

MLU Official Guide

Version: "Snow Globe V2" edition.

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[A] Guide Introduction

Here is a basic guide for the game Motherload Unlimited. I try to make sure that there are no spoilers in this guide. It is just a basic run down of how to play and what MLU is. This guide will be updated as newer versions of MLU comes out. **All data is subject to change.**

December 29, 2007 - Added new control information to the Basic Controls section.

Changed the Petroluem Refinery information in the Upgrades Section.

December 28, 2007 - Now with this guide evolving and becoming official. Here is a toast to the new year, 2008. May MLU live on forever and a special thanks to those that make this game. Alex and Seth, great job out there.

Added table of Contents and fixed more spellings mistakes. Also added new information.

[B] MLU History

MLU stands for Motherload Unlimited. It is based on a fun flash game called Motherload that was created by Skye. MLU was originally designed by Alexxz4.

1.5 years ago, Alexxz4 began work on a Motherload remake using game making software called GameMaker. The game had a total of 7 upgrades; the ground was 20,000 ft. (2,000 blocks) deep and 600 ft. (60 blocks) wide, it had about 40 minerals, square earth blocks and a weak boss. A few months later Alexxz4 decided to post it on the Xgen Motherload forums calling it Motherload Unlimited. It caught on quick first achieving the acronym MU but later MLU became more appropriate as the L stood for "load".

In August of 07, Alexxz4 began work on a Java version of MLU. After some research on the Java language, Alexxz4 wrote MLU's basic structure in about 7 days. It had primitive graphics and various bugs. The original MLU is still available for download at <http://mlu.4shared.com> (MLU 1). In October of 2007, Alexxz4 created a private forum for further support and development of MLU: <http://mlu.acebaord.com>.

Then Alexxz4, with the assistance of Sethness and Thescorpion420, continued the project creating the "Plastic Dashboard Jesus" edition. This version was a major step up in graphics with almost all the graphics being redone. Then came "Pumpkin Patch" edition and now the "Snow Globe" edition.

[C] MLU Now

Currently MLU is constantly under development. New updates with better features are released every 2-3 months. The development team, consisting of Alexxz4 (Programmer, Game Logic), Sethness (Graphics Editor) and Thescorpion420 (Database Support), are currently hard at work. With new ideas always being introduced into the game there is always promise of new versions coming out.

[D] MLU vs. Xgen ML

MLU was based on Xgen Motherload but it is a conceptually more improved version of Xgen Motherload. MLU offers more minerals, upgrades and adventures. To get a better understanding of what MLU offers here is a basic comparison of Motherload Unlimited and Xgen Motherload.

-Ground Map Size

Xgen ML width: 30 blocks, height: ~500 blocks
MLU width: 48 blocks, height: 3000 blocks

-Minerals

MLU offers a lot more minerals than Xgen Motherload. In fact, there are more than 40 minerals in MLU but not just ordinary "junk" that fills up your cargo bay. Certain minerals in the game have special features.

-Upgrades, Upgrades, Upgrades

MLU offers 7 upgrades in 8 categories. Battery, Fuel Tank, Drill, Radiator, Cargo Bay, Bio-X Radiation Shielding, Engine, and Hull. Each with their own important function.

-Offline Game Play

MLU does not require an internet connection to play. This allows the game to be more accessible. Though you do need internet in order to download the game and to submit your score to the Online High-score

Table.

-Offline Saving

Recently (Summer-Fall 2007), Xgen server was malfunctioning, resulting in problems with logging in onto Xgen Motherload. MLU does not face those problems. With the ability to save offline you don't have to worry about losing your saved game (Unless if you cheat). It will always be there right from where you last left off. Don't worry about the save file size either, it is only 147 KB. You can have as many saves as your hard drive can handle.

-Bigger Screen Size

Xgen Motherload: 550x400

MLU: 800x600

Bigger, more stable screen gives a better playing experience.

-Runs at Lower CPU

This is important to a game. This can determine if your computer can handle the game and lag. Remember, different stages of the game can run differently. The CPU depends on the computer but on average MLU runs at about 3 times lower CPU than Xgen Motherload.

-Technical Data

The game is an applet written in java and uses a HTML page (a browser) to run it. The game is played offline. The game data is saved to a file that is located next to the HTML page and the JAR file. Off course, java has some disadvantages (compared to C++ for example). Sometimes its difficult to get the game started because of the different version of java runtime environment (JRE) and different settings of your browser. Also, java graphics can be slow, resulting in flickering and slow load time. Of course, the results can vary depending on your operating system, processing capabilities and graphics card. Overall, the game should run smoothly.

[E] CPU Usage

This shows how much CPU usage it takes to run MLU. **Results will vary on your computer.** If you wish to submit how much CPU usage it takes to run MLU on your computer head to the MLU forum found here <http://mlu.aceboard.com>.

