

Ad Astra Playing Tips

The following tips are intended to help the novice player familiarize themselves with the game and to generally stay alive.

1. Use the Space Key to pause the game when things get 'hot'. The long range scanners, tactical screen and status screens can all be freely accessed in order to formulate a suitable combat strategy.
2. Don't horde missiles, they're relatively cheap and very effective. Also be aware of the type of missile that will be fired next from the magazine – if in doubt pause the game and check via the status screen.
3. Buy Enhanced Short Range Scanners at the earliest opportunity.
4. Be aware of your enemy's strengths and weaknesses. In particular if the hostile spacecraft possesses multiple engine arrays then the quickest way to disable it is a missile barrage from the front on its cockpit.
5. To earn a decent profit through trade requires a super freighter .If you own a smaller ship then bounty hunting, deep space salvage or piracy are the quickest ways of becoming rich.
6. If you're targeted by a missile then head for the nearest super freighter – with any luck it will hit this before it hits you.
7. Space Stations and City Landing Pads are safe havens. If you're outgunned dock at the earliest opportunity.
8. Save the game regularly via the F12 key – it's quick and not particularly intrusive. Remember to clean up the save directory and recycle bin on a regular basis though.
9. The recommended control method is via the mouse. It is also worth stressing that whilst the 'fly to pointer' option is probably the most intuitive method, the default 'Pitch + Roll' provides more freedom of control and is worth persevering with. If the 'fly to pointer' method is adopted then the mouse sensitivity will probably need to be raised.
10. If you're new to the game then unprovoked attacks can be inhibited by selecting the 'passive aliens/pirates' in the preferences menu. It may also be a good idea to jump to a new system as this will cause current attackers to be disengaged.

Ad Astra Quick Start Guide

The following section is intended for all those people who really just cannot be bothered to read instructions and summarizes important aspects of the game that the user should be aware of before executing it.

Essential Knowledge

1. The option screens are accessed via the 'Esc' key and allow the Input Control method to be changed, the Video mode to be altered and the user preferences to be adjusted.
2. Ad Astra supports six different control methods described in Section 2.5 of the Manual. Although the default mechanism, 'Pitch + Roll' provides very precise control of the spacecraft, it may not be the most intuitive of the options provided. If a different control method is selected then the sensitivity settings may need to be adjusted to yield the best results.
3. Deuterium is the fuel required to travel between Star Systems and can be bought via the Stock Market at space stations and city landing pads.
4. The 'space key' will pause the game and should be used when things get 'hot' since all screens and systems can be freely accessed allowing time to formulate a suitable combat, or exit strategy.
5. The 'right mouse button' will deactivate user control and allow the windows in the main screen to be accessed.

6. The help screens can be accessed via the 'H key'. These provide information describing the control keys together with weapon and spacecraft statistics.
7. If you are new to the game then you can prevent indiscriminate attacks by 'ticking' the 'passive pirate/alien' boxes in the preferences screen described in Section 2.2 of the manual. Selecting this option will not cause current aggressors to break off their attack; however it should stop any new ones from joining in.
8. The F12 key saves the game without prompting and hardly interrupts the game play – it should be used frequently. Games can be loaded via the option screen and screen shots together with time tags are used to identify particular saved games. Deleting a saved game moves it to the recycle bin and this should be periodically emptied.
9. The Auto Pilot can be engaged via the 'A' key and will cause your spacecraft to fly to the currently selected target. The following types of target can be selected:
10. Spacecraft. Selected via the 'v' key (standing for vessel) or by using the Long Range Scanners. It is also possible to left click on ships from the main screen by holding down the 'right mouse button' in order to disable mouse control.
 - Space Stations. Selected via the 's' key or from within the Solar System screen (F1 Key).
 - Planets. Selected via the 'p' key or from within the Solar System screen (F1 Key).
 - Cities. Selected via the 'o' key or from within the Solar System screen (F1 Key).
 - Any point on a planets surface. Enter to Solar System screen (F1 key) and select the required planet.

Zoom into the planet using 'Page Up/ Down' keys and left click on the desired location.

