MANUAL for maxr 0.2.8 ½

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Contents

Intro

This guide is for people that don't know the original games M.A.X. and M.A.X 2. MAXR is a remake of the first MAX game released 1996 by Interplay with the main target to get a working network games based on TCP/IP (e.g. over the internet). This game is written for all the fans of old school strategy gaming out there.

Unlike most strategy games you may know is MAXR a turn based game. This doesn't however necessary mean that you are doomed to wait and fall asleep while your opponents do their turns. In fact with default settings all players do their moves at the same time. This is called "simultaneous mode". Keeping in mind that the turn ends clock starts to race to zero when the first player end the turn by using the "end" button. In this situation MAXR can become almost as fast and stressfull like it's realtime relatives.

Another point about MAXR is that this is actually a strategy game. You don't have to care about resources only. While building, upgrading and conquering, you have to keep your eyes on munition and materials. Buildings have to be connected at least to power sources and your tanks won't be able to fire at pointer without ammo. Also keep an eye on your opponents doings. All units in MAXR are the same but unlike in other games you can upgrade each unit absolutely individually. Make sure to counter your pointer technical advances in time before they outrun you with their researches depending on their current strategy.

Figure 1: Concret Block, Anti-Air-turret and ari

To achieve your goals a huge fleet with various vehicles is offered to you. You won't need all - it's up to you what you actually want or need. Vehicles don't get out of fashion since it's up to you whether and what you upgrade. Go for long range missiles destroying your pointer before they can even see you or take off to the skies and force your opponents into defence with the most powerful bombers ever.

1 1. Basics

Before you join a game you have to select your landing units. This can be considered as your HQ after your faction drops down to the planet. Choose wisely, since every mistake or miscalculation in the early game stage may lead to sudden defeat. You may also buy some upgrades before the game starts with credits you didn't use on vehicles.

This is the hangar menu. Here you can buy and upgrade your units you want to start with. On the upper left you can see the currents units information picture followed by details and optional descriptions. The details offer upgrade options as well. Simply make use of the arrows behind each values. To upgrade units, that can not be purchased before the game starts, switch into upgrade mode using the button on the lower right. On the right side you see all units that can be purchased or selected. Buttons below the window provide you with filters. That way you can display only ground,- air-, or seaunits. The other two buttons display only buildings or fighting units (including turrets as well).

In the upper middle you can see your current selection. Below you see two bars. One is your credits amount in gold. Each unit or upgrade costs gold. Also does the cargo. When a constructor is selected cargo (materials) can be bought by using the arrows below the bar or by simply clicking on the bar directly.

As default units you have: one constructor, one engineer and one surveyor. Depending on the start credits, you can buy some units (or not). It's normally a good idea to buy some basic defending units and some more constructors and pioners.Make sure to load your constructors with materials or you have to wait some turns until you get some material from your mine. Especially scouts can be a real pain at the beginning of a game.

When you're ready hit the "Done"-button to join the game.

Now you'll have to choose a landing position. Take up time until you select your landing position!REM

Keep in mind that your strategy depends on this step as well as the step before. If you are going for the biggest sea power on the map you should maybe start close to water but this also higher the risk, that you have to build mines on the water. Keep in mind that opponents might start really close to you as well. If you want to be left in peace for some turns you might consider a small island (remember water + mines. . .). Starting in the middle of the map might put you between two other opponents crushing you in the middle later. Starting in a corner may result in a very long way to reach your enemy. So study the map carefully and make your decision depending on your strategy, starting units and even on your opponents. When done simply click on the point where you wish to start.

No big deal for you to finde a good location - right? You found a nice place to start and now you may have to wait until all players selected a landing position. Furthermore is it possible that you have to reselect you landing coordinats. This happened if at least two players landing positions are to close. Finally your landing ship will go down at the selected position. A mining station will be build on the spot you selected to provide you with some basic recourse. Additionally you'll have a power generator to be able to use your mine. Your HQ units will start spread around the mining station.