Submitted by Pariah.

My CPU: Intel Celeron CPU, 2.60GHz

My RAM: 2.59GHz, 512 MB

Web Browser Used: Internet Explorer

Approx. Minimal Memory Usage: ~65,500 k, ~63.9 MB

Approx. Maximum Memory Usage: ~65,700 k, ~64.1 MB

Approx. Memory Usage: 56,200 ~ 71,700 k, 55 ~ 70 MB

Approx. CPU Usage: ~15%

[F] Background Story

You are Hired by a Martian mining company to dig out rare minerals hidden beneath the surface of Mars. You dig out these minerals for your own personal profit. Then, you use this profit to purchase upgrades and items for your digger. Frequent transmissions guide you on your way and introduce you to game's features.

There is a lot to explore underground with many minerals waiting to be dug up. It is up to you to use your strategy skills in order to obtain these minerals. Various upgrades, items, and secrets will help you along the way. Be careful, Mars can be a dangerous and unstable place.

[G] Quick Walkthrough

First you need to download the latest version MLU which can be found here: <http://mlu.4shared.com>

Once downloaded, Un-Zip the file by right clicking and choosing Un-Zip. Next, locate the HTML document inside. Open the HTML document and your Internet Browser will pop up. The game will then start to load. After about 10-12 seconds the game should be loaded (this should be faster if the game is launched the second time).

Once loaded, you will see three key things: "Start a New Game", "Load a Game", and "Enter a Cheat". First, click on the screen to activate control then, using the arrow keys select "Start a New Game" and type in your desired save-file name (The save-file name must be at least 3 characters). In order to load a game, type in the save-file name that you used to start your game. You have to be sure that you saved while using that save-file name or you may not load it. To find your saved files, they are located right after the .jar file. You may also enter a correct cheat in the cheat text box. Only one cheat, the latest entered, is active for the current session. Don't go asking for cheats unless if you are prepared to send 200,000,000 Martian dollars.

When you are satisfied with your desired save-file name press Enter and you will find yourself on Mars. Start heading to the right till you see Home Base. From here you can buy new upgrades, sell your minerals, and post your high scores. Now since you know where home base is, it is time to mine.

Press the Down Arrow to dig out a peace of dirt. You'll get a message that will introduce you into the game and give you a few tips. From here I believe you know what to do. Though, if you ever do run into trouble the MLU forum is the best place to get your questions answered. The link can be found here. <http://mlu.aceboard.com>

[H] Basic Controls

[H1] Game Controls

Up Arrow:	Flies your vehicle upwards.
Down Arrow:	Engages your vehicle to mine the ground below you.
Left and Right Arrow:	Moves your vehicle left or right. You cannot

mine left or right using these arrow keys.
Space Bar: Depending on which direction you are facing, when you press the space bar your vehicle engages mining left or right if your drill is not broken.
Shift: Pressing shift turns the jet booster on and off.
M: Shows/Hides the cargo and supplies inventory.
Also pauses the game.
Option to turn on/off music and sound effects with a Left Mouse Click.
+/-: Change the game speed.

[H2] Home Base Controls

Arrow Keys: Use the arrows keys for menu navigation.
Enter: This will switch you over to a different menu. Like the Online Score Board.
Space Bar: Used to buy items, repair the digger, and sell your minerals and other things.
Esc (Escape): This will exit you out of the Home Base.
Left Mouse Click: In the Fix'N'Fill, Upgrade Shop, and Gadget Shop with a Left Mouse Click to select an item then another Left Mouse Click to purchase the item.

[H3] Using Items

CTRL + Arrow Key: Use Tractor Beam.
Z: Use Dynamite.
X: Use TNT.
Q: Use Teleporter 1.
W: Use Teleporter 2.
A: Fix your ship's Hull.
S: Fix your ship's Drill.
C: Switches Mineral Processor on/off.
1: Use Sonic Bomb.
2: Use Ice Bomb.

[I] HUD

HUD or Heads Up Display are all your gauges, measures, and well you know. Here is a quick guide for the HUD used in MLU. Starting from the far left:

-Time

You'll see the Days, Hours, and Minutes you have spent in the game. The time is in MST (Mars Standard Time).

-Hull

This shows the damage on your hull. If your Hull reaches full red, you may want to have it repaired or take your chances.

-Drill

This shows your Drill health. If you see no red, you need to have it fixed or use alternative ways of mining.

-Radiation

You do not want to have this bar all red. Radiation is lethal for you.

-Temperature

The deeper you go, the hotter it gets. Make sure that this bar is not all red.

-Cargo

Shows how much minerals you have in your cargo (lbs.).