Increasing System Performance

Ad Astra will attempt to choose the most appropriate default settings by inspecting the host machines settings at start-up. However if the game continues to run slowly then the following suggestion may be of help:

1. Enter the Video options screen via the 'Esc' key, change the display mode to use a 16 bit palette (e.g. 1240x1024x16) and then press 'Apply'. This will free off considerable amounts of video memory and also mean that less information needs to be written to the video buffers. If the resulting rendering appears to be very coarse then it may be necessary to 'Save' the option and completely restart the game from windows since some video cards seem to do odd things when the palette is changed. Reducing the resolution may also help, but other options should be tried first.
2. Enter the Preferences screen via the 'Esc' key and deselect the 'Hi Altitude Detail' in the Fractal options. This should speed up rendering when in high orbit above a planet.
3. Enter the Preferences screen via the 'Esc' key and deselect the 'Hi Res Textures'. This will free off more video memory and may improve rendering performance when in close proximity to a planet.
4. Enter the Preferences screen via the 'Esc' key and deselect the 'Cloud Rendering' in the Fractal options. This will mean that fewer large objects need to be drawn and should improve performance when within a planets atmosphere or in low altitude orbit.
5. Enter the Preferences screen via the 'Esc' key and adjust the 'Min Vegetation/ Animal size' sliders in the Fractal options. This will adjust the amount of flora/ fauna drawn when in close proximity to a planets surface. Each of the options 2 -5 will take immediate effect.

Making Your First Kill and Claiming Salvage

Salvaging space wrecks is the quickest way of turning a profit in Ad Astra and if there isn't enough debris lying around then a spot of bounty hunting may be required. Follow these steps to make your first kill and claim salvage rights:

1. At a space port equip your spacecraft with 'Enhanced Long Range Scanners', 'Enhanced Short Range Scanners' and fill your missile magazine with purely destructive missiles. It may also be worth filling up your Hold with Deuterium and pre-selecting a nearby star system in the Galactic Map (F2 key) if a quick escape is required.
2. Use your 'Enhanced Long Range Scanners' to select a suitable victim. This should be either a pirate or an alien as it is not a good idea to attract the attention of the local police force. Also the selected ship should not be much larger than your current spacecraft otherwise the tractor beam will be unable to pick it up. The 'Spacecraft Statistics' in the help screens ('H' key) should be of assistance here. If you are flying a 'Taipan' then each of the following are viable targets :
 - Boomslang
 - Sabre
 - Cutlass
 - Rapier
 - Warlock
 - Gy-Raptor
 - Hornet
 - Reaver
 - Beaufighter
 - Banshee

Larger ships such as the Condor can also be picked up by a Taipan, however they will need to be reduced in size by blasting off their wings and other extremities first.

Another aspect that needs to be borne in mind when selecting a target is the number of engine clusters it possesses. Alien spacecraft such as the Warlock and Gy-Raptor support five sets of engines and if an initial frontal assault on the cockpit is unsuccessful then these vessels can be very difficult to 'disable'.

3. Undock from the Space Port, select your victim and engage the auto pilot. As you approach the ship and the auto pilot disengages you should use the Long Range scanner to find out what it's up to. If it is simply patrolling then it may be best to wait for it to launch an attack on your ship as this will give you a good chance of destroying the vulnerable cockpit leaving most of the ship intact. If the spacecraft is already engaged in combat then you'll need to attack from the rear.
4. If a frontal assault occurs then you should launch a missile when within range (the targeting sights should change color). If the missile destroys the cockpit and disables the craft (indicated by a quick burst of the 1812 overture) then you should pause the game by hitting the space bar. This will give you the chance to plan your interception course to pick up the wreckage as it sweeps past. You need to prepare to fly just over the stricken craft and engage the tractor beam by repeatedly pressing the '[' key. Once you are ready unfreeze the game and execute your planned maneuver. When the tractor beam secures its target you should hear a buzzing sound and subsequent pressing of the '[' key will indicate that the tractor beam is already in use.
5. If the frontal assault failed or was not possible then you will need to take out the engine clusters from the rear. Swing round onto your prey's tail firing all your cannons and unleashing a missile. Don't fire too many missiles otherwise you risk blowing the ship up completely or leaving very little to salvage. Once sufficient damage to the engines has been sustained then you should hear the sound indicating that the ship is disabled as described previously. The wreckage will gradually slow down and you should be able to catch up with it to pick it up.
6. Once the salvage has been secured then freeze the game using the space key as you now need to determine where to sell it. If you're in the middle of a dog fight with other aggressors then it may be best to open a wormhole via the 'W' key and enter a quieter system. If you didn't select a system while you were docked then you can do so now. If things are relatively quiet however then you should fly towards the nearest space station and once within docking distance you should release your salvage using the ']' key so that it drifts towards the station. Once within range the space station will pick it up and you should be rewarded with a salvage statement and any bounty that was placed on the malefactors head.

Ad Astra Equipment

Shield Units - A shield unit is a defense against Electromagnetic radiation and by virtue of this provides protection against Laser damage. Each Shield Unit is able to absorb 100MW of energy and can regenerate at a rate of 30KW per second. Fitting extra shield units has a cumulative effect on both these figures and as an example, four shields units are able to absorb 400MW of energy and recharge the polarizing field at a rate of 120KW/s.

