

The Ultimate MarsWars – is a real-time strategy game set in the Doom 2 universe.

Main menu

Section MAP

Map settings:

Number (0-4294967295) – determines obstacles positions. Right click - generate random value.

Size – map size in pixels (value between 3000-7000 with step of 500).

Lakes – "lake's" obstacles part.

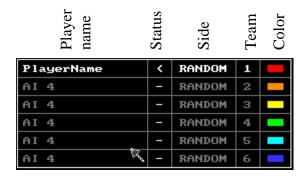
Obstacles - count of obstacles.

Random map – set random map settings.

Liquid type in lakes (water, slime, blood, mud or lava) and land texture depend on *Number*. Liquids do not damage units.

Section PLAYERS

Players table.



Fields:

Player name:

- If *Status* = «**C**» (computer player), left click here to switch AI level;
- If $Status = \langle \mathbb{C} \rangle$ (computer player) or $\langle \rangle$ (empty slot), right click here to move you on this line.

Status:

 \ll -» – Empty slot;

 $\langle C \rangle$ – Computer player.

For multiplayer game:

«+» or «-» - Player «ready» status;

«?» – Connection problem;

«@» − Host player (server);

«<» – You position.

Side - Hell or UAC.

Team – team number (1-6), players with same team number will be allies.

Color – player's color. Color cannot be changed.

In multiplayer game only host-player (server) can change *Status*, *Team* and *AI level* of computer players on this table.

Section SETTINGS

Subsection «GAME»:

RIGHT CLICK – right click order type for units;

SCROLL SPEED – camera move speed;

MOUSE SCROLL – turn off/on mouse scroll;

PLAYER NAME – you name in game. Name cannot be changed when game started or multiplayer game created;

INTERFACE LANGUAGE - English or Russian.

Subsection «VIDEO»:

WINDOW RESOLUTION;

WINDOWED – full screen or windowed mode;

Subsection «SOUND» - music and game sounds volume.

Section SAVE/LOAD

Save and load game. You cannot save/load game while multiplayer mode is on.

Section REPLAYS

Game replays.

Section CAMPAINGS

Missions list of campaign. Not available yet.

Section SCIRMISH

Subsections GAME OPTIONS and RECORD. You can turn off/on game record anytime.

Section MULTIPLAYER

Server/client settings and game chat.

Dedicated server

Dedicated server – special game version w/o GUI, that does not loading any game resources and start working immediately as server.

To start *dedicated server*, run it with follow parameters:

MarsWars_ded.exe [X]

where X - UDP port (optional argument, default value - 10666).

After connection to dedicated server, you can manage it using special chat commands.

Use -h or -help to see all available commands.

Game automatically start when all players are ready (Field $Ready = \ll + \gg$).

Server reset game after last player disconnect. Player's timeout time – 60 seconds.

Game mechanics

Game control panel

Game minimap:

Minimap alarm indicators types:

- White pulse circle units alarm;
- White pulse square buildings alarm.

Sections under minimap:

```
Energy subsection – free energy level / maximum energy level;
Army subsection – total count of all units (units + buildings).
```

Control tabs:

- Buildings;
- Units;
- Upgrades/researches;
- Controls.

Numbers on icons:

Green – total count of selected unit/buildings;

Yellow – count of productions;

Orange or gray – total count of this type of building/unit or research level;

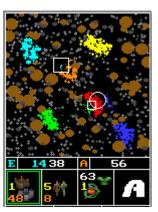
Purple – number units of this type in selected transport(s);

White – time to production end;

Red – ability charges:

- UAC Rocket Launcher Station: missiles count;
- Hell Monastery: Hell Powers
- Hell Altar: Invulnerability spheres

Aqua – reload time;





Icons hint format

Reverse teleport (B) [120] (3) x1 *
Units can teleport back to Hell Teleport.
Requirements: Hell Monastery, Ancient evil

Short description (HOTKEY) [PRODUCTION TIME] {energy required} xupgrade max level Description

Requirements: (if exits)

possible to produce this upgrade in many buildings at time.

Unit selection, orders and hotkeys

Use left mouse button to select unit and right - to command it.

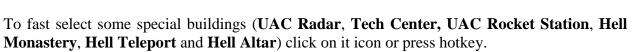
You can add units to selection with **Shift** button. Double click on unit to select all of it type on screen.

To bind units to hotkey-group - select it and press **Ctrl+1..9**. To add units to group - select it and press **Alt+1..9**. Fast double press on group hotkey to move camera to group position. **F2** hotkey will select all battle units on map. Fast double **F2** will move camera to you army.