2 walk-through or the first game

2.1 The GUI

Finally, when the game itself starts, you'll see your base depending on your decisions you made before. Let's go for a small walk through the functions. As you can see, the GUI is very simle. There are two major parts, within the brown collor. This is more or less all static content of the game. The dynamic part (you main time you'll be there) is in the pictur at the moment coverd with the green color, your main mine and the untis you selected in your HQ.

2.1.1 Static GUI (general)

The left side is split up in three parts. The upper part shows details about the current selected unit including the most important informations like health, action points, munition and so on. The vehicle's video can be paused if the spinning irritates to much. Just use the right flanking Play or Pause butten or klick in the image itself.

The middle part holds dialogs and settings for keeping an overview of the map and game itself. Click around and try it for yourself. The most useful buttons are Scan, Range, Fog, Chat. Additionally all this buttons can be (de-)activated with hot-keys...

The bottom part contains the mini-map. This mini-map is good for a 'global overview'. Right flanking you see (FIXME : P-button and Militarry unit-button and 2×-Button + description)

2.1.2 Static GUI (more details)

In the top-left corner you'll find the buttons "Files" and "Settings". (FIXME: description needed) In the top-right corner you'll find the "End"-button. You have to use the "End"-button (or sipmly press Enter/Return on your keyboard) to end the current turn and to delimitate the time that your enemies still have to finish there work for this turn. Righthand of this nice "end"-button you have two boxes: the first one indicates the current turn number and the second one is as long as noone hit "end" empty. After the first player hit "end", you'll see a countdown in this box. After all players end the turn or the countdown reached zero, the turn ends immediately.

On the middle-bottom position you have two more boxes. The first contains two numbers seperated with a "less"-sign. This box shows you your currents pointer position on the map's grid. The other box contains some informations about the unit that is currently under your pointer if there is one (including the owner of it). (FIXME: some more detailse needed??)

2.1.3 Dynamic GUI (the main window)

You may notice that there is nothing like your amount of materials or build- or attackbuttons. To request such informations or actions simply click on the unit that has something to do with the desired action. For example if you want to know how much materials you have simply click on a mining station or a storage. Double clicking on a unit will pop up it's context menu. To build something select a construction unit or factory and choose the build button in the context menu.

To scroll the map simple move the pointer to the borders of the screen, or use arrows or click on the mini-map as you may know it from similar games or klick and hold the right button and move your mouse around. Let's do something already. In the middle of the screen you'll find your first mining station connected to a power generator. As default setting, your mine is working, but you can also stop it and start again. For sure there is no reason to turn off your mine, else you won't get more materials and so you won't be able to increase your base size. As you may also notice the power generator beside the mine is working too. Nearly all buildings in MAXR request energy to work. Energy is provided by generators that need fuel to operate. Your mining station mines fuel as well.

Let's build something... locate the engineer and check out how much material he is currently carry around in the details (field below the vehicle's video). Select Build from the context menu. The build screen pops up.

The engineer is capable to build small buildings (none of this buildings need energie even better you can build power genrators with this unit too). Furthermore you can build various small buildings including defence types and structures like roads and bridges and storages. The menu works very similar to the hangar menu. Search and choose the fuel tank in the menu on the right side. In the lower middle you can select the building speed. Notice that constructing at higher speed increases the material need for the building significant. Leave the speed at Build x1 and hit the Done button. The engineer starts building a fuel tank at his current position. The building will be finished in two rounds.

Here is something special for MAXR. Each building has to be connected to at least a power source to work. To connect buildings you have to build connectors. A connector can be considered as a big pipe allowing materials, fuel, energy and even gold to flow. Only buildings connected to other buildings can receive things they need to function proper. In our example you have to connect the fuel tank to the mining station to store unused fuel each turn. Unneeded materials of any kind are lost if they can't be stored! A building is however automatically connected to a building next to it. This is an excellent time to start searching for more resources. Locate your surveyor and select it.