Enhanced Short Range Scanners - Enhancement of the short-range scanners significantly improves the Radar that is fitted as standard to all Spacecraft by offering the following extra features:

1. Five fold increase in range.
2. Resolution adjustment.
3. List of registered aggressor vessels
4. Visual indication & audible warning of Missiles locked onto your Spacecraft

Enhanced Long Range Scanners - Enhanced Long Range Scanners extend the range of the standard item so that all spacecraft within the local star system can be tracked.

Tracking Computers - The tracking computer is an augment to the Enhanced Long Range Scanner that allows the position of the currently targeted spacecraft to be plotted within the Solar System Map. Although the device can be used in conjunction with the standard scanner its benefits are severely compromised.

Signal Interpreter - A signal interpreter is capable of analyzing the raw data from the scanners so that a comprehensive set of details concerning any targeted spacecraft can be displayed within the 'Target Ship Status' screen.

Trading Computer - The standard trading computer establishes a communications link with the cities and space stations within the local star system so that the details of available commodities can be displayed via the Solar System Map.

Enhanced Trading Computer - The enhanced trading computer replaces the standard unit by extending its range to include systems selected from within the Galactic Map.

Afterburner - The afterburner can be used to double the free flight velocity of the spacecraft by draining the energy banks of the shield units. Fitting extra shield units will increase the burn time, however the device drains energy at a faster rate as available energy increases. To activate the afterburner keep the accelerator key (i.e. '+') pressed.

Trajectory Computer - The trajectory computer is an invaluable aid to those pilots that favor the use of Rail guns rather than Lasers. The device will plot the course of the required target spacecraft and draw a cross hair to indicate where the weapons should aimed in order to hit it.

Observation Camera - The observation camera is activated/ deactivated using the 'R' key and provides rear or remote view of your spacecraft.

Debris Collector - A Debris collector can purchased in preference to a heavy cannon and is fitted to the missile launcher in its place. Four classes of collector exist which are capable of scavenging debris of increasing size. The equipment can be used to retrieve cargo canisters that have been shed during the destruction of a spacecraft or they can be used to collect mineral ore that has been scattered due to asteroid mining activity.

Debris Analyzer - An augment to the Long Range Scanner that can be used determine the contents of cargo canisters. This piece equipment should be regarded as essential if a debris collector has been fitted.

Asteroid Analyzer - An extension to the Long Range Scanners which allows the mineral composition of an asteroid to be determined.

Ad Astra Equipment List

Missile	Cost	Class	Type	Bom	ShU	Dam	Vel	Wt	Ft	Notes
Malestrom		1	AM	4			12	1	5	
Sunburst	114	1	EM		5		12	1	5	
Brimstone	113	1	DE			500	12	1	5	
Harpoon	167	2	DE			1200	12	2	7	
Energy Bomb	167	2	EM		10		12	2	7	
Tempest	195	2	AM	6			12	2	10	
Grandslam	222	3	DE			2000	12	3	10	
Dark Shadow	222	3	EM		24		12	3	10	
Cyclone	250	3	AM	8			12	3	10	
Nemesis	335	4	DE			3000	12	5	12	
Midnight	334	4	EM		32		12	5	12	
Wrath	337	4	CL			500x4	12	5	12	4xBrimstone
Cataclysm	447	5	DE			4000	10	6	15	
Energy Lash	440	5	EM		48		10	6	15	
Rage	493	5	CL		500x3	1200x3	10	10	15	3xBrim 3xHarpoon
Vulcan's Ham	561	6	DE			6000	10	10	17	
Vendetta	555	6	EM		64		10	10	17	
Fury	616	6	CL	6		500x8	8	15	17	2xWrath 1xTempest

Railgun	Cost	Dam	Ran	Vel	Wt	Laser	Cost	ShDa	HuDa	Ran	Wt
Class 1	119	7	1400	14	1	Class 1	117	20	2	4000	1
Class 2	172	10	1400	14	1	Class 2	171	40	4	4000	1
Class 3	228	14	1400	14	2	Class 3	226	60	6	4000	2
Class 4	283	18	1400	14	3	Class 4	284	80	8	4000	3
Class 5	346	22	1400	14	4	Class 5	349	100	10	4000	4
Class 6	457	26	1400	14	5	Class 6	466	140	14	4000	6
Class 7	565	30	1400	14	7	Class 7	573	160	16	4000	7
Class 8	683	35	1400	14	9	Class 8	687	180	14	4000	9
Class 9	862	40	1400	14	10	Class 9	863	200	20	4000	10