Orders and hotkeys:

- Right click «Move» or «Move»+«Attack» (you can pick action in menu);
- «Move» (Q), «Stay» (W), «Patrol» (E), ignore enemies;
- «Move» (A), «Stay» (S), «Patrol» (D), attack enemies;
- «Select all units» (**F2**) select all battle units on map;
- (Action)(Z) do some ability (if unit have);
- «Destroy» (**Delete**) destroy selected units;
- «Action at point» (X) do action at specific point;
- «Right click action» (Alt+X) switch right click action;
- «Cancel production» (C) abort current production (hotkey work on Units or Upgrades/researches tabs);

For buildings, which can produce units, you can set rally-point with right click.



TAB – switching game control panel tabs;

Tab «Buildings»: **R T Y F G H V B N** – buildings;

Tab «Units»: RTYFGHVBNUIO and Ctrl + RTYFGHVBN – units;

Tab «*Upgrades/researches*»:

RTYFGHVBNUIOJKL and Ctrl + RTYFGHVBN – upgrades;

- Alt draw colored rectangles and health bars above units;
- Pause/Break pause/continue game in network game. Client can't cancel server's pause.
- PrtScr make screenshot.

Build base, units and upgrades production

For build you must have at least 1 main building: **UAC Command Center** or **Hell Keep**. Press on building icon on control panel to select which building type you need. It start draw circle around cursor. Radius of circle is radius of building. If circle is red - not enough space, if blue - too far from builder, if green - you can start build here. Right click to cancel selection. If icons are disabled, it can mean: there is no one main building, number of buildings of this type reached limit, not enough energy or not satisfied requirements. Destruction one of you builds adds 3 seconds of build cooldown. Maximum build cooldown – 12 seconds.



Unit's icons enabled when there is at least one Hell Gate or UAC Military unit, army size less than limit, number of this unit less than maximum, enough energy and requirements are satisfied. When you click on unit icon while no one Hell Gate/UAC Military unit is selected - unit producing order will send to any idle building. If any HG/MU is selected - order will send to selected buildings.

Upgrade's icons enabled when there at least one **Hell Pools** or **UAC Weapon Factory**, enough energy, upgrade research level less than maximum and requirements are satisfied. Most upgrade can be researched in one building at time.

Moving camera

To move camera use arrows buttons on keyboard or middle mouse button. Also, you can move camera with cursor - move it to screen border (this feature must be enabled in SETTINGS section in menu). You can change camera scroll speed in **SETTINGS** menu section.

Resources and army limit

There is no gold/wood/minerals/etc. like in other RTS games. There is energy level that means how many productions (producing units/building builds/upgrades researching) at one time you can. Maximum unit count (all units + all buildings!) for each player - 110.



Game:

- **DOOM 2** «*DOOM 2*» mode.
- **UDOOM** «The Ultimate DOOM» mode; there is no additional buildings/units/upgrades and some difference in game balance.

Game mode:

Skirmish - default mode - you must destroy all enemy players;

Two bases - 3x3 - red+orange+yellow vs green+aqua+blue players.

Three bases - 2x2x2 - red+orange vs yellow+green vs aqua+blue players.

Invasion - all players in one team. You need survive for 20 waves of powerful monsters.

Capturing points - there is 6 points on map that needs to capture. Capturing process will be faster if you use many units for this. Point will heal units stay inside.

Royal Battle – like Skirmish, but here is circle on map that slowly reduced radius. All units that step out this circle instantly die.

Starting base: buildings at game start;

Show player starts: if "\(\frac{1}{4}\)" game show you players start positions on map.

<u>Fill empty slots:</u> if set, empty player slots will filed with AI players;

Random skirmish: set random map and random game settings.

Units and buildings

Base things for units and buildings

Detector - unit/building that can detect invisible units.

Unfinished buildings have less armor and take more damage. If maximum energy level = 0 - all buildings will explode. In non-campaign games, if player loss all their builders – all his units revealed on map.

Armor will decrease damage.

Every unit can be advanced. Advanced units have some ability or increased some parameters.

Advanced unit have white symbol on selection rectangle:



Invulnerable unit have white aura:



Unit-detector have this symbol:

Unit's categories:

Mechanical:

- buildings;
- mechs;

Biological:

- light;
- medium;
- massive;
- Ground;
- Air (soaring and fly);

Other:

HPS – Hits Per Second.

SDR – Splash Damage Range.

