guard stays at the current location which must be a jump point or planet. Such ships can be used as a platform for scanning (primarily as an early warning system). Ships on guard when encountered will cause the opposing fleet to make the decision of attacking, remain where they are, or retreat.

NOTE: If you have an Open Border treaty with another race that race will be allowed to ignore the “Guard” function.

Factory Ships

These highly specialized ships have a number of functions, including the construction of Military Outposts and Space Surveillance Systems.

- **Military Outpost:** These defensive stations are constructed at wormholes as a first line of defense. Military Outposts automatically have the Guard command on at all times. These stations take multiple turns to build and until fully constructed provide no defensive benefit. They have the same sensor range as Space Surveillance Systems. Outposts can only be built in systems where you have a colony.

Advanced factory ships can build or upgrade existing outposts to an Advanced Military Outpost. These outposts are stronger both defensively and offensively over the initial Military outpost.

- **Space Surveillance Systems:** These platforms have no weapons and will not stop fleets who wish to bypass them. Their main advantage over Military Outposts is their ease of construction and no cost to maintain. They provide an early warning system as their scanners can detect ships out to several parsecs. These systems do not require a colony to be in system; thus they can be built at any jump point.



System-Wide Defenses

At very high technology levels a variety of system-wide defensive units can be researched. These defenses can include:

- **Artemis System Net:** This structure surrounds an entire planetary system with a mine field. Enemy ships colliding with a mine will suffer damage. Shields have no effect on these mines which makes them very deadly.
- **Jump Gate:** A Jump Gate may be built at one of jump points in your system by a manufacturing ship. Only one may be built per colony. This structure allows faster transportation between your colonies significantly reducing travel times. The ability to shift fleets quickly within an empire has a huge defensive benefit.



PLANETARY DEFENSE

Orbital Stations

Your main orbital defense will include your Star Base, if any, as well as any ships, and/or orbital battery technologies defending the planet. A planet without any form of orbital defense will be quickly invaded or destroyed by an enemy fleet. Your star base and upgrades are

briefly described below:

- **Star Base:** This unit is an armed orbital station. It is required for battleship construction. Your home planet begins the game with a Star Base already in orbit
- **Battle Station:** Upgrades the Star Base into a more heavily armed platform. Scanner range is also increased
- **Star Fortress:** The ultimate upgrade of either a Star Base or Battle Station. This Leviathan of orbital defenses is the defensive equivalent of a Titan.

Battle Stations and Star Fortresses also have increased scanner range and increased Command Points. These two upgrades are built from the Production Queue where you may do a “Buy Out”. They do not have to be built in order – a Star Base may be upgraded directly to a Star Fortress (or a Star Fortress may be immediately built on a colony with no current station).



Orbital Auxiliary Defense Units

Ships and bases are not the only defensive units placed in orbit. To supplement these units additional technologies may be researched. These are:

- **Missile Base:** Equipped with your most advanced missiles, these bases automatically fire on an enemy fleet in orbit. They augment your fleets and orbiting bases or, if no such units are available, they will engage as best they can until destroyed. Missile bases update automatically when new missiles are researched.
- **Orbital Battery:** This battery contains a Heavy Mount and PDF versions of your best available beam weapon. When a new beam weapon is researched the battery is automatically upgraded. The orbital battery will engage the enemy automatically until destroyed.

Planetary Shields

A few structures are able to deflect or even stop incoming bombardments and invasions. These planetary shields also provide the benefit of turning a radiated planet into a barren one. However, these shields can be placed on any planet for their defensive benefit.

Some shields must be collapsed to 0% before bombardment and/or a planetary invasion can reach the planet. The shields do regenerate a percentage of their strength each turn. Shields,

especially higher technology ones, while not making a planet immune to attack can significantly delay an attack giving you valuable time to counter-attack or strengthen your defenses.

- **Planetary Radiation Shield:** This shield's primary purpose is to shield against radiation. However, it does provide the benefit in reducing bombardment damage. Does not stop planetary invasion.
- **Planetary Flux Shield:** Replaces the Planetary Radiation Shield if currently built. Bombardment damage is reduced to none until the shield collapses. Does not stop planetary invasion.
- **Planetary Barrier Shield:** The ultimate defensive shield which replaces the other two shields if currently built. Stops all bombardment damage and prevents planetary invasion until the shield collapses.



Ground Defenses

On the planet's surface you may construct numerous defensive structures. Some are useful only against planetary invasion by ground troops while others can fight enemy ships in orbit. A few advanced technologies provide planetary shielding that will prevent planetary assault or orbital bombardment until the shield collapses. Some structures and tech that can be built include:

- **Marine Barracks:** The basic ground defense unit used to defend against a planetary assault. These are available to all colonies with no research required.
- **Armor Barracks:** Allows a colony to train and maintain tank battalions
- **Battleoids:** An adjunct to armor barracks these units are 10% better at ground combat and require 3 hits to destroy.

- **Power Armor:** Increases the effectiveness of marines in both offense and defense.



DIPLOMATIC DEFENSE

In your dealings with the other spacefaring races, you have various diplomatic options that can prevent hostilities from breaking out, bring fighting to an end, or bring allies to help your cause. Once an embassy is established, treaties that can aid in defense are:

- **Non-Aggression Pact:** Each party agrees to not attack each other. While this does not provide free access to each other's empires, it does ensure that your ships will pass each other safely. A non-aggression pact is also the means by which a war is ended—provided the other race agrees to talk to you
- **Declare War On:** You may request a treaty with another race to declare war on a third race. Defensively you may be able to get help if the other leader believes such an act can aid them as well. Sometimes the offer of a BC "advance" can help tip a wavering leader into agreeing to this declaration
- **Alliance:** The ultimate treaty the alliance combined the Non-Aggression Pact, Open Borders, and – most importantly – the Declare War On treaties. With an Alliance the other race will not attack you, has free reign to send their ships were needed, and will automatically declare war on and begin attacking the race which attacked you.

NOTE: If a race you have an Alliance with is attacked you will be notified and a screen will pop-up with a request to declare war on the race attacking your ally. Failure to declare war will reduce your disposition potentially causing the Alliance and additional treaties to be canceled.