You may notice some circles on the map now. This is the Survey mode, that can be accessed clicking on the Survey button over the mini-map as well. While you move your surveyor around, he scans for minerals so move this unit a little bit around and see what happens.The circles with colours indicate resources. White is for raw material. Green is for fuel. Yellow is for gold. The amount is displayed directly on the circle. Blank circles represent no resources at a field. Resources usually group in fields that have to be found first.You don't have to move the surveyor around on your own all the time. Open it's context menu and choose the Auto option. The surveyor will now start to search for resources automatically. Watch him doing so and check your Survey map regularly to identify good spots for mining stations. If you have found some materials, you can build a mining station upon this to access the resources.

Mining stations (we want to build on on the new found reources) and other huge buildings (2×2-fields), can only be build by a constructor. This vehicle is very important at the beginning. If you lost this unit by a roaming scout you'll be defeated. Without him, you can't build any other vehicle factory (an no new constructor).

When a good spot for a mining station is found simple drive with the construction vehicle to the spot. Keep in mind that huge buildings need more space and you only get the material under the mine. Build a second mining station to gain more resources. While your build this mine, you can connect it using connectors to your first station. Also build another power generator to power the second station as well. You can also built the power generator next to your new mine first and connect it afterwards to your first mine. If you do this, you should check if the new mine able to mine the needed fuel for the power generator.

End the turn if you're done with all your actions for this round. Each round you'll gain some resources. Action points will be refreshed and units built. When a building is finished a green box around it will start to flash. Click on the construction vehicle and move it to an exit point. The new building will appear. Notice that the constructor's materials will decrease with every building. To reload a construction vehicle's cargo use the X-FER command available from storages and mining stations. The vehicle has to stand next to a connector or a building connected to the material source for a transfer.

After some turns you should have a small base established. Make sure you have enough energy for all your buildings. Click on a generator to find out. Also make sure you have always enough fuel for your generators. A generator without fuel will stop working. Buildings depending on that generator will stop working too. This can cause a chain reaction stopping even your mining stations.

To check your resource income open the allocation menu from the context menu of a mining station.

Each mine can dig max. 16 resources each turn. If a resource spot provides more than 16 resources you have to choose the preferred resources manually. The allocation menu represents all mining stations connected to the current base. Increase or decrease sliders to select what resources should be mined for.

With this knowhow you should now be able to expand your base with factories. Construct defence turrets and consider roads for your vehicles to reach the frontline faster. Make sure to connect buildings using connectors with your base.

2.2 Battle

2.2.1 Special Units and what's important

There are some special units like the infiltrators. These human units can only be dedected from other humans like the infantery. After they misdo ther work they'll be seen from your enemie too. You can use this unit to spy your enemy out, disable units or even steal an enemy vehicle by hacking it. Make use of infantery to detect enemy infiltrators threatening your faction. Infiltrators can also gain experience advancing their chances on success for disabling or stealing. There are more stealth units like the APC (as long as it under water) or the submarine. Both can be detected and attacked by a corvette. Bombers and other submarines can also attack submarines and APCs after you have detecd this hidden unit.

Remember that submarines will be visible for your enemy if they launched their weapon. To hide it again you have to end the turn AND (logical and!) you changed their position in the next turn. Units don't have to be seen or detected to get hit by a lucky fired shot. You can always guess that an enemy is around and cover a field with manually fire – devastating for mines or infiltrators with e.g. a cluster since a cluster will damage several fields around the targeted hot spot as well. (FIXME sense of last sentence - sorry i don't get it [nonsinn])

2.2.2 Prepare your units for a fight

After some turns you played, your enemy shows up and claims the planet for himself. Luckily you was able to built some military units too. Furthermore you'll be happy to own some credits which you meanwhile produce every turn too. So it's

normally a good idea to improve your basic units a bit before you attack him or just for defend reasons. More hitpoints and armor or simply more attack. This can higher your chance to win the fight (and later maybe the whole war).

Each unit is a specialist in something. Whether fast, strong or destructive depends on it's values. Each value can be upgraded individually. It's completely up to you and your strategy what style of combat you're going for – and whether your opponents plays his part too.