-Engine

There is a lot of pressure underground, making soil very hard to dig through. If this reaches over 100%, you are toast.

-Fuel

Do not, I repeat DO NOT let this reach 0. If you do, your ship loses all power and you'll be unable to move.

-Battery

This shows how much Mega Watts (MW) of power your battery has. 1MW = 1 L of fuel. There are numerous ways to charge the battery.

-Cash

Shows the amount of money you have.

-Depth

Shows your depth in feet.

[J] Upgrades

Upgrading is a very important part of MLU. Without upgrading properly and effectively can cause you to lose the game. Don't expect it to be easy. Try some variety; if you lose then you learn from your past mistakes.

There are currently 7 upgrades in 8 categories. They include Fuel Tank, Battery, Drill, Radiator, Cargo Bay, Bio-X Radiation Shielding, Engine, and Hull. Each is with their own important function.

-Fuel Tank

A Fuel Tank is very important. It determines how much energy you can spend mining and moving. If you run out before reaching Home Base, you lose.

-Battery

Using certain gadgets energy from minerals can be extracted and put into the battery. It is like your second fuel tank.

-Drill

The Drill allows you to mine the Martian soil. It determines how much soil you can mine. Also determines if you can drill through obstacles. If your drill reaches 0, do not worry, you will have to return to Home Base to get it repaired or use a Drill repair if you have one.

-Radiator

Mars gets hot the deeper you go. The Radiator keeps your engine and the cabin cool. If you wish to go deeper, upgrade your Radiator. Remember,

the better the radiator, the more fuel it consumes. A better radiator provides a higher limit of tolerated temperature.

-Cargo Bay

The bigger your Cargo Bay is the more minerals you can hold.

-Bio-X Radiation Shielding

Radiation Shielding protects you from the radioactive minerals onboard. They tend to be worth more.

-Engine

A better Engine is required if you wish to dig deeper. The Mars soil gets harder as you go down so u need more torque.

-Hull

Hull gets more important as you get deeper underground. It determines how much damage you can take.

The Gadget Shop has the following gadgets: Coal Burner, Petroleum Refinery, Natural Gas Burner, Nuclear Reactor, Nuclear Reactor X, Jet Booster, and Tractor Beam.

-Coal Burner

Allows you to burn Coal to charge your battery. 1 Coal = 10 MW.

-Petroleum Refinery

Allows you to refine Petroleum into energy to charge your battery. 1 Petroleum = 20 MW.

-Natural Gas Burner

Allows you to burn Natural Gas to charge your battery. 1 Gas pocket = 50 MW.

-Nuclear Reactor

Takes radioactive material and converts it into energy to charge the battery.

-Nuclear Reactor X

Takes radioactive material and converts it into energy to charge the battery. Nuclear Reactor X is twice as efficient as Nuclear Reactor. The following minerals can be used with both Reactors:

	Nuclear Reactor	Nuclear Reactor X
Thorium:	100 MW	200 MW
Uranium:	150 MW	300 MW
Plutonium:	250 MW	500 MW

-Mineral Processor

When Mineral Processor is on, the minerals are converted to energy. Otherwise, they are stored in your cargo bay.

-Jet Booster

Allows you to go up a lot faster, but consumes more fuel and strains your engine more.

-Tractor Beam

Allows to mine in all four directions from you without removing the

soil. Other secrets are for you to find out.

[K] Items

Items are used to help you along the way while mining. They can be useful when used wisely. They include Dynamite, TNT, Teleport 1, Teleport 2, Hull Repair, Drill Repair, Sonic Bomb, and Ice Bomb.

-Dynamite

Blasts a hole of 30 ft in diameter.

-TNT

Blasts a hole of 50 ft in diameter.

-Teleport 1

Use this to teleport back up to the surface. (Warning: Does not work under 8000 FT.)

-Teleport 2

Use this to teleport back up to the surface from any depth.

-Hull Repair

Repairs 250 hits of damage to your Hull.

-Drill Repair

Completely repairs you Drill.

-Sonic Bomb

Buy one and find out.

-Ice Bomb

Buy one and find out.