Combat

GALAXY SCREEN

There will be times when your colonies will be at risk or you decide another race just needs to be exterminated. That's when the combat ships and marines of your Empire's Fleet come into action.

How to Attack

To attack simply click the Attack button when a fleet has been selected on the Galaxy screen. You have the option of attacking any enemy fleet you share the same location with – even an Ally. The only time the button will be greyed out is if you fleet is composed of ships with no offensive capability (i.e. scouts, colony ships, transports and factory ships). This will take you to the Attack screen.



ATTACK SCREEN

Fleets

Arrayed to either side of the Attack screen will be the fleets that will engage in battle. The number, type and level will be displayed for both sides.

Victory Chances

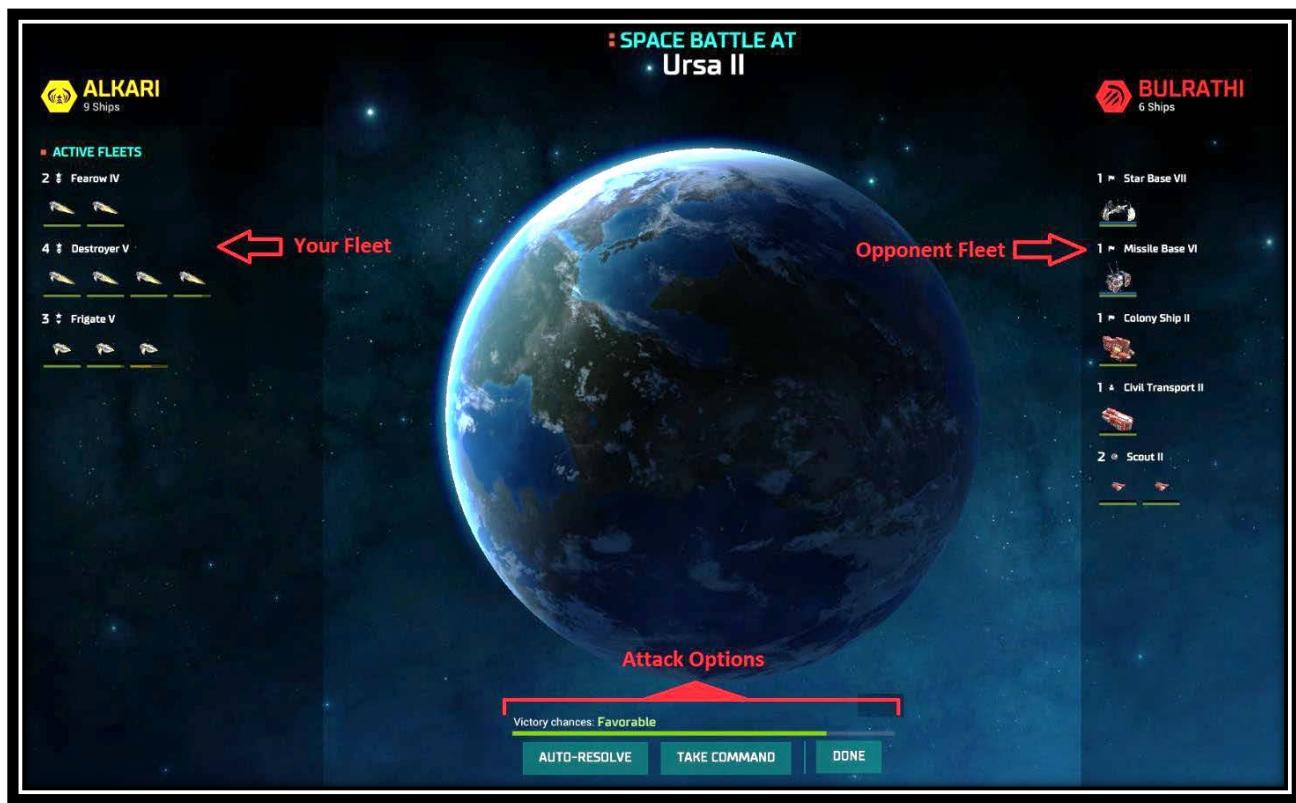
Above your "Attack Options" buttons will be displayed a "Victory Chances" bar. This bar will indicate by both color and wording your chances in the selected battle.

Attack Options

You may select from three options for combat:

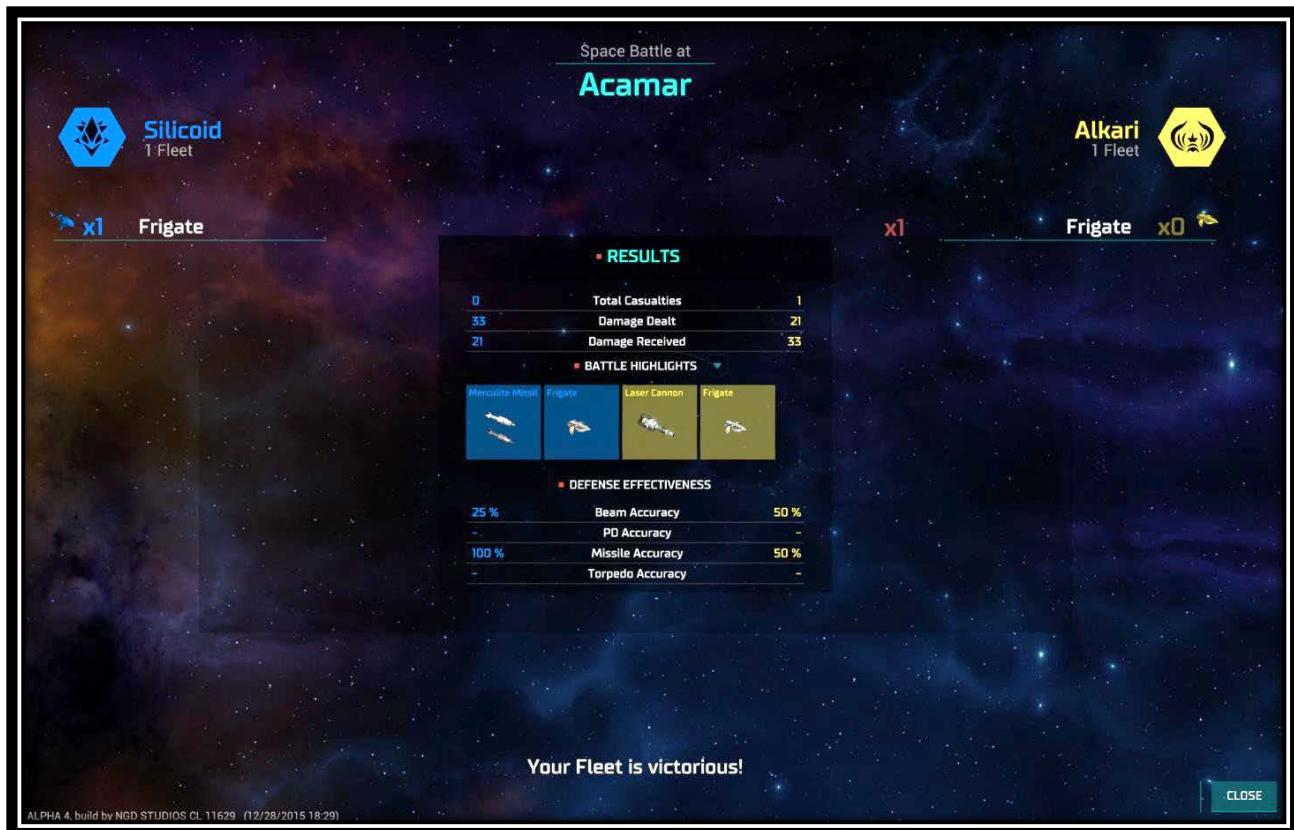
- **Auto-Resolve:** A quick and easy option where the computer controls all combat once initiated on a simple screen. The player has no input once combat has begun when “Auto-Resolve” is selected.
- **Take Command:** Selecting this option will bring you to the tactical screen, detailed below.
- **Done:** When selected returns you to the Galaxy screen.