BUILDINGS

HEDI

Ice	on	
Sprite		Description
- H	ot	Description
ke		
	Hell Keep	
	Hits	3000
	Size	66
	Building time	60
	Base sight radius	
**	Max count	Unlimited
	Energy required	
	Energy provided	
		ows you to build base.
R	Possible upgrades	•
	20	ortation – allow HK to teleport to any map
	location;	and we are to tempore to unity map
	•	K damage enemy units around;
	- Sight radius upg	
		tion – allow HK teleporting on map
	obstacles;	
	- Built-in Hell Syml	ool – increase provided energy level.
	Hell Gate	
991 St. 991 St. 991 St.	TT'-4	1500
A BUILDING S	Hits	1500
	Size	60
方 第	Building time	41 200
	Sight radius Max count	Unlimited
T	Energy required	
	Energy required	т
	Army production.	
	Hell Symbol	
	TT:4~	125
	Hits Size	125 24
	Building time	8
70	Sight radius	200
	Max count	Unlimited
	Energy required	
Y	Energy provided	
	Provide energy.	
	Possible upgrades	:
	- Short distance to	

	Hell Pool
F	Hits 1000 Size 53 Building time 41 Sight radius 200 Max count Unlimited Energy required 6 Research upgrades.
	Hell Tower
G	Hits 700 Size 21 Building time 20 Base sight/attack radius 250 Max count Unlimited Energy required 2 Defense structure. Attacking all units with Revenant fireballs, but Revenants - with Cacodemon fireballs. Possible upgrades: - Range attack upgrade; - Attack/sight radius upgrade; - Short distance teleportation.
H	Hits 500 Size 28 Building time 31 Sight radius 200 Max count 1 Energy required 4 Teleport units to any location. Select Hell Teleport and do right click to set destination point. Next select units and do right click on Hell Teleport or it panel icon. Reload time after teleportation depend from unit power. Can teleport allies units. Possible upgrades: - Teleport upgrade – decrease reload time; - Reverse teleport - units can teleport back to Hell Teleport.

	Hell Monastery	
V	1) Select Hell Monas	make advance any unit: tery and do right click on unit; right click to Hell Monastery building anel;
В	Hell Totem Hits Size Building time Base sight/attack ra Max count Energy required Requirements Advanced defense str Possible upgrades: - Range attack upgrades: - Short distance telegative.	Unlimited 3 Hell Monastery building Ancient Evil upgrade ucture. Attacking like ArchVile unit. ade; supgrade;
N	Hell Altar Hits Size Building time Sight radius Max count Energy required Requirements Cast Invulnerability Possible upgrades: - Invulnerability- ch	

SPECIAL BUILDINGS

Hell Eye

Base sight radius

250

Max count

Unlimited *Lost Soul* unit

Requirements

Hell Eye upgrade

Detector. Summoned by a **Lost Soul**. Live time - 2 minutes. Dies after single hit.

Possible upgrades:

- **Hell Eye** increase sight radius;
- Invisibility;

Hell Military Unit



Hits 1500
Size 70
Sight radius 200
Max count Unlimited

advanced *Lost Soul* unit

Requirements *UAC Military Unit* building

Produce zombies and Hell units.

Possible upgrades for all Hell buildings:

- Buildings armor upgrade;
- **Building restoration** restoration for damaged buildings.

In **UDOOM** game mode **Building restoration** ability working without upgrade.

Hell can't build Hell Totem and Hell Altar in UDOOM game mode.



Sprite	Icon / Hot key		Description
	R	to fly (use «Action» of - Sight radius upgrawhen it ground; - Command Center (attacking like Major except other CC);	2500 66 80 280 Unlimited 10 8
	T	UAC Military Unit Hits Size Building time Sight radius Max count Energy required Army production.	1700 66 40 200 Unlimited 4
	Y	Hits Size Building time Sight radius Max count Energy required Energy provided Provide energy.	250 42 17 200 Unlimited 2

Hits 1700 Size 62 Building time 40 Sight radius 200 Max count Unlimited Energy required 6 Research upgrades. UAC Chaingun Turret Hits 400 Size 17 Building time 15 Base sight/attack radius 250 Max count Unlimited Energy required 2 Attack 12 Attack 12 Attack 4HPS G Defense structure. Attacking like Mastermind unit. Possible upgrades: - Range attack upgrade; - Attack/sight radius upgrade; - Turrets armor; UAC Radar Hits 500 Size 35 Building time 31 Base sight radius 200 Max count 1 Energy required 2 H Reveals map. To reveal map area – select Radar and do right click on this area. Possible upgrades: - Detectors: - Detectors: - Baden upgrade: - Detectors: - Detectors: - Baden upgrades: - Baden upgrad			HAC Woonen Foots	ME7	
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- Detectors;		Н		eal map area – select Radar and do right	
- Detectors;					
- Rader ungrade Increase rader ecouting time and radius					
- Nauai upgraue - merease radai scodding time and radius.			- Radar upgrade - In	crease radar scouting time and radius.	