Aliens: Increase range to 1820

Aliens: Increase range to 5000

Plasma	Cost	ShDa	HuDa	Ran	Vel	Wt	Equipment	Cost
Class 1	1189	200	50	2000	20	4	Shield Units	1100
Class 2	1773	400	70	2000	20	8	Enhanced SR Scanners	2260
Class 3	2381	600	100	2000	20	16	Enhanced LR Scanners	3353
Class 4	3503	1000	140	2000	20	16	Tracking Computer	4457
Class 5	5135	1200	180	2000	20	16	Signal Interpreter	5639
Class 6	7054	1400	200	2000	20	16	Trading Computer	1173
Aliens: Increase range to 2600							Enhanced Trading Comp	11,171
							Pickup	
C1 Debris	1114	0	0	0	4	1 t	Afterburner	5558
C2 Debris	1667	0	0	0	8	3 t	Trajectory Computer	1232
C3 Debris	2205	0	0	0	16	8 t	Observation Camera	2360
C4 Debris	3364	0	0	0	16	40 t	Debris Analyzer	4548
							Asteroid Analyzer	5739

Note: Cost will change slightly per given star port.

Ad Astra Ship List

Ship	Cost	Vel	Acc	Dec	RoT	Cargo	ShA(k)	ShU	C-PM	C-GM	C-ML	C-TU
Warlock	303,419	13.0	1.0	0.6	210	45	7.7	0.8	2-1	2-4	2-1	
Mutilator	296,667	12.0	1.0	0.8	210	29	8.8	0.9	2-1	2-2 3-4	2-1	
Sorcerer		12.0	0.8	0.4	180	42	16.2	1.6	2-1	2-2 3-2	2-1	
Tornado	479,816	11.0	1.2	0.8	180	172	16.4	1.6	3-1	2-4 3-2	3-1	
Gy-Raptor		9.9	1.0	1.0	180	52	5.2	0.5	2-1	2-6	2-1	
Exorcist		9.5	0.6	0.4	120	2968	124.3	12.4	3-1	6-2 4-4	3-2	3-4
Sabre	85,767	9.9	0.8	0.4	180	16	4.5	0.5	1-1	2-2	1-1	
Taipan	104,979	9.2	0.7	0.4	180	8	5.5	0.6	1-1	2-2 3-	1-1	
Executioner		9.1	0.5	0.4	150	3977	114.6	11.5	4-2	5-2 9-4	4-2	3-4
Cutlass	114,752	9.0	0.7	0.4	150	13	5.0	0.5	1-1	2-4	1-1	
Hornet	188,010	9.0	0.7	0.3	150	19	8.5	0.9	1-1	2-2 3-2 4-1	1-1	
Banshee	134,204	9.0	0.7	0.3	150	35	4.2	0.5	2-1	3-2	2-1	
Lacerator		8.9	0.6	0.4	165	1766	78.8	8.0	3-1	6-2 8-2	3-2	3-4
Reaver	139,137	8.7	0.5	0.3	180	13	11.0	1.1	1-1	2-1 3-1	1-1	
Vortex		8.6	0.3	0.2	105	5309	108.9	10.9	3-1	4-4 6-2	3-2	3-4
Boomslang	139,285	8.6	0.5	0.4	150	11	10.8	1.1	1-1	3-2 4-1	1-1	
Wraith	198,024	8.2	0.5	0.2	120	37	15.1	1.5	2-1	2-2 3-2	2-1	
Rapier	168,857	8.0	0.6	0.3	120	26	7.0	0.7	2-1	2-2 3-2	2-1	
Beaufighter	118,057	7.8	0.6	0.3	120	9	6.1	0.6	1-1	1-1 2-2 3-1	1-1	
Dracolisk	354,119	7.2	0.4	0.2	90	105	11.9	1.2	1-1	3-2	1-2	1-4
Venom	1,126,247	7.0	0.4	0.3	75	1886	75.0	8.0	3-1	4-2 7-2	3-2	3-4
Typhon	1,285,794	6.6	0.4	0.1	90	1735	69.0	7.0	3-1	7-2 8-1	3-2	3-4
Phantasm	1,266,279	6.3	0.4	0.2	90	2927	130.0	13.0	4-1	7-2 9-2	4-2	3-4
Condor	221,491	5.4	0.3	0.2	90	54	18.0	1.8	2-1	3-2	2-1	
Albatross	1,205,169	5.4	0.3	0.1	75	2269	155.0	16.0	3-2	4-2 7-2	3-2	3-4
Raven	1,359,468	4.7	0.3	0.1	75	1678	158.0	16.0	3-1	6-2 8-3	3-2	3-4
Tyrant		3.6	0.2	0.1	66	44,980	385.9	38.6	4-1 5-2 6-1	8-2 9-2	4-1 5-2 6-1	4-6 6-2
Tusker	699,307	3.2	0.1	0.1	54	20,131	114.4	12.0	6-1		6-1	9-2
Mammoth	683,941	3.1	0.1	0.1	45	30,795	204.7	21.0	6-1		6-1	9-2
Ravager		3.0	0.2	0.1	135	10,013	453.3	45.3	6-1	9-4	6-3	6-6
Interdicator		2.9	0.1	0.1	39	19,657	564.8	56.5	6-3	6-3 9-4	6-4	6-8
Kraken	1,454,906	2.7	0.1	0.1	36	23,839	345.0	35.0	5-1		5-3	5-6
Titan	1,445,358	2.5	0.1	0.1	30	23,977	235.0	33.0	5-1		5-3	5-6
Leviathan	1,483,496	2.4	0.1	0.1	30	50,889	500.0	50.0	5-1		5-2 6-1	5-4 6-2