NOTE: A fleet being attacked that has no offensive capability can only be “Auto-Resolved”. “Take Command” may not be selected.



AUTO-RESOLVE BATTLE

After an “Auto-Resolve” battle, a post-battle screen will appear. This screen will display various results, including the main weapons used by each side, which can give you a glimpse into your opponent’s potential military technology level.



TAKE COMMAND BATTLE

When you “Take Command” you are taken to the tactical screen. Within this screen you may select formations, weapon ranges, speeds, plot moves, etc.

The initial screen will show a top down view of the battle area. Silhouettes of all forces will be displayed in the color of their race. If any terrain is on the map this will also be displayed.

Selecting any ship or structure will bring up a pop-up. This pop-up will display all weapons, offense and defense stats, and other information. Hovering over a weapon will also display on the tactical map the maximum range of the weapon selected as well as a pop-up of that weapon's stats. A line will show the current target of the selected ship or structure. A more detailed explanation of these functions are given below.

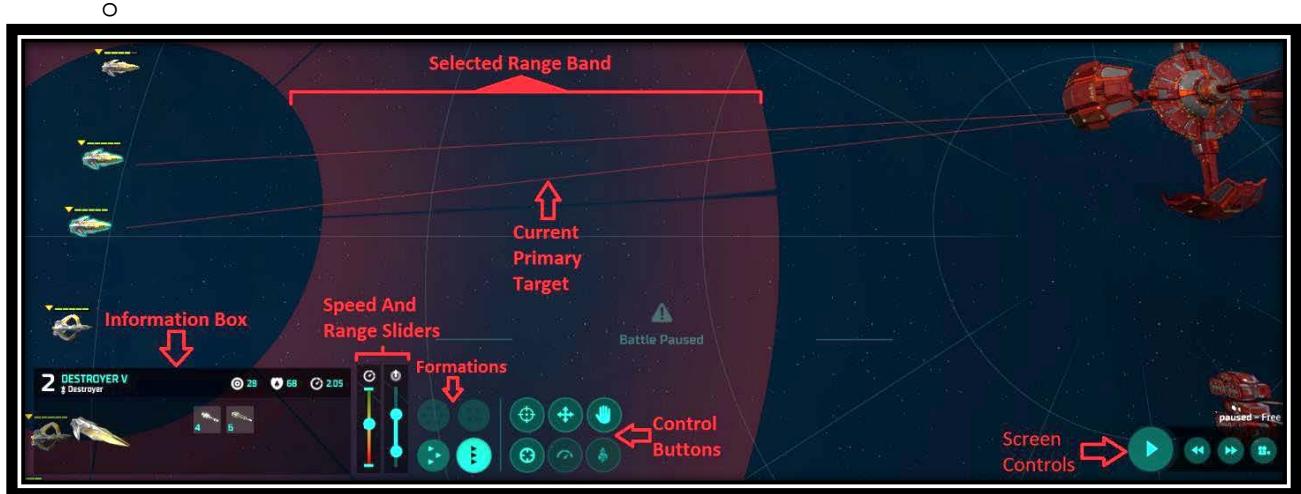
Tactical Screen

Hovering over any of the below items will display a pop-up displaying data for that item.

- **Information Box:** The Information Box lists the following:
 - Total: Number of ships in formation.