	UAC Tech Center	
V	Hits Size Building time Sight radius Max count Energy required Requirements Can advance units. Possible upgrades: - Advanced armory units; - Fast rearmament To advance unit, se Center or it icon on c	equire short distance between unit and
В	Hits Size Building time Base sight/attack radius Max count Energy required Requirements	400 17 20 250 Unlimited 2 UAC Tech Center building cacking like Major unit.
N	strike" research. Miss	see Station 500 40 31 200 1 4 UAC Tech Center building see. Missile strike requires "Missile siles have 300 damage and 175 SDR. Sight units, x2 to buildings and x0,75 to

		UAC Rocket Turret	
		Hits	500
		Size	17
		Building time	31
		Base sight/attack radius	250 common 190 against <u>air</u>
		Max count	Unlimited
allia.		Energy required	4
	Ctrl	Requirements	UAC Tech Center building Rocket turrets upgrade
	T T	Defense structure. Attacking HPS.	g like Cyberdemon unit with 0,6
		Possible upgrades: - Range attack upgrade; - Attack/sight radius upgra - Turrets armor;	de;

SPECIAL BUILDINGS

	Mine	
	Hits	1
	Size	5
	Attack	175 damage 100 range
	Base sight radius	100
	Max count	Unlimited
	Requirements	advanced <i>Engineer</i> unit
	Set by advanced UAC Possible upgrades: - Detectors;	C Engineers.
	- Mine-sensor – mine can switch to sensor mode that provide	
	300 sight ranges and not explode under enemy unit (use «Action» order to switch mode).	

Possible upgrades for all UAC buildings: - Buildings armor upgrade.

UAC can't build UAC Rocket Launcher and UAC Rocket Turret in UDOOM mode.

UNITS

HELL UNITS

All **Hell** units have $\langle pain\ state \rangle$ - state when it stun and cannot attack and move. $\langle Pain\ state \rangle$ happens every X hit from most attacks or more often from other.

	Loan			
	Icon			
Sprite	'		Description	
_	hot		•	
<u> </u>	key	7		
		Lost Soul		
		Class	soaring, light	
	_	Hits	90	
	R	Production time	8	
		Energy required	1	
		Speed	23	
		Size	10	
		Sight/attack radius	250	
		Pain state	every 3 hit	
			10	
		Attack	1 HPS	
*	-AF	Possible upgrades: - Melee attack upgrade; - Hell Eye – Lost Soul ca	n transform to Hell Eye (use «Action» order);	
W.			around light	
		Class	ground, light	
	\mathbf{T}	Hits	70	
	1	Production time	5	
		Energy required	1	
		Speed	9	
		Size	12	
		Sight/attack radius	250	
		Pain state	every 3 hit	
		Attack	12	
			1 HPS	
	Weak ground unit with ranged attack. Deal x0,5 damage to <u>mechanical</u> units. Attacking other Imps only with melee attack same as ranged attack). Advanced Imp has 2 HPS.			
		Possible upgrades: - Firepower – increase missiles speed.		

	Demon		
6.6	Class	around modium	
		ground, medium	
Y	Hits Production time	150 8	
	Energy required	2	
	Speed	15	
	Size	14	
	Sight/attack radius	200	
	Pain state	every 8 hit	
	Attack	40 1 HPS	
	Base armor	2	
	Fast ground unit with melee	e attack. Cannot attack air units (except Lost	
	Soul). Advanced Demon has	s invisibility.	
	Possible upgrades:	•	
		Demon's movement speed and attack.	
* A	Cacodemon	•	
See			
CT (CT)	Class	air, medium	
	Hits	225	
F	Production time	20	
	Energy required	2	
	Speed	9	
	Size	14	
	Base sight/attack radius	250	
	Pain state	every 6 hit	
		25	
	Attack	0,8 HPS	
	Base armor	2	
	Air unit with ranged attack.	Deal x1,25 damage to <i>light</i> units, 0,75 to <i>air</i>	
	and massive units, x0,5 to mechanical units. Attacking other Cacodemons		
	only with melee attack (damage same as ranged attack). Advanced		
	Cacodemon has 275 attack a		
	Possible upgrades:	llan amand	
	- Firepower – increase miss	nes speed.	
	Baron of Hell / Hell Knight		
	Class	ground, medium	
	Hits	350	
-	Production time	40	
	Energy required	4	
G	Speed	9	
	Size	14	
	Sight/otto als no 3:	250 common	
	Sight/attack radius	190 against <u>air</u>	
	Pain state	every 8 hit	
	Attack	50	
		0,8 HPS	
	Base armor	3	
	, ,	ged attack. Attacking other Barons/Knights	
	only with melee attack (d	amage same as ranged attack). Deal x0,5	

