



Manual

Milky Way, 2471

Mankind already began a long time ago to venture into deep space. By the development of the overlightspeed propulsion system they had the possibility of establishing colonies on far distant planets and of building space stations. Man was so able to make half of the galaxy to his home. They also got in contact with the Apa'ars, an extraterrestrial civilization that is living together with the humans in peace.


But on the 25th of October an Apa'ar ship – on board also a few humans – came across an alien race in space sector 57. Those beings, calling themselves Qeyons, declared war on the two allied civilizations. They have the intention of annexing the humans' and Apa'ars' resources and of enslaving them. The two governments only received these news via hyperspace communication – the ship never came back.


You are a Lieutenant of Mankind's Space Fleet, employed on Earth. Although still very young, Fleet Command assigns you without further ado a little ship docked on Earth's station – the SFS SKYLINER. You, some Fleet officers and volunteers now have the mission to do the best to defend the human civilization against the Qeyons.

Already one week after war declaration your ship is knocked into shape, refueled, and equipped with weapons. The ship is released from the station and gets clearance for start. On all what you are going to do or to omit from now not only depends your own life and your crew's, but also the survival of the whole human civilization...


Galaxy is at war!


Loading the game

 is started with a double-click on the EXE file `galwar_eng`. After that you see the game's story. Press any key or click on the arrow on the right bottom to skip to the main menu immediately.

If none of the newer versions of the Windows Media Player is installed on your system, you will receive error 339 (`wmp.dll`) when starting the game. In this case use the EXE file `galwar_eng_nosound` to start . The only restriction is that you will not be able to listen to the game's music and sound effects.

General instructions

Most actions in  can be done with mouse or keyboard (see *Keyboard functions* at the end of this document).

If an arrow () appears at the right bottom of a dialog, click on it to continue. In this case you can also press any key. Some windows are closed with a click on the X on the right top or any key.

If you have to choose between two options to continue, you can activate the first one (e. g. attack) with enter key or Space and the second (e. g. escape) with `ESC`. Yes/No-dialogs can also be answered with Y resp. N. The function keys are assigned to the options of bigger menus.


The main menu

In the main menu of  you have the following options:

F1 **Continue current game**

Only available when a game has been started. With this option you can return to it.

F2 **Start new game**

Brings you to a dialog where you can enter your player name and select one out of five difficulty levels. After that a new game will start. Please note that an already started game is lost when confirming with *OK*: There can be only one  game in progress at the same time.


F3 **View story**

Shows the story of the game.


F4 **Brief manual**

Shows an extremely shortened manual.


F5 **Info and credits**

This option shows information on .

`ESC` **Quit "Galaxy War"**

Quits the program. A game not yet concluded will automatically be saved so it can be continued when starting  the next time.

The map

After a new game has been started, the main screen of  appears where the whole game is taking place. The biggest part of it is used by the field on the left: our home galaxy with its billions of stars – Milky Way. The map shows an area of $122,880 \times 122,880$ light years and serves to both your ship's navigation and to display the current political situation.

Objects

In blue are these objects displayed that belong to the humans. That are 17 planets (Earth and 16 colonies) in lighter and 24 space stations in darker blue. The planets and stations of our allies, the Apa'ars, are shown in light and dark green. Enemy objects are displayed in red. Yet, these still have to be discovered.

When pointing with the mouse on an object, you can read its name and further information on it what can be switched on and off with a click on *Object info* on the right top or by pressing the `O` key.

Your ship's position is marked with a blinking white dot and a gray reticule. At the start of the game you are located on Earth.

Navigation

The galaxy is divided into 100 space sectors, $10,000 \times 10,000$ light years each. These are numbered from 00 (left top) to 99 (right bottom). Earth is located on the border between the sectors 74 and 75. For a more precise position fixing, Space Fleet defined a system of coordinates with Earth located on the coordinates $0 \setminus 0$. The x-axis goes through the center of the galaxy.

When moving the mouse over the map, the corresponding coordinates as well as the space sector is displayed what can be switched on and off with a click on *Navigation info* or by pressing the N key. It is also displayed how many allied and Qeyon ships are located in the sector.