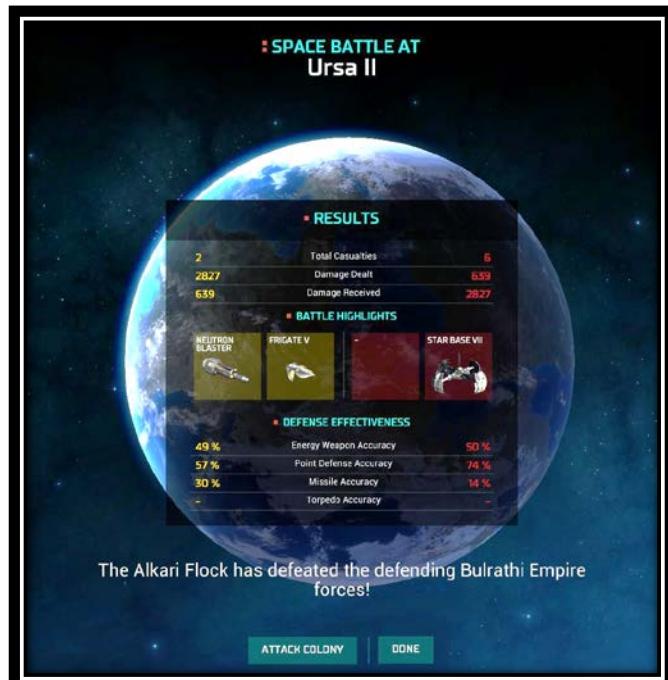
- Name/Type: Name, type and level of ships selected.
 - Offense: Total offensive power. Hovering on this displays additional information.
 - Defense: Total defensive power. Hovering on this displays additional information.
 - Speed: Total current speed per second. Hovering on this displays additional information.
 - Weapons: Weapons currently on ship. Hovering on this displays additional information,
- **Speed and Range Sliders:** These sliders are used to adjust the speed and engagement ranges of the selected ship(s).
 - Speed: This slider adjusts the speed of the ship(s) selected from zero to full speed.
 - Range: Allows you to set the min/max range at which you begin firing as well as stand-off range. The range will be displayed as a red selected range band centered around your ship(s). Mousing over each weapon in the Information Box will display their maximum range as a red circle to aid you in selecting the min/max range. Note that if your minimum range is away from your ship then your ship will attempt to maintain that distance from the enemy.
- **Formations:** If you have more than one ship in your group you may be able to pick from different formations. Formations will give you certain bonuses to the selected ships. These formations are:
 - Line: This is the default formation even for a single ship. Beam Accuracy: +25%; Weapon Cooldown: -20%
 - Wedge: Ship Speed: +25%; Beam Accuracy: +20%
 - Square: Beam Defense: +50%; PD Accuracy: +25%
 - Circle: Beam Defense: +25%; PD Accuracy: +50%
- **Control Buttons:** Used to control your individual ship(s) as required:
 - Attack: Place the attack symbol over the primary target and click. A red line will appear to indicate your current primary target.
 - Move: Right click where you want the ship(s) to move to. This will be indicated by blue lines.
 - Hold: Ship(s) will hold current position.
 - Cease Fire: Ship(s) will cease firing.
 - Match Speeds: Match speeds with selected target.
 - Retreat: Ship(s) will begin to retreat at best speed and warp out. This will take time to accomplish. Ships will not warp out until they have reached the edge of the tactical screen and then require a few seconds for their drives to engage.
- **Screen Controls:**
 - Pause/Play: Pauses the battle so you may adjust your tactics.
 - Slow Play: Decreases the speed of the battle.
 - Fast Play: Increases the speed of the battle.
 - Camera On/Off: By turning the camera on you may watch a cinematic of the battle.
- **Special Technologies (Not Shown):**
 - If your ship is equipped with special technologies buttons will display to the right of the control buttons. You may toggle these technologies on/off as required. Note that ships

in a formation will either all have the technology activated or deactivated.



POST TACTICAL BATTLE SCREEN

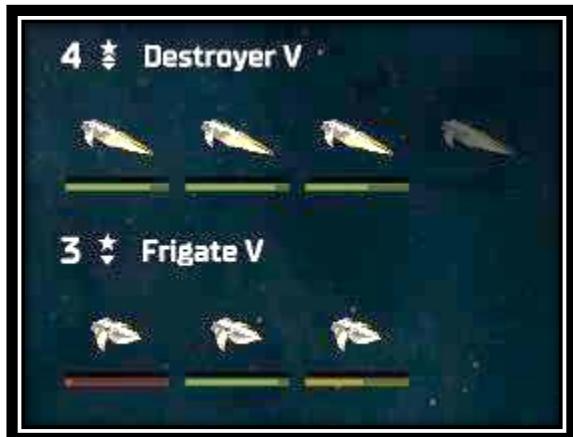
After your tactical battle, whether victorious or not, the Post Tactical Battle screen will appear. This screen will display overall results and effectiveness of the forces involved. If you are around a colony you will also be given the choice to attack the colony by selecting the **“Attack Colony”** button, explained below.



Ship Damage

Ships and structures do receive damage in battle. Damage is indicated via the damage bar which can be green, yellow or red depending on the amount of damage received. Ships or structures that have been destroyed are shown as greyed out.

If not destroyed they may be repaired via advanced technology and/or by locating to a star base or military outpost. Repairs are not necessarily instant often taking multiple turns before being fully repaired.



Post Battle: Numerous Damaged Ships and One Destroyed Destroyer

COLONY ASSAULT SCREEN

The Colony Assault Screen is the means by which your forces may either bombard a planet from orbit to destroy it, or to soften it up prior to your marines invading the planet. To destroy a colony simply keep bombarding the planet until no structures or individuals remain; the planet is now ready for you or others to re-colonize. If your marines can defeat all of the opponents' defense units then you will capture the planet; any remaining enemy population and structures will fall under your control.

Your Force

The left side of the screen arrays the forces available to you for the colony attack:

- **Explosive Bombs:** The total number of bombs available to bombard the planet.
 - Drop: This button will drop your bombs in a slow steady pattern on the target colony.
 - Drop All: Selecting this button will cause all bombs to drop at once.
- **Marines:** Lists the total number of marines available to assault the colony.
 - Transports: Marines are only available from troop transports. This button allows you to select the number of transports you wish to use for the assault.
 - Clear: This resets your Troop Transport selection to "1".

- Deploy: This button will cause the selected transports to invade the colony.
- **Abort:** Located on the bottom of the Colony Assault screen this will take you back to the Galaxy screen. One reason to “Abort” is to allow a bombardment to continue on the following turns.