damage to <u>light</u> units, x0,75 to <u>air</u> and <u>mechanical</u> units. **Baron Of Hell** (red skin) – it advanced **Hell Knight** (white skin). **Baron Of Hell** take x0,5 damage. In **UDOOM** mode this unit spawns as **Baron Of Hell**.

Possible upgrades:

- **Firepower** – increase missiles speed.





Η

Cyberdemon

Class ground, massive
Hits 2000
Production time 90
Energy required 8

Speed 10 **Size** 20

Base sight/attack radius

Pain state

250 common
190 against <u>air</u>
every 15 hit

100

Attack 0,85 HPS

45 SDR

Base armor 3 Max count 1

Requirements *Hell Monastery* building

Heavy ground unit with ranged attack. Deal x1,5 damage to <u>buildings</u> and x0,5 to <u>light</u> units. You can't product **Cyberdemon** when **Mastermind** production in progress. Don't take splash-damage from rockets and grenades. Advanced **Cyberdemon** has 275 attack (against <u>ground</u>) and sight ranges.





 \mathbf{V}

Spider Mastermind

Class ground, massive Hits 2000

Production time 90
Energy required 8
Speed 10
Size 35
Base sight/attack radius 275

Pain state every 15 hit

Attack
12
9 HPS
Base armor
3
Max count
1

Requirements *Hell Monastery* building

Heavy ground unit with ranged attack. Deal x0,5 damage to *buildings*, x0,75 to *mechs* and x1,5 to *light* units. You can't product **Mastermind** when **Cyberdemon** production in progress. Don't take splash-damage from rockets and grenades. Advanced **Mastermind** has 325 attack (against *ground*) and sight ranges.

MAN		Dain Elemental	
Similar	Aprelia -	Pain Elemental	
	7	Class	air, medium
		Hits	200
	В	Production time	40
		Energy required	6
		Speed	9
		Size	14
		Sight radius	250
		Attack radius	350
		Pain state	every 3 hit
		A 441-	spawn Lost Soul
		Attack	0.6 HPS
		Requirements	Hell Monastery building
		Flying unit. Spawn Lost So	ul when attack or on «Action» order. Advanced
		Pain Elemental spawn adva	anced Lost Souls and spawn 3 Lost Souls after
		death.	-
12		Revenant	
10.	37		
	• [Class	ground, light
	N.T	Hits	200
	N	Production time	40
		Energy required	4
		Speed	12
		Size	13
		Base sight/attack radius	250
		Pain state	every 7 hit
		Attack	30
		Attack	0.8 HPS
		Requirements	Hell Monastery building
		_	ack. Deal x1,5 damage to <u>mechs</u> and x0,75 to <u>air</u>
			her Revenants only with melee attack (damage
			anced Revenant has 325 attack ranges.
		Possible upgrades:	
Cillin		- Revenant missile upgrade	- missiles become homing.
		Mancubus	
- CT	0	Class	ground, massive
		Hits	400
	Ctrl	Production time	60
		Energy required	6
	+ D	Speed	6
	R	Size	20
		Sight radius	250 300 common
		Attack radius	150 against <i>air</i>
		Pain state	every 4 hit
		1 am state	35x2
		Attack	1.2 HPS
		Base armor	3
			Hell Monastery building
		Requirements	Ancient Evil upgrade
		Strong ground unit with ran	ged attack. Deal x1,5 to <u>buildings</u> , x0,5 to <u>light</u>
			nechs. Cannot attack other Mancubus . Advanced
		Mancubus have «pain state»	
<u> </u>	1	The state of the state of	