Keep in mind that your enemy will probably advance his favored units depending on his strategy too. For example a bomber with increased armor and hitpoints can easily attack and destroy a default Mobile-Anti-Aircraft. Be prepared for surprises and cover weak points in your defence as soon as possibel. Normally it is also good to carry around a repair unit and a material truck too. So you can repair and refill your vehicles in action.Try to have unique units on the battel field!

2.2.3   Start an attack

Short before you attack you enemy, you should check his untis ability. Use the "Info" dialog from the context menu to see the current setting of his unti. If this is a default unit (for his clan), you'll be able to read "MK I" in the top left corner image and in the box on the bottom of the main window (the boxes with the information of untis under your pointer). After he upgraded his unit(s) the Roman numeral increase. You can display each units scanning and firing range on the map as well. To do so simply click on the buttons "Scan" and "Range" in the middle left part of the static GUI.

To issue an attack simply select one of your fighting unit and click on an opponent in reach. Depending on the units range and weapon type it will attack the opponent automatically. Keep in mind that you have to see your enemy to attack his units. Use scanners and/or scouts to find your enemy and his long range missile untis (launcher, cruiser crawler) and destroy this.

Some units can't move and fire in the same turn. Others can always fire a shot and the third kind can move and fire (depending on how many shots and how far it moved - just have an eye on the "Shot" images in the units overview). Each shot takes munition that has to be refilled in time. The ability to attack an enemy depends on the weapon type too. Most units can't attack air planes like bombers others can only attack planes. You'll find out about this quickly and by reading the unit descriptions carefully. This result in a knowledge which unit you maybe need in this game for your way of gaming. NOTE: most players dislike rush-attacks so talk about this point before you start a game.

2.2.4   Damage calculation

Calculation for damage is done really simple. Take the attack value, subtract the targets armor and you'll get the hitpoints removed from your target. In MAXR warfare is completely mechanized. Your unit will always hit the weakest point of your enemies. Neither wind nor camouflage will have any effect on this. To see how much damage can be issued simply check the attack pointer itself. While holding the pointer over an enemy unit you can read from the pointer's health bar how much damage your shot will issue.

3   Multiplayer

Well, this is what MAXR is all about. Bored with the AI or done with unstable IPX games in M.A.X.? Let's play against human opponents. Simply start MAXR => Multiplayer => TCP/IP Host or TCP/IP Client. One of you have to Host the game all other player can use the Client.

1. The Host should as first step us the "Start Host" button to allow other players to connect to him. Afterwards he has to select a planet, set up the Options or simply load an earlier game. Note: you can use the chat window too and ask for map ideas nstuff. Your IP-box contains only a "-" and that's OK.

2. The client just have to insert the right IP and Port, select a Player name maybe change the Color and finally hit the red circle behind his nick (under the color-selection) and this turnt into a green circle as a sign that you are ready and happy with all settings. If the Host change some settings you have to klick the read circle again...

3.1   LAN

Basic steps as before described. The IP for the clients is the Host's PC-IP. Furthermore it should work out of the box, nothing special is to configurate. You just have to be sure, that all using the same Port.

3.2   Online game

As long as we don't have a lobby (to expensive for the low number of gamers) one of you have to Host the game or drop in the IRC and ask for a game on the "dedicated server" AND stay until you have an answer (no 24/7 support!).

To Host a game by our own, you may have to configure your router and (normally) your firewall too. Afterwards you must find out our public IP addrees and share this IP with your friends (after a Net-Split you'll normally have another public-IP. The final 'magic' is the same as mention above.

3.3   My IP??

You can find out your computer's IP by issuing the command „ipconfig" on windows. Usually it will report something like 192.168.1.*. For a LAN game you sipmly share this IP with the other players. To Host Online, connect to your router's admin panel (usually with http://192.168.1.1 or something like that depending on your local subnets IP area in your webbrowser) and map the default port 56800 for MAXR to your local computer. TCP/IP is enough – there's no need to map UDP too. Make sure that no firewall on your local computer blocks MAXR or the port 56800. Your public IP can be detected by websites like http://whatismyipaddress.com/ . Share this IP with your friends when the server is running.