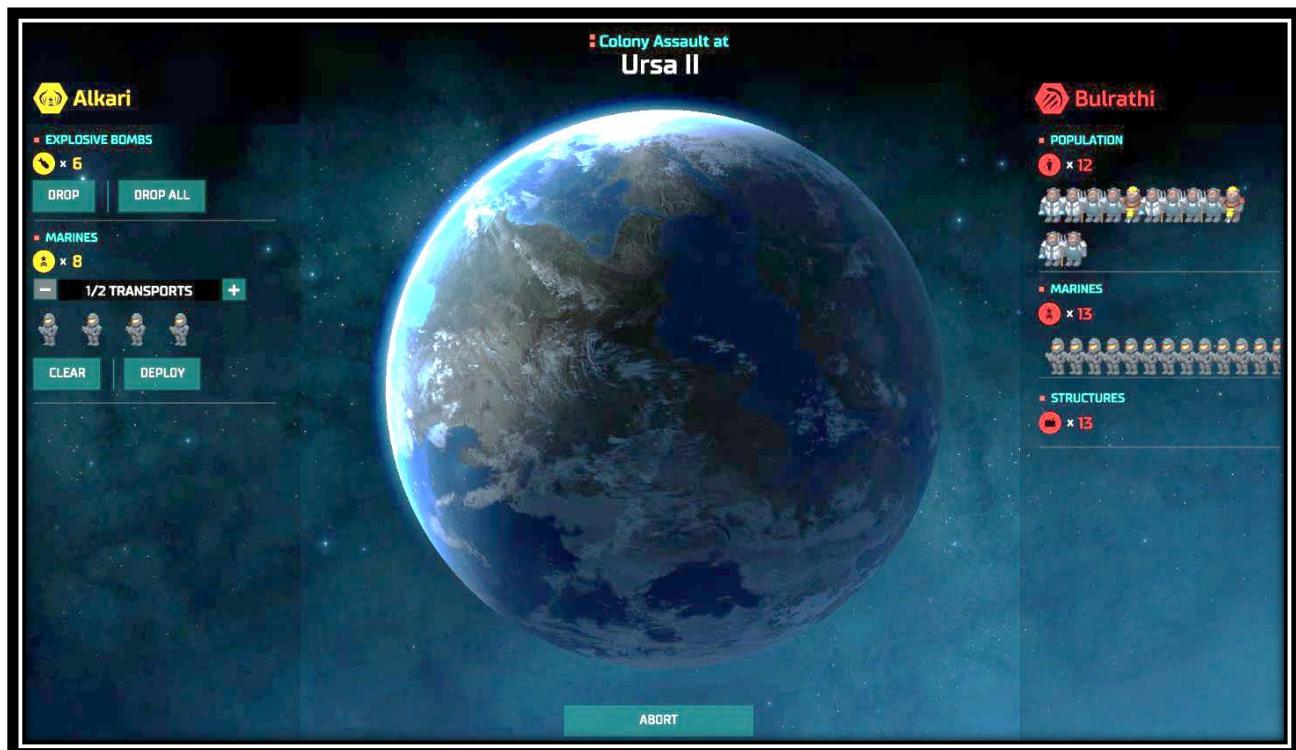
Enemy Force

The right side will display what is currently on the planet that you must fight but also what may end up as yours if victorious.

- **Population:** Total population is displayed to include how many are currently located in Research, Food and Production generation.
- **Marines:** Total ground defense forces will be shown here. These will be marines but can also include other forces.
- **Structures:** Total structures on planet is shown. However, you will not know what these structures are until the planet is conquered.

Colony Invasion

Once deployed the computer determines the battle similar to “Auto-Resolve” for fleets. A victory will instantly place what remains of the colony under your control becoming a colony of your empire.



Espionage

Espionage involves researching and building a Spy Center on one of your colonies. Your empire may only ever have one Spy Center as it is a unique structure. Here, your agents are trained ready to be deployed against your opponents' colonies to perform missions, or within your own empire for **Counter Espionage** missions.

Once built, the Spy Center generates an initial Agent and an additional Agent every 20 turns after that. The maximum number of agents is 10 per race. When a new agent is available or reaches a destination a “**Spy Needs Orders**” button appears which when selected will take you directly to the Espionage screen.

NOTE: If the Spy Center is destroyed, any current agents remain and can be used stay but no new agents will be trained.

ESPIONAGE SCREEN

The Espionage screen has the following information and functions:

Agents

Your agents' list has the following:

- **Name:** Lists the agents name as a phonetic.
- **Status:** Displays the status of the agent: Mission name, Travelling with turns to arrival, on Hold, etc.
- **Location/Destination:** Current location or selected destination.

Selected Agent

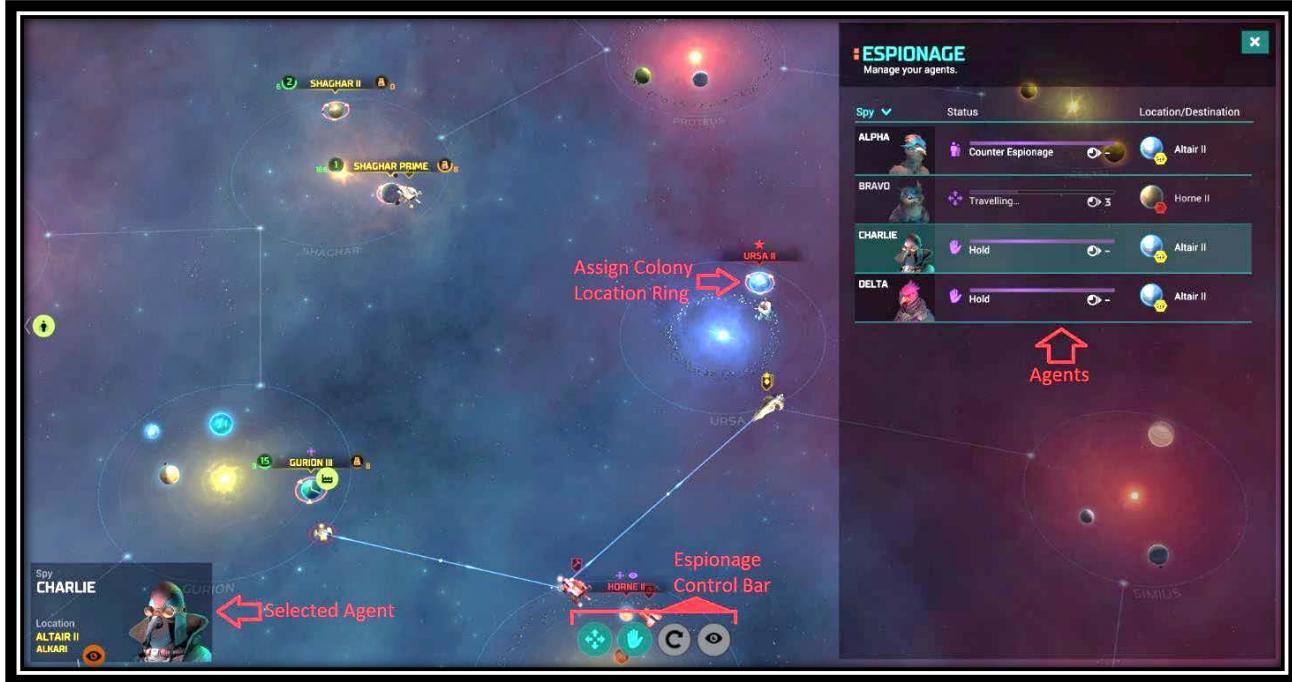
Indicates current agent you have selected along with their location. Note that agents that are travelling cannot be selected and thus will not appear as a Selected Agent.