a (29)b. 4		T	
A STATE OF THE PARTY OF THE PAR	1000	Arachnotron	
	· 1 ·	Clara.	
	Ctrl	Class	ground, massive
		Hits	350
	+	Production time	50
	\mathbf{T}	Energy required	6
	1	Speed	9 20
		Size	250
		Sight/attack radius	
		Pain state	every 4 hit
		Attack	15 4 HPS
		Base armor	4
		Requirements	Hell Monastery building Ancient Evil upgrade
	5	ArchVile	
n	1	Class	anaund madium
		Hits	ground, medium 400
	Ctrl	Production time	90
	+	Energy required	10
	Y	Speed Speed	15
	1	Size	15
		Sight radius	250
		Attack radius	450
		Pain state	every 12 hit
			90
		Attack	0.4 HPS
			15 SDR
		Base armor	3
		Doguinomente	<i>Hell Altar</i> building
		Requirements	Ancient Evil upgrade
		Strong ground unit with Advanced ArchVile can r	ranged attack. Deal x0,5 damage to <i>buildings</i> . resurrect dead units.

SPECIAL UNITS

	Ctrl	Zombies	
	+	CI.	1/ * 1.1.
	F G	Class	ground / air, light
	HV	Size	12
7	ΒN	Pain state	every 2 hit
		Requirements	Hell Military Unit building
	\mathbf{U}	UAC Infantry corrupted b	y advanced Lost Soul . Zombies don't have UAC
		Infantry abilities (Enginee	er's mines, Medic's paralyze bullets).

- Possible upgrades for all Hell units:
 Ranged attack upgrade (for units with ranged attacks);
 Unit armor upgrade;
- Regeneration damaged units will slowly regenerate their health;
 Pain threshold decrease "pain state" chance.

UAC UNITS

UAC u	nits have	no <i>«pain state</i> ».			
g .,	Icon		Described to		
Sprite	hot	Description			
	key				
*		Engineer			
		Class	ground, light		
		Hits	100		
	R	Production time	10		
		Energy required	1		
		Speed	13		
		Size	12		
			220 common		
		Sight/attack radius	165 against <i>air</i>		
			6		
		Attack	1.7 HPS		
		Place in transport	1		
		_	ged attack. Can repair own and allies damaged		
			damage to <i>light</i> units, x0,5 to <i>massive</i> and x0,25		
		to <u>mechanical</u> units. Advanced Engineer can paralyze <u>mechs</u> when attack			
		Possible upgrades:			
			ing - increase the efficiency of repairing;		
		- Mines - Engineer can set N			
A COLUMN TO THE PARTY OF THE PA	Pa	Medic	Times (use Wietfoll/Forder).		
7		Medic			
	Ph	Class	ground, light		
		Hits	100		
	\mathbf{T}	Production time	10		
			10		
		Energy required	13		
		Speed	13		
		Size	220 common		
		Sight/attack radius			
			165 against <u>air</u>		
		Attack	6		
		Dla a a in 4	1.5 HPS		
		Place in transport	1		
			ged attack. Can repair own and allies damaged		
		•	amage to <u>light</u> units, x0,5 to <u>massive</u> and x0,25 to		
		mecnanical units. Advanced	Medic can paralyze <u>biological</u> units.		
		Possible upgrades:			
		- Advanced repair and heal	ing - increase the efficiency of healing.		

*	2.	Sergeant		
7	2	Sergeunt		
	7.0	Class	ground, light	
	X 7	Hits	100	
	Y	Production time	10	
		Energy required	2	
		Speed	13	
		Size	12	
		Sight/attack radius	240 common	
		Signivattack radius	180 against <u>air</u>	
			Not advanced:	Advanced:
			- min: 9	- min: 12
		Attack	- max: 28	
			max SDR: 30	max SDR: 40
			1 HPS, mi	n SDR: 10
		Place in transport	1	
		Ground unit with ranged a	ttack. Deal x0,5 d	lamage to <u>fly</u> , <u>light</u> and
		massive units, x0,25 to me	echanical units. D	amage and splash-range
		depends from distance to tar	get. Advanced Ser	geant deal more damage
		and have more SDR. Serge	ant's attack set He	ll units into «pain state»
		more often than other units a	ttack.	
	_ _	Commando		
7		Commando		
	27	Class	ground, light	
		Hits	100	
	${f F}$	Production time	15	
		Energy required	2	
		Speed	- 11	
		Size	12	
			250 common	
		Sight/attack radius	220 against <i>air</i>	
			6	
		Attack	8 HPS	
		Place in transport	1	
		Ground unit with ranged atta	ack. Deal x1.5 dam	age to <i>light</i> units x0.5 to
		massive and x0,25 to mec		•
		invisibility.	Gillio. 11d	Commission into
	3	Artillery soldier		
	93	Class	ground, light	
		Hits	100	
	\mathbf{G}	Production time	30	
		Energy required	30 4	
		Speed	10	
		Size	10	
			250	
		Base sight/attack radius	23U	
			50	
		Attack	50 0.6 HDS	
			0.6 HPS	
		Attack Place in transport Requirements		o otomy building