As mention above, you'll be now able to Host a Multiplayer game. Just keep in mind that you first have to "Start Host" before anybody wouly be able to connect to your game

3.4   Host options and some othe stuff

The hoster is able to Choose Planet (map for the match). Important: you won't be able to share original maps! (It would be a crime!!). Furthermore you are able too set some Options for the game. Remember that if you want play on a original map, all players have to have the selected map installed. Random free maps should be downloaded automatically from the host. Additionally everyone of you should play with the same (SVN) version of MAXR. Use the chatbox if you feel chatty. To change your player's name simply enter a new nick in the field playername. To change the colour for your player use the arrows beside the color field. To change the player status into ready each player has to click on the tiny red button behind his nick in the box which include all connected players. Alternatively you may use the chat command /ready as well. Hitting "Back" will terminate the server or connection. An a final action here, the Host have to hit the "OK"-button.

4   Host options in detail FIXME START: THIS NEED A TOTAL REWRITE SINCE THERE IS A CHANGE IN THE OPTIONS SCREEN

Options are separated in six groups. Each groupe controle one game option. Options are set in a multiple choice type. Select a new option by clicking on it and another option is deselected automatically. Let's go through the options from top-left to bottom-right.

4.1   Resource density

Here you can set the density of resources found on a resource spot. Increasing the density will result in rich fields. If you are new to MAXR or wish for a fast game with lots and lots of units choose for example very much materials. This raises the chances for up to 16 materials on one single spot. The same goes for fuel and gold.

4.2   Credits

The credits represent your starting money. Units and upgrades can be bought with them in the hangar menu before the game starts. Not used credits are lost. Remember that many credits mean as well many possible units or powerful units at game start. This is dangerous if your opponent starts close by and likes to rush early. This is nice if you're just out for a small skirmish. Use low credits for difficult and long lasting starting phases.

4.3   Starting Base

This setting controls whether the base is already built or whether you have to look for a good spot first and start building your base all by yourself. The base consists out of a factory and a small generator to power it. Choose no base if you just wish for fast skirmish games. In this case you may leave out any constructing units and start with a fleet of basic ground units – some perhaps upgraded. Search your opponents with that fleet. Dominate or get destroyed.

4.4   Alien Technologie (disabled atm)

At the moment not available - may come in future release. . .

4.5 Resource Frequency

The frequency of resource spots found on the map is set by this value. Many resource spots means many resources in game. You'll be able to build mines very close to each other without looking long for a good spot.

4.6 Game Type

Whether the game will be turn based or simultaneous is set here. MAXR is a turn based game but usually all players move at the same time. This is called „simultaneous mode". If you like the traditional style more and prefer to wait until your opponents completely finished their moves (and wait for yours) choose the turn based mode instead.

4.7 Other Options

Other options may be available if we find some options to add.

5 FIXME (total rewrite needed) END

6 Commands

The ingame console offers a variet of commands for debugging or information purposes. Simply bring up the chat ('Tab'-key or "Chat"-button) and enter one of the following commands:

Command	description
/base [server/client/off]	shows details of the client or the server* to bases.
/sentry [server/off]	shows covered areas by unity on sentry.
/fx [on/off]	shows additional information to special effects.
/trace [server/client/off]	shows additional information of the client or the server* about current field.
/ajobs [on/off]	shows additional information about attackjobs.
/players [on/off]	shows additional information about all players (with ids) in the game.
/resync [id]	HOST: resyncs all units of the player with the overgiven number or all players if no number was se
	CLIENT: resyncs all units of your own / get current information about units from server.
/kick [id]	removes a player from the game.*
/disconnect [id]	closes connection to a player and starts waiting for reconnection.*
/deadline <seconds>	sets deadline for turnend to given seconds.*
/fps	shows frames per second
/com [on/off]	[*not working*] shows network traffic (multiplayer)
/log [on/off]	[*not working*] creates a logfile by engine
/[show/hide] log	[*not working*] shows log (if active)
/ping	[*not working*] checks connectivity in multiplayer

* only available on the host/server

The next commands are considered as cheats and work only on the host or in singleplayer:

7 All stuff behind below this headline need some more work... but as long as this is a draft... :)

/survey shows all resources /color [0-7] sets new color for active player /fog off disabled fog for a short period /credits [*not working*] player gets +1000 credits /kill [x] [y] [*not working*] kills whatever is on position x,y /god off [*not working*] creates a godless world /load [*not working*] reloads active unit

Other commands will follow soon.