Espionage Control Bar

The following functions are available:

- **Assign Colony:** You may assign your agents to any of your colonies or enemy colonies. Available colonies will be indicated with a Colony Location Ring around the colony. Selecting the colony will start your agent travelling there.

- **Hold:** Causes an agent to remain at current location with no missions assigned. Note that this is the only way multiple agents may be on the same planet.
- **Recall:** Recalls agent to the your homeworld.
- **Missions:** How an agents missions are selected, detailed below.



Each time a Spy is generated, a turn-blocking “**Spy Needs Orders**” button appears. Clicking it:

- Opens the “**Espionage**” window with the corresponding Spy highlighted
- Centers and zooms the camera into the corresponding colony
- Opens the “**Spy Orders**” window with all the orders a spy can take (defensive missions: counterespionage, offensive missions, relocate, recall and wait). Selecting an order (except relocate) shows its requirements, description and/or duration, and enables the “**Give Order**” button. Click it for a Spy to start their assignment.

Most of the times, a Spy needs to be sent to a colony before starting a mission, which is done by selecting “**Relocate**” from the “**Spy Orders**” window. When a Spy reaches its destination, the “**Spy Needs Orders**” button activates, as explained in the previous section, and the spy can be assigned a mission. However, if a condition prevents the Spy from making their journey (for example, the colony was destroyed), a notification indicates the Spy is being recalled.

NOTE: Only the colony where your Spy Center may have more than one spy located there (because they were generated there, or because they had to be recalled there). But even then, only one Spy can perform an actual mission. The others have to wait until a location for them is available. In this sense, Exploration and Expansion are key elements to take advantage of spies.

SPY ORDERS SCREEN

Missions are tasks performed by agents at colonies. Missions take turns to perform with the greater the reward the longer the mission takes. Turns required to complete missions can be reduced with advanced technologies.

Security

Every turn, there is a chance of the mission failing with your agent being caught. This chance depends on the **Security** of the opponent's colony. Security is a colony variable that defines the chance of discovering an enemy agent performing an offensive mission:

- **Security Via Structures:** Various structures provide a security bonus.
- **Counter Espionage:** A bonus provided by an agent performing **Counter Espionage** assigned to that colony.
- **Advanced Technology:** Bonus provided by some advanced technologies for both colony and empire wide security.

The sum of the security values is indicated by your colonies Security Level. These levels range from "1" (minimal security) to "5" (agents without advanced training and/or technology are discovered very quickly).

Offensive Missions

Offensive missions are performed against other races. All missions begin with Acquire Data. Once this mission is successful additional mission types unlock. The following types of offensive missions are available:

- **Acquire Data:** Reveals basic information on the target colony.
- **Infiltrate Cybercrime:** Reveals Research generation, structures and technology.
 - Hacking: Prevents generation of Research points for 10 turns at that colony.
 - Steal: Steal a random technology.
- **Infiltrate Trade Unions:** Reveals Production generation, structures and technology.
 - Strike: Prevents all generation of Production from Population.
 - Sabotage: Destroy a random structure.
- **Infiltrate Agronomy:** Reveals Food generation and structures.
 - Famine: Cancels all food surplus for 10 turns.
 - Contaminate: Causes food poisoning causing Population to die off.
- **Infiltrate Diplomacy:** Reveals economy, military, morale, security and pollution structures.
 - Destabilize: Lower disposition with other races against target race.
 - Revolt: Colony no longer under control of target race for 20 turns. May be invaded to return to the target race before the 20 turns end.
 - Steal Charts: Steal navigation data.

Note that you may set your agent up to complete an entire series of missions at one time. Example: You may set an agent to complete a series of missions from Acquire Data to Steal Charts simply by clicking the Steal Charts mission. The agent will automatically continue from one mission to another until discovered or all missions are completed.

Missions carry one of three levels of risk for the agents:

- **Low:** Agents have a low probability of being detected while the mission length is relatively short (approximately 4 turns).
- **Medium:** Agents run an increased risk of being detected with a longer mission length (between 8 – 15 turns).
- **High:** The most extreme missions with a potentially crippling outcome for your opponent with a lengthy mission time (approximately 18 turns).

NOTE: If a colony with an agent on it is destroyed or invaded by another race, the agent is killed and the mission is aborted. The result of a mission is shown in a special popup that also informs if any agents were discovered then deported or killed.

NOTE: Once **Acquire Data** and **Infiltrate** missions have been successfully completed on a colony you do not start over if your spy is caught and deported or killed. Those missions will remain “unlocked” for that colony. However, if your spy is deported or killed before that mission is unlocked you lose any turns that have been accumulated and must start from the beginning for that mission.

EXPLORATION
Manage your agents

Spy
Start

ALPHA
BRAVO
CHARLIE
DELTA

SPY ORDERS

Assign orders to the spy.

Spy
BRAVO

Location
HORNE II
BULRATHI

CURRENT MISSION
No Mission

DONE

Research

RESEARCH MANAGEMENT SCREEN

The Research screen will display all technologies that can be currently selected for research. Simply select the technology you wish to research from the “Available Technologies” shown then select “**DONE**” to return to the Galaxy screen.

If a deeper look at your technology is required select the “**VIEW TECHNOLOGY TREE**” button.