Fleets


By clicking on *Fleet info* or pressing the F key, the state of the friendly and enemy fleet in every space sector is shown at the bottom of the map. The fleet of the humans is displayed in blue, the Apa'ars' in green, and the Qeyons' (where known) in red. The lighter a color in a space sector, the more ships of the corresponding fleet are located there. Mostly unexplored areas as well as regions of low activity appear black. Your current position is marked with a circle, galaxy's center with a cross.

The status display

At the top there are three options available (not during flight):

State shows information on the ship and your person. Key: F9

Log shows the ship's log where the most important events are listed in reverse chronological order. Key: F10

Menu brings you back to the  main menu. The game has been saved and can be continued at any time, unless you start a new game. Key: F12

Below that is displayed:

- the name of the ship you are commanding
- your name and rank
- the current game date
- distinctions

In the window *News* the newest information concerning the war progress is displayed and in *Navigation* and *Propulsion control* the most important information that is necessary for flight.

Flight

Setting a course

Before you can engage the ship's propulsion, you will have to determine a destination. By a click into the map a course is set: the selected coordinates (and possibly the name of the object to reach) appear in the navigation window under *Destination* and the distance in light years (ly) is calculated and displayed. The destination is marked with a green circle and reticule on the map and the way to go with a broken line. A new course can also be set during flight.

Engage and disengage propulsion

After a course has been set, you are able to engage the propulsion system. To do this, actuate the master switch at the bottom of the propulsion control window or press `Ctrl`. Now your ship is moving faster than light towards the selected destination. Actuate the propulsion switch again to stop the ship.

During flight you can see in the status display how time goes by. The SFS SKYLINER is capable of reaching 130,000 times the speed of light (88 trillion mph), however travelling to the nearest station may take a few weeks because of the huge distances in the galaxy. The game speed can be changed as you like with the keys from `F1` (1 day in 2 seconds) to `F8` (64 days per second) at any time. `F4` (4 days per second) is set as default.

In the navigation window you can see the estimated flying time and the expected date of arrival. This display is blinking red in case you have too less fuel to reach your destination. You should select a nearer destination or decrease engine power (see section below) until the display appears green again. Of course, the destination has to grant the possibility of refueling.

Engine power, speed, and fuel consumption

Your speed is measured with light years per day (lpd). It depends directly on the engine power that is adjusted with the cursor keys: the keys up or right increase the power by one percentage point, the keys down or left decrease it. In the propulsion control window you can follow the changes. The keys `PageUp` and `PageDown` increase resp. decrease the engine power by five percentage points. The adjustment can also be done with the keys from 1 to 0: press 1 for 10 %, 2 for 20 % and so on to 9 for 90 % and 0 for 100 %. Clicking on the engine power display besides the propulsion master switch also adjusts the power.

At a setting of 100 % you reach the ship's top speed and at 50 % half of it. However, fuel consumption grows quadratic, that means that at 50 % the consumption is four times less than at 100 %, and at 10 % even a hundred times less. With engine power at 100 % and full fuel tanks the SFS SKYLINER is capable of covering about 15,000 light years (no problem in an friendly area), at 50 % twice as much. Please note that the top speed your ship can reach is decreased because of damage. So you should always care for repair right in time.

By clicking on *APA* in the propulsion control window or pressing the `A` key the automatic power adjustment is switched on and off. This lets you adjust engine power maximally to a value that allows you to reach your destination just before running out of fuel.

Hyperspace mass drag

Because of the hyperspace mass drag your ship's top speed can actually never be reached. The presence of mass in normal space generates a disturbing force in hyperspace where your ship has to be to be capable of flying faster than light. So you can fly faster at the same engine power when being in an area with less stars than when approaching the center of the galaxy where a lot more mass is located.

For example near Earth the drag is average at 18 % what means a real top speed of 82 % of the declared figure. Outside the galaxy there is practically no drag, so that you can almost reach top speed here. In the galaxy's center the drag can be as high as 99.5 % what makes it impossible for your ship to reach high speed. So in order to save fuel, you should better stay away from galaxy's center. The Qeyons will have to do the same in all probability.

Wormhole propulsion system

The S.F.R.D. (Space Fleet Research Department) is currently working on the last tests for a very new way of propulsion. It will make it possible to create a wormhole to any point in space through that a ship can cross the whole galaxy practically without loss of time. Already the ships of the next generation are planned to be equipped with this wormhole propulsion system.