8 Hotkeys

MAXR offers a set of hotkeys. Most keys can be defined in the file keys.xml.

F1 Go to event F2 Issue player kick for disconnected player (server only) F5-F8 Jump to saved screen position Alt+F5 – Alt+F8 Save current screen position Alt+C Take a screenshot Arrows Scroll map + / - (also mouse wheel) Zoom map Enter Turn end Tab Chat / Console N Fog on/off G Grid on/off S Scan on/off, stop, start, sentry, steal R Range on/off, reload, repair, research M Munition on/off T Hitpoints on/off F Color on/off A Attack, automove, acticate B Build menu X

Xfer menu C Clear, clear mine L Load, lay mine D Disable, distribution menu, destroy U Upgrade L-Shift [*not working*] calculate path without moving ESC Exit, end game

9 Mouse Style

You have to edit keys.xml if you want to switch between classic and modern mouse input methods. The classic style behaives more like in the original MAX.

To change to the classic input style open keys.xml and change the MOUSE_STYLE to OLDSCHOOL

<Mouse> <MOUSE_STYLE Text="OLDSCHOOL"/> </Mouse>

To change to the modern input style open keys.xml and change the MOUSE_STYLE to MODERN

<Mouse> <MOUSE_STYLE Text="MODERN"/> </Mouse>

10 4. Advanced Gameplay

(TODO)

11 5. Mapediting

(TODO)

12   6 License

MAXR is released under the GPL. You can read the online version at https://www.gnu.org/licenses/gpl-2.0.txt

12.1   GNU GENERAL PUBLIC LICENSE
   Version 2, June 1991

FIXME: Must the whol GNU PL be included here??? AND won't you upgrade to GPL 3.0???

13   7. Appendix

Over the years a lot of projects around the original game MAX where started. This is to clear the confusion about several projects. I'll try to list every project I know about in an alphabetic order without taking care of targeted operating system, license or coding language as good as I know. Please let me know about further informations or mistakes!

Artlav's M.A.X. Prior stopped clone project of M.A.X. resurrected in M.A.X.G. Barlogg's M.A.X. Prior stopped clone project of M.A.X. resurrected in M.A.X.G. M.D.V. M.A.X. clone by Didi written in basic still in the early beginning M.A.X. Mechanized Assault and Exploration – Interplay's original M.A.X. II Official sequel of M.A.X. by Interplay MM's M.A.X. Early version of M.A.X.R. written by M. Mönch M.A.X.G. M.A.X. Gold is a rewritten and expanded clone of M.A.X. by the russian MAX-Club mostly written by Artlav to play by mail M.A.X.R. M.A.X. Reloaded, this M.A.X. clone written by community of maxthegame.de featuring TCP/IP U.M.A.X. Attempt for a M.A.X. clone from france – sadly inactive for years

Unlike other clones MAXR aims primary for multiplayer over TCP/IP on any common operating system currently in use. It runs on Linux, Mac and Windows as well thanks to the SDL libraries available on all three operating systems. Additional the original game data isn't needed to play M.A.X.R. - a free alternative graphic set makes this possible. However for the original look and feel and optional stuff like sounds, music or videos an original game cd of M.A.X. is needed. The tool „Resinstaller" coming along with M.A.X.R. extracts all this data automatically. MAXR doesn't feature AI (yet?). If you want to play against your computer check out various reports about running MAX with „dosemu" or „dosbox" on modern operating systems.

It's easy to expand MAXR with new units or translations. The file formats for units, translations and even save games are kept in readable XML and can be modified or expanded. Check out the bbs at http://www.maxthegame.de/bbs and join the community for playing or hacking MAXR or simply drop by on the IRC at irc.freenode.net channel #maxr