TECHNOLOGY TREE SCREEN

The Technology Screen, which can be moved side to side by click/hold and swipe, allows you to view, plan and pick your research. This screen has the following functions:

- **Highlight:** This drop down menu will allow you to pick from the various research areas. Research related to the selected area will remain highlighted.
- **Search:** The search box will highlight any Research whose name contains all or part of a word. Example: The word “Star” will show “Star Fortress” and “Doom Star” as hits on the search.

Hovering over a Technology Bar will cause a pop-up to appear giving a brief explanation of the available technologies, turns to complete, and required Research points. Hovering over the technology within the Technology Bar will display a pop-up detailing the individual technologies.

Technology that has already been researched will be greyed out. Technology available for research will be colored blue with a Turn to Completion symbol in the corner. Technology not yet available for research will be colored black with a lock symbol in the corner.

Technology currently being researched will have a glowing Technology Bar.

Research Path

Instead of choosing your Research projects one at a time you may instead select a Research Bar farther down the tree. Selecting this project will outline any other Research projects needed to achieve the selected project as well as turning any connecting paths blue. The research will be generated in the order shown by small blue numbers next to the required projects.



Blueprints

Blueprints allow you to change your ship designs and even make ships from scratch to conform to your vision of combat. The main Blueprint screen has the following information and functions:

- **Ship List:** The Ship List displays all of your current ship designs along with a snapshot of their attack and defense capability. Slots marked “Empty” may be used to make additional custom ships.
- **Hull Capacity:** Each ship has a finite amount of space for systems and weapons. This shows how much space used/space maximum for the selected ship design.
- **Systems List:** Displays all current Core Systems, Special and Weapons. Hovering over the item will bring up a pop-up with details.
- **Ship Stats:** Displays critical information on the ship as currently built. If upgrades are available will also show the effects if systems are replaced by these upgrades.
- **Menu Buttons:** These do the following:
 - Edit: Takes you to the Blueprint Editor screen, detailed below.
 - Scrap: Deletes this ship build.
 - Upgrade: Upgrade the selected ship type.
 - Upgrade All: Upgrades all ship types.
 - Done: Returns to Galaxy screen

NOTE: Upgrading a ship on the Blueprints screen will ONLY upgrade ships either being built or built later. Currently produced ships may visit a star base/military outpost or better to receive upgrades to conform to the current build, if you wish. However, such upgrades are not free and will cost you BCs to bring your ships up to their latest technology level.



Blueprint Editor

The Blueprint Editor is where you go to design and edit your ships. Similar to the main Blueprint screen in layout the main difference is on the left side. Instead of the Ship List the following functions located here are:

- **Name:** You may rename your ships.
- **Hull:** This will be set if you are editing the initial hull. If you had chosen an “Empty” slot from the Ship List all currently available hull types will be here for you to select from.
- **Model:** Select between the base hull graphic or an alternate.
- **Theme:** Select between 3 alternate markings for your ship.

The ship stats and hull capacity give you the same information as in the Blueprint screen. However, these are now “active” and will change as you design your ship.

The System List is now also active. Clicking on an item or an empty slot will take you to that systems currently researched technology. From there you may choose the equipment you want and, in the case of weapons, decide how many, what modification and the facing.



Clicking on a System List button will bring you to the technology screen where you may select your core systems, specials, and weapons. While core and special systems may only have a single instance of a particular technology added to the ship, weapons have different choices to make.

When clicking into the weapons systems the following information is displayed:

- **Clear:** This will clear weapons selected for this slot.

- **Weapon Systems:** Clicking on any weapon will bring its description, modifiers, quantity and other information on the right side of the screen. The system box also displays the production, space required and damage proc of that weapon.
- **Weapon Description:** The weapon selected, its description, cooldown, damage, and range are displayed.
- **Modifiers:** If technology modifiers have been unlocked they will be displayed here. Clicking on the button will make all weapons for that slot have the identical modifier. Hovering over the modifier will bring up a pop-up detailing how the weapon(s) will be effected. You may select more than one modifier being limited by available hull space. However, weapons selected as PDF systems may only have that modifier.
- **Quantity:** Click the arrows to increase or decrease the number of weapons for that slot.
- **Facing:** Clicking on the Facing button will allow you to select how all weapons for that slot will face. Facings are Front, Sides, Rear and Any (ie 360 degrees). The more facings a weapon has the more space they require. Some weapons are automatically Any and this button will not be active.
- **Slot Information:** As you add/delete the quantity, facings and modifiers the Total DPS, Total Cost, and Total Space Used will reflect these changes.
- **Add:** Once you are satisfied with your choice click “Add” to add these weapons or other technology to the selected slot in the System List.

WEAPONS

Click an item to see a detailed description here.

CLEAR 	NUCLEAR BOMB 🕒 3 🕒 9 🕒 2.85	LASER CANNON 🕒 1 🕒 5.4 🕒 1.66	NUCLEAR MISSILE 🕒 3 🕒 9 🕒 1.81
ANTI-MISSILE ROCKETS 🕒 2 🕒 3 🕒 2.5	NEUTRON BLASTER 🕒 4 🕒 7.2 🕒 3	MERCULITE MISSILE 🕒 6 🕒 10 🕒 2.5	PROTON TORPEDOES 🕒 6 🕒 15 🕒 5.25
MASS DRIVER 🕒 10 🕒 10 🕒 3	FUSION BOMB 🕒 6 🕒 10 🕒 4.28	DEATH SPORES 🕒 10 🕒 15 🕒 1.42	

HULL CAPACITY

CORE SYSTEMS

SPECIALS

NEUTRON BLASTER

SHIP SYSTEMS

- Total Hull F
- Armor Resi
- Total Shield
- Shield Absor
- Travel Spee

COMBAT

- Cooldown: 3.0
- Average Da
- Damage: 9
- Beam Attac
- Range: 50 units
- Beam Defe
- Missile Def
- PD Effectiv
- Payload Va

MODIFIERS

QUANTITY

COSTS

Production

Facing

Front

Hand

Total DPS
🕒 14.39

Total Cost
🕒 26

Total Space Used
🕒 80.99/81.25

ADD

Path to Victory

Victory Conditions

You may win the game via five victory conditions:

- **Conquest:** Exterminate all other races to become the sole ruler of the galaxy. This victory condition is always “On” and cannot be toggled “Off” in Advanced Settings.
- **Score:** Have the highest overall score between the four other victory conditions listed above prior to the Turn Limit being reached.
- **Diplomatic:** Be nominated to the Galactic Council and obtain 2/3 of all available votes.
- **Technological:** Be the first to build the three required scientific victory structures.
- **Economic:** Reach a pre-determined percentage of the GGP and purchase a set percentage of available GMF shares then maintain these conditions for a set number of turns.