Stay on a space station

When you have arrived at a planet or a space station of the humans or the Apa'ars, your ship is automatically docked there. After that you can refuel and repair your ship and reload your weapons. But note that the Apa'ars are not able to service your ship as good as a station of the humans because of technological differences.

In case the station has sufficient defense systems, you can uninstall a part of it and take it along in your cargo hold. On a station with weakened defense you can deliver the freight and install it to strengthen this station.

On all of the 17 planets of the humans there is a base of Fleet Command. It will always be appreciated when you appear there from time to time to report your actions personally.

Discovering enemy objects

During flight the local area is permanently scanned by the sensors to register enemy activities. So you are able to discover Qeyon ships or even space stations and planets and to decide whether to attack them or not.

Fight

When you have decided to attack the enemy, the window *Tactical/Weapon systems* opens. Here you get a highly simplified view over the current fight situation. On the left and right the strength of the enemy's defense resp. the state of your ship's structure is displayed in a bar. In the field in the middle the enemy object is displayed in red and your ship in white. Enemy missiles are shown in yellow and your own in green. Above this field you receive the most important information on damages.

Approach and withdraw

With the cursor keys left or up you give the order to approach the enemy object. The closer you get, the more damage can be done by your missiles. Of course, the same is for damage on your ship caused by enemy fire. To withdraw from the enemy, press the cursor key right or down. By remaining in movement you also can get out of the way of enemy missiles.

Firing the weapon

With space bar you can fire a missile. However, it takes a few seconds until your weapon is ready again. Above the ammunition display the fire readiness is shown. The lamp is yellow when the weapon is being reloaded and green when you are able to fire. In case the weapon is not available, the lamp turns into red. Damage causes delay of fire readiness.

Escape


With **ESC** you can escape from the fight at any time. Your propulsion is engaged for a moment and you can leave combat by a leap faster than light. You should better do that when your ship structure's state gets critical. Remember that damage causes speed loss and you may still have a long way home to get it repaired. Furthermore, the lower your ship's structure is, the more possible is getting irreparable damage. On the other hand, leaving a fight too early is also not a good choice: Fleet Command will think you are not showing enough zeal. Furthermore, note that the extremely sensitive propulsion system of your ship will not respond at the first key press even at less damage.

Capturing

After having managed to break through the defense of an enemy space station or planet, you immediately send a command over there to seize control over the object. If your men are successful, the enemy object has been captured and can be used as base by the Allied Fleet. Then you should first spend some days there strengthening the defense systems that have been weakened by your attack. Otherwise the Qeyons will have no problem of seizing control over the object again within a short period, in the worst case when your ship is still docked there.

End of the game

The game ends at a whole string of events, e. g. with your ship's destruction or when quitting your service at Space Fleet. The goal to be aimed for is of course the Qeyons' surrender and so the winning of the war for humans and Apa'ars.

The game's logbook is saved in the directory `log`. These files can be deleted at any time. Your score (if you have reached one) and some other game data is saved in the text file `scores` in the  directory.

Keyboard functions

	Main screen	Tactical/Weapon systems	Main menu
Esc		Escape	Quit program
F1	Game speed 1 day in 2 seconds		Continue current game
F2	Game speed 1 day/second		Start new game
F3	Game speed 2 days/second		View story
F4	Game speed 4 days/second		Brief manual
F5	Game speed 8 days/second		Info and credits
F6	Game speed 16 days/second		
F7	Game speed 32 days/second		
F8	Game speed 64 days/second		
F9	View ship's state		
F10	View ship's log		
F12	Return to main menu		
1 to 0	Engine power 10 % to 100 %		
A	Automatic power adjustment on/off		
F	Fleet info on/off		
M	Music on/off	Music on/off	Music on/off
N	Navigation info on/off		
O	Object info on/off		
S	Sound effects on/off	Sound effects on/off	Sound effects on/off
Ctrl	Propulsion on/off		
Space		Fire weapon	
↑	Increase engine power	Approach enemy	
←	Decrease engine power	Approach enemy	
↓	Decrease engine power	Withdraw from enemy	
→	Increase engine power	Withdraw from enemy	
PageUp	Increase engine power by 5 percentage points		
PageDown	Decrease engine power by 5 percentage points		