	Ground unit with ranged attack. Deal x1,5 damage to <u>buildings</u> and x0,5 damage to <u>light</u> and <u>mechs</u> units. Cannot attack <u>air</u> units. Cannot attack units closer than 45 pixels. Advanced Artillery soldier have 275 attack and sight radius.		
I T	-	ground/air, light 100 20 4 Not advanced: 9 Advanced: 13 12 250 15 4 HPS 1 UAC Weapon Factory building ged attack. Deal x1,5 damage to mechs, x0,5 to buildings. Advanced Major can fly (use	
V		ground, light 100 60 5 10 12 250 125 125 SDR 0.4 HPS 1 UAC Weapon Factory building anged attack. Deal x0,5 damage to light, mechs need BFG Marine has 275 attack and sight	

- Possible upgrades for all UAC Infantry:
 Infantry armor upgrade;
 Lightweight armor increase infantry move speed

	-	Air APC	
a file and a	-	Class	mech, ground
_		Hits	250
	В	Production time	25
		Energy required	3
		Speed	22
		Size	33
		Sight/attack radius	250
		Signivattack radius	6/12
		Attack (upgrade)	
		D	2 HPS
		Base transport place count	10
		Base armor	3
		Requirements	UAC Weapon Factory building
		Fast air transport. Can transport	rting all ground UAC units. Advanced Air
		APC has 14 places.	
		Possible upgrades:	
		- APC turret.	
		Ground APC	
		Class	mech, ground
		Hits	350
	N	Production time	25
		Energy required	3
		Speed	15
		Size	15
		Sight/attack radius	250
		Signivattack radius	6/12
		Attack (after upgrade)	2 HPS
		Page transport place count	
		Base transport place count	3
		Base armor	
		Places in transport	8
		Requirements	UAC Weapon Factory building
		.	
			transporting all ground UAC infantry.
			6 places. Marines can attack while they in
		APC.	
		Possible upgrades:	
		- APC turret.	

		T	
	1	Terminator	
**		Class	mech, ground
		Hits	350
	Ctrl	Production time	60
	+	Energy required	6
	R	Speed	14
		Size	16
		Sight/attack radius	275 common
		Signifatiack radius	6/12
		Attack	8 HPS
		Paga armar	
		Base armor	3
		Place in transport	3
		Requirements	UAC Tech Center building
		•	High technologies upgrade
		Tank	
		Class	mach ground
		****	mech, ground
	Ctrl	Hits	400
	Ctrl	Production time	400 60
	+	Production time Energy required	400 60 8
		Production time Energy required Speed	400 60 8 10
	+	Production time Energy required Speed Size	400 60 8 10 20
	+	Production time Energy required Speed	400 60 8 10 20 250
	+	Production time Energy required Speed Size	400 60 8 10 20 250 45 SDR
	+	Production time Energy required Speed Size Sight/attack radius Attack	400 60 8 10 20 250 45 SDR 0.6 HPS
	+	Production time Energy required Speed Size Sight/attack radius Attack Base armor	400 60 8 10 20 250 45 SDR 0.6 HPS 3
	+	Production time Energy required Speed Size Sight/attack radius Attack Base armor Place in transport	400 60 8 10 20 250 45 SDR 0.6 HPS 3
	+	Production time Energy required Speed Size Sight/attack radius Attack Base armor	400 60 8 10 20 250 45 SDR 0.6 HPS 3

		Flyer	
		Class	mech, air
		Hits	350
	Ctrl	Production time	60
	+	Energy required	8
	Y	Speed	19
		Size	18
		Sight/attack radius	275
		Attack	30
		Attack	2 HPS
		Base armor	3
		Requirements	UAC Tech Center building
		Requirements	High technologies upgrade
			ged attack. Deal x0,5 damage to ground units and
		buildings. Advanced Fly	yer has 350 attack ranges against <u>air</u> .

- Possible upgrades for all UAC Mechs:
 Mech armor upgrade;
 Advanced engines increase <u>mechs</u> move speed.