You may check the current standings of these victory conditions by clicking on the “**Path to Victory**” link of the Empire Command Bar. This will take you to a screen showing all victory conditions and the standing of all races currently in the game (conquered and/or exterminated races are dropped from the lists).

When in the Path to Victory you may click on each victory condition to receive a more detailed report on your current status for each condition.

You also have the ability, when creating a new game, to select which victory conditions will apply to you. This appears under Advanced Settings, detailed in that section.

NOTE: Any victory type except for Conquest can be disabled during game set-up. See “NEW GAME/MATCH SET-UP” for this function.

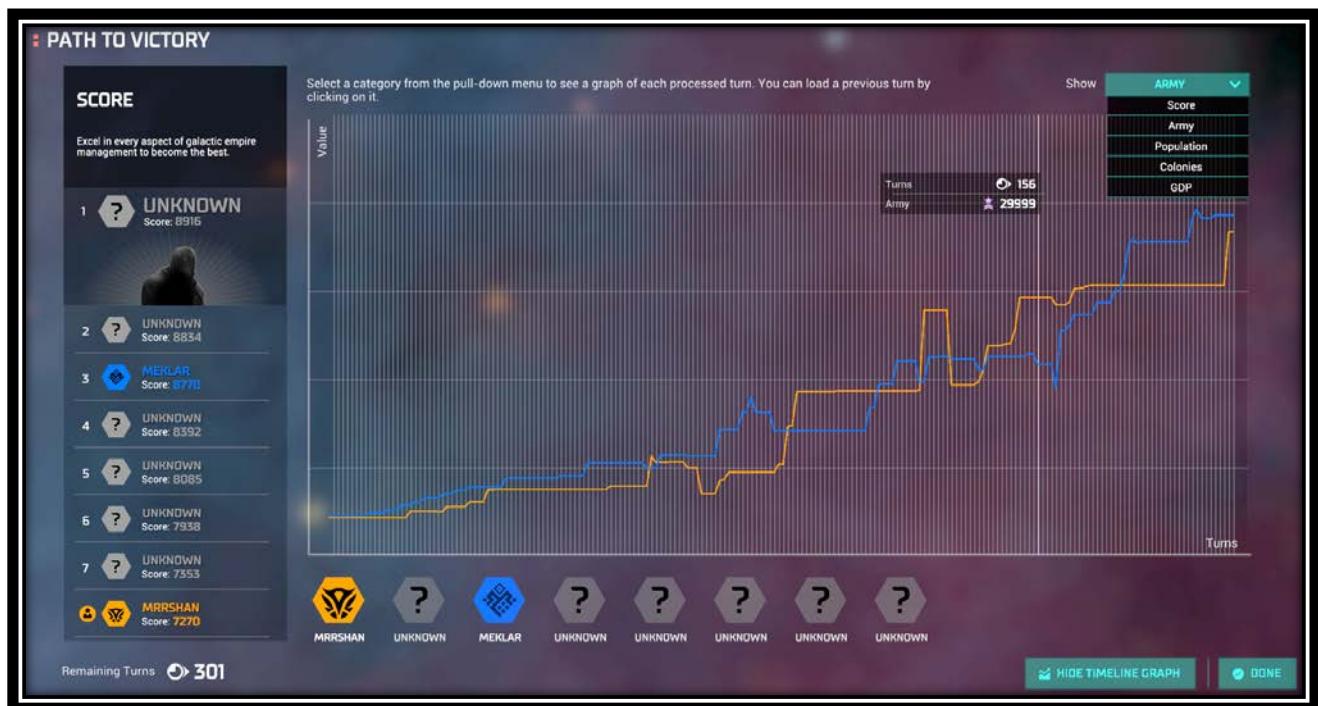


Timeline Graph

Within the Path to Victory clicking “View Timeline Graph” in the lower right corner will take you to the graph. The graph allows you to accomplish the following:

- **Turn by Turn Data:** By using the drop down menu you may see your progress in five areas (Score, Army, Population, Colony and GDP) over the course of the game.
- **Race Selection:** Located on the bottom of the graph screen are buttons representing all currently known races. Clicking these buttons on/off will allow you to overlay those races on the graph for comparison.
- **Previous Turn Load:** Scrolling across the graph with your mouse will cause a white line to appear. This line will display the turn and data for that turn. By clicking on the line it will take you back to that turn. You will load and restart at the selected turn but turns beyond that will be deleted and unrecoverable.

Note: Use of the Advanced Settings to set automatic turn saves to any number other than every turn will affect the graph accordingly.



Now that you future explorers have grasped the basics of Master of Orion, you are ready to start your campaign and Conquer The Stars!

Appendix A

Game Icons

Colony Specific

-  = Homeworld (Note: White star will be color of race)
-  = Blockade
-  = High or Low Gravity Planet
-  = This colony has a Star Base
-  = Jump Gate
-  = Colony Event: Plague
-  = Colony Event: Pollution Clean-Up
-  = Colony Event: Population Growth
-  = Colony Event: This colony is starving

Espionage Specific

-  = Spy in Transit to Location
-  = Spy Mission: Hold
-  = Spy Mission: Counter-Espionage
-  = Spy Mission: Spy Traveling to Colony
-  = Spy Mission: Acquire Data
-  = Spy Mission: Infiltrate Cybercrime
 -  = Spy Mission: Hacking
 -  = Spy Mission: Steal
-  = Spy Mission: Infiltrate Agronomy
 -  = Spy Mission: Famine
 -  = Spy Mission: Contaminate

 = Spy Mission: Infiltrate Trade Unions

 = Spy Mission: Strike

 = Spy Mission: Sabotage

 = Spy Mission: Infiltrate Diplomacy

 = Spy Mission: Destabilize

 = Spy Mission: Revolt

 = Spy Mission: Steal Charts