Note: Cost will change slightly per given star port.

Game Controls

ESC Options Menu
H Help Menu
SPACE Pause Game

Flight Controls

D Dock / Land Request
U Undock / Takeoff Request
+ Accelerate
- Decelerate
G Gain Altitude (Autopilot mode)
Q Yaw / Roll Anti-clockwise
E Yaw / Roll Clockwise
L-Arr Yaw / Roll Anti-clockwise
R-Arr Yaw / Roll Anti-clockwise
A Toggle Autopilot
W Open Wormhole to selected Star System
1 - 5 Fire Missile from Magazine 1- 5
[Activate Tractor Beam
] De-activate Tractor Beam

Information

L-Alt Show Labels
L Toggle Long Range Scanner Window
M Toggle Message Window
C Toggle Close Contracts Window
R Toggle Close Observation Camera (option)

Stock (Docked)

S Stock Exchange
E Equipment
O Ordinance
G Light Cannons
B Heavy Cannons
Y Shipyard

Facilities (Docked)

W Workshop
F Weapon Filters
V Missile Loaders
U Undock

Contracts (Docked)

L Long Range Scanners
M Messages
C Contracts
P Police
N Royal Navy
H Help

GALACTIC Map

Control Method 1: Lock to Selected System

Pg U Zoom In towards Selected Star
Pg D Zoom Out away from Selected Star
Arr U Rotate Upward about Selected Star
Arr D Rotate Downward about Selected Star
Arr L Rotate Anti-Clockwise about Selected Star
Arr R Rotate Clockwise about Selected Star
R Mou Re-Lock to current Star System

Control Method 2: Unlocked

Pg U Move Forward
Pg D Move Backward
Arr U Rotate Upward
Arr D Rotate Downward
Arr L Rotate Left
Arr R Rotate Right

SHIFT Slow Movement
Rr Mo Close Selected Star Window

Function Keys

F1 Toggle System Map
F2 Toggle Galactic Map
F3 Toggle Ship Info
F4 Toggle Target Ship Info
F5 Toggle Tactical Screen
F6 Toggle Spacecraft Design Screen
F8 Toggle Star System Design Screen
F9 Toggle Animal Design Screen
F10 Toggle Tree Design Screen
F11 Toggle Texture Design Screen
F12 Save Game

Targetting

V Target Vessel (Spacecraft)
S Target Space Station
J Target Debris (Junk)
T Target Asteroid
P Target Planet
O Target City on Current Planet

(Adding SHIFT Selects Nearest Target)

Miscellaneous

< Take Screen Shot before Windows drawn
> Take Screen Shot after Windows drawn
SHIFT-R Mo Turn off Ship Control

SYSTEM Map

System Controls

Pg U Zoom In towards Selected Planet
Pg D Zoom Out away from Selected Planet
Arr U Rotate Upward about Selected Planet
Arr D Rotate Downward about Selected Planet
Arr L Rotate Anti-Clockwise about Selected Planet
Arr R Rotate Clockwise about Selected Planet
R Mou Re-Lock to Central Sun / Close Planet Window

Tactical Screen

Pg U Zoom In towards Ship
Pg D Zoom Out away from Ship
Arr U Rotate Upward About Ship
Arr D Rotate Downward About Ship
Arr L Rotate Anti-Clockwise About Ship
Arr R Rotate Clockwise About Ship

Selected Ships

RENDEZVOUS Assemble Squadron Formation
REPAIR Go to Nearest Station for Repairs
ATTACK Attack Current Target
SALVAGE Salvage Target Wreckage