UPGRADES

Hell

Icon / Hot key	Time Energy Level	Description	Requirements
R	180 4 4	Range attack upgrade Increase all ranged attacks damage.	
T	180 4 4	Unit armor upgrade Increase unit's armor.	
Y	120 4 4	Buildings armor upgrade Increase buildings armor.	
F	60 2 3	Melee attack upgrade Increase all melee attacks damage.	
G	120 3 2	Regeneration Damaged units will slowly regenerate their health.	
Н	60 2 3	Pain threshold Decrease "pain state" chance.	
V	120 3 3	Hell Eye Lost Soul ability & Hell Eye sight radius. In UDOOM game mod, last level of upgrade make Hell Eye invisible.	
В	120 3 3	Tower range upgrade Increased range of defensive structures.	
N	120 2 3	Teleport upgrade Decrease teleport cooldown.	
U	180 3 1	Hell Keep teleportation Hell Keep can teleport to any location.	

		Degay Aumo	
I	120 3 2	Hell Keep will damage all enemies around. Also, this aura neutralize UAC Medic's toxins effects on own and allied units.	
O	120 2 2	Hell Keep range upgrade Increased Hell Keep view/build range.	
J	60 3 1	Demon's anger Increased Demon's movement and attack speed.	
K	120 2 1	Firepower Increase missiles speed for Imp, Cacodemon and Baron of Hell/Hell Knight.	
E L	20 10 15	Hell power Allow Hell Monastery upgrade units.	Hall Managtany hailding
Ctrl+R	120 12 1	Ancient evil New buildings, units and upgrades.	Hell Monastery building
Ctrl+T	120 3 1	Reverse teleport Units can teleport back to Hell Teleport.	
Ctrl+Y	120 2 1	Revenant missile upgrade Missiles become homing	
Ctrl+F	120 2 1	Hell Totem and Eye invisibility	Hell Monastery building
Ctrl+G	120 2 3	Building restoration Damaged buildings will slowly regenerate their health.	Ancient evil upgrade
Ctrl+H	60 2 1	Hell Keep can teleport on obstacles.	
Ctrl+V	30 1 15	Short distance teleportation Hell Symbols, Towers, Totems can teleport to short distance.	

	180 10	Invulnerability	
Ctrl+B	10 1	Charges for Hell Altar's ability.	Hell Altar building
A. A.		Built-in Hell Symbol	Ancient evil upgrade
Ctrl+N	180 4 3	Additional energy for Hell Keep .	



Icon / Hot key	Time Energy Level	Description	Requirements
R	180 4 4	Range attack upgrade Increase all ranged attacks damage.	
T	120 4 5	Unit armor upgrade Increase infantry unit's armor.	
Y	180 4 4	Buildings armor upgrade Increase buildings armor.	
F	60 3 3	Advanced repair and healing Increases the efficiency of repair/healing of Engineers and Medics.	
G	120 3 2	Lightweight armor Increase infantry move speed.	
H	120 2 2	APC turret Weapon for APCs.	
V	120 3 1	Detector device Radar and mines becomes detectors.	
В	120 3 3	Turrets range upgrade Increased attack range of defensive structures.	

	120	Radar upgrade		
N	2 3	Increase radar scouting time and radius.		
	180	Command Center engines		
U	3 1	Command Center gains ability to fly.		
Ame	190	Command Center turret		
I	180 4 1	Flying Command Center will be able to attack	Command Center engines upgrade	
	120	Command Center range		
o	2 2	Increased Command Center's view/build range.		
10 to	60	Mines		
J	2 2	Engineer ability.		
	60	Mine-sensor	3.6	
K	2 1	Mine ability.	Mines upgrade	
୬ €	120	Advanced armory		
	12 1	Tech Center will be able to upgrade own		
مراه	120	units. High technologies	UAC Tech Center building	
Ctrl+R	12 1 1	New buildings, units and upgrades.		
(*) (*)	180	Missile strike		
Ctrl+T	12 8	Missile for Rocket Launcher Station.		
4	120	Advanced engines		
Ctrl+Y	3 2	Increase mechs move speed.	UAC Tech Center building	
	180	Mech armor upgrade	High technologies upgrade	
Ctrl+F	4	Increase mechs armor.		
	120	Fast rearming		
Ctrl+G	2	Decrease Tech Center reloading time.		

Ctrl+H	60 2 1	Free placement Command Center will be able to land on obstacles.	UAC Tech Center building High technologies upgrade
Ctrl+V	120 3 2	Turrets armor Additional armor for turrets.	
Ctrl+B	120 4 1	Rocket turrets Allows you to build Rocket turrets.	
Ctrl+N	180 4 3	Built-in generator Additional energy for Command Center.	