[L] Tables

[L1] Mineral Chart (0-10,000 ft, difficult level)

Name	Weight, lb	Price, \$	Rx	Range, ft
Coal	40	15		0-5000
Petroleum	50	40		0-5000
Iron	30	30		0-5000
Copper	25	50		0-5000
Quartz	15	75		0-5000
Lead	80	90	8	0-5000
Bronze	30	120		200-7000
Silver	30	250	3	700-7000
Gold	30	750	5	1000-7000
Palladium	25	1000	30	2400-7000
Cesium	20	1250	25	2000-7000
Platinum	35	1500	30	3400-7000
Opal	5	2500		4000-10000
Topaz	5	3000		4400-10000
Emerald	5	4000		4600-10000

Sapphire	5	5000		4800-10000
Ruby	5	7500		5000-10000
Diamond	5	12000		6000+
Amazonite	5	20000		7000+
Thorium	35	25000	100	6000+
Uranium	30	30000	200	6400+
Plutonium	25	50000	500	6800+
Moonstone	1	100000	300	7500-10000
Starstone	1	200000	1000	8000-10000
Sunstone	1	300000	2000	8500-10000
Kryptonite	1	500000	5000	9000-10000
Dark Matter	1	1000000	10000	9500-10000

[L2] Upgrades Chart

Name	Price, \$	Amount	
Engine		Power, HP	
Stock	0	100	
Small	300	250	
Medium	2000	400	
4-cylinder	10000	600	
6-cylinder	30000	750	
12-cylinder	100000	1000	
Turbo-X	500000	1500	
Fuel Tank		Volume, L	
Stock	0	30	
Small	200	50	
Medium	1000	100	
Large	3000	200	
Extra Large	10000	500	
Gigantic	50000	1000	
Super	200000	2000	
Cargo Bay		Volume, lbs.	
Stock	0	500	
Small	1000	1000	
Medium	3000	2000	
2-Chamber	10000	3000	
4-Chamber	40000	4000	
Large	200000	5000	
Gigantic	1000000	6000	
Radiator		Max. temperature	Fuel consumption
Stock	0	50	0.03
Small	500	100	0.06
2-Turbine	2000	200	0.09
3-Turbine	10000	300	0.18
Eon	50000	400	0.3
Freon	300000	500	0.6
Liquid Nitrogen	2000000	600	0.9

Hull		Max. damage, hits	
Stock	0	5	
Bronze	400	10	
Steel	2000	30	
Tungsten	7000	50	
Diamond-Coated	15000	200	
Kryptonite	50000	600	
Energy-Shielded	200000	1000	
Bio-X Shielding		Max. radiation, Rxs.	
Stock	0	10	
Iron-Coated	1000	50	
1" Lead	5000	200	
3" Lead	20000	500	
5" Lead	100000	2000	
Energy Deflector	500000	10000	
Super Shield	3000000	60000	
Drill		Drill Life	
Stock	0	50	
Steel	1500	100	
Carbide	6000	200	
Tungsten	30000	1000	
Ruby	150000	2000	
Diamond	700000	5000	
Nano-Tube	5000000	10000	
Battery		Energy, MW	
Stock	0	50	
Small	400	100	
Lithium-1	1000	400	
Lithium-2	10000	1000	
Cadmium	50000	2000	
Hydrogen-Cell	1000000	6000	
Kryptonite	10000000	10000	

[L3] Depth Chart

Depth	Temperature	HPmin (dig)	lb. fuel/block	DL/block	DL/granite	DL/marble
0	-8	58	0.53	1.01	102	254
200	2	75	0.68	1.07	108	322
400	12	92	0.84	1.13	114	340
600	22	109	0.99	1.19	120	358
800	32	126	1.15	1.25	126	376
1,000	42	143	1.30	1.31	132	394
1,500	67	185	1.69	1.46	147	439
2,000	92	228	2.07	1.61	163	485
2,500	117	270	2.46	1.76	178	530
3,000	142	312	2.84	1.91	193	575
3,500	167	355	3.23	2.06	208	620
4,000	192	397	3.61	2.21	223	665

5,000	242	482	4.38	2.51	254	756
6,000	292	567	5.15	2.81	284	846
7,000	342	651	5.92	3.11	314	936
8,000	392	736	6.69	3.41	344	1,026
9,000	442	821	7.46	3.71	375	1,117
10,000	492	905	8.23	4.01	405	1,207
11,000	542	990	9.00	4.31	435	1,297
12,000	592	1,075	9.77	4.61	466	1,388
13,000	642	1,159	10.54	4.91	496	1,478
14,000	692	1,244	11.31	5.21	526	1,569
15,000	742	1,329	12.08	5.51	557	1,660
16,000	792	1,414	12.85	5.81	587	1,749
17,000	842	1,498	13.62	6.11	617	1,839
18,000	892	1,583	14.39	6.41	647	1,929
19,000	942	1,668	15.16	6.71	678	2,020
20,000	992	1,752	15.93	7.01	708	2,110
22,000	1,092	1,922	17.47	7.61	769	2,291
24,000	1,192	2,091	19.01	8.21	829	2,471
26,000	1,292	2,261	20.55	8.81	890	2,651
28,000	1,392	2,430	22.09	9.41	950	2,832
30,000	1,492	2,599	23.63	10.01	1,011	3,013

[M] Credits

Created by Pariah. Assisted by Alexxz4 and Sethness.