

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.

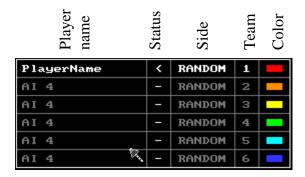
Obstacles - count of obstacles.

Random map – set random map settings.

Liquid type in lakes (water, slime, blood, mud or lava) and land texture depend on *Number*. Lava and slime 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* = «**C**» (computer player) or «-» (empty slot), right click here to move you on this line.

Status:

 $\leftarrow \rightarrow -$ Empty slot;

 $\langle C \rangle$ – Computer player.

For multiplayer game:

«+» or «-» - Player «ready» status;

«?» – Connection problem;

«@» – Host player (server);

<<>> − You position.

Side – <mark>Hell</mark> or <mark>ŪAC</mark>.

Team - 1-6, players with equal team number will be allies.

Color – player color cannot be changed.

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

Section SETTINGS

Subsection «GAME»:

RIGHT CLICK – order type for units on right click.

If field value = «Move+attack», then order on right click = «move, attacking all enemies on way» and right click + Ctrl key = «move, ignoring enemies».

If field value = «Move», then right click = «move, ignoring enemies» and right click + Ctrl key = «move, attacking all enemies on way».

SCROLL SPEED – camera move speed;

MOUSE SCROLL – turn off/on of mouse scroll;

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

INTERFACE LANGUAGE - English or Russian.

Subsection «VIDEO»:

WINDOW RESOLUTION: 800*600 / 960*720 / 1024*768;

WINDOWED - full screen or windowed;

Subsection «SOUND» - music and game sounds volume.

Section SAVE/LOAD

Save and load game. You cannot save/load game in multiplayer mode.

Section REPLAYS

Game replays.

Section CMPAINGS

Missions list of campaign.

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 console version, where it 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 connect to dedicated server, you can manage it through chat using text commands.

-h or -help – show all exist chat-commands;

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

Server reset game after 10 seconds after last player disconnect.

Game mechanics



Game control panel

From top to down:

Game minimap:

Minimap alarm indicators types:

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

Line under minimap:

Energy section – free energy level and maximum energy level;

 \overline{Army} section – total number of **buildings** and **all units** (units + buildings).

Tabs:

- Units and buildings;
- Upgrades/researches;
- Replay management.

Tab «replay management» active only when record playback.

Tab «units and buildings»:

- first 9 icons buildings;
- next 12 icons units;
- next 3 icons special units icons (for **UAC** count of **Mines**, for **Hell** count of **Zombies** and **Hell Eyes**);
- next 3 icons icons of some orders;
- last 2 buttons:
- -- «Menu»;
- -- «Pause» turn on/off game pause (available only in multiplayer game).

Numbers on tab of *«upgrades/researches»*: white number – time to end of nearest research; yellow number – total count of current researches in progress.

Numbers on icons of buildings/units:

(for buildings and units)

- on right down (orange or gray color): total count of this type of building/unit. If numbers have gray color count of these buildings/units reached limit;
- on right top (green color): total count of selected buildings/units of this type;
- on left top (yellow color): total count of this buildings/units type in production;
- on left top (white color): time to end of nearest unit production;
- on left down (purple color): number units of this type in selected transport; (on left down, for buildings only)
- UAC Radar, UAC Tech Center, Hell Teleport, Hell Altar: reload time;
- UAC Rocket Launcher Station: missiles count;
- Hell Monastery: Hell Powers's charges
- Hell Altar: Invulnerability spheres

(for upgrades)

- on right top: green color - research level; gray color - upgrade research level reached maximum; yellow - total count of this upgrade type in production.

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} xupgrade max level Description
Requirements: (if exits)

Unit selection and orders

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**». Fast double press on group hotkey to move camera to this group. Also, «**Ctrl**»+«**A**» combination will select all battle units on map.

Orders:

- Right click to any point move and attack all enemy on way;
- Right click with Ctrl just move;

You can switch these actions in **SETTINGS** section in main menu.

- Right click to enemy unit attack this enemy unit;
- Right click to ally unit follow it and attack all enemies on way.
- «Action» («**Ctrl**» + «**Space**» ho<u>tkeys</u> or button) do some ability (if unit have it).
- «Destroy» («**Delete**» hot key or button) destroy selected units.
- «Cancel» («**Space**» hot key or button) cancel order (for units stop here; for production buildings abort current production);

To fast select some special buildings (UAC Radar, Tech Center, and Rocket Station, Hell Monastery, Teleport and Altar) click on it icon or press hot key.

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

Build base, units and upgrades production

For build you must have at least 1 main building. 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. There is cooldown for 2 seconds between starting build any building.

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 - order to start produce unit will send to any idle building. If any **HG/MU** is selected - order will send to him. One building can produce only one unit at one time.

^{*} it possible to produce this upgrade in many buildings at time.

For **Hell** side, press on zombie icon to start zombie production in **Hell Military unit** and use «Action» order to change Zombie type.

Upgrades 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 turn on in **SETTINGS** section in menu). Change camera scroll speed in **SETTINGS** section in menu.

Hot keys

TAB – switching game control panel tabs;

Tab «Units and buildings»:

QWEASDZXC - buildings;

RTYFGHVBNUIO-units;

M – start zombie production in Hell Military unit;

Tab «*Upgrades/researches*»:

QWEASDZXCRTYFGHVBNUIOJK-upgrades;

- «**Ctrl**» + «**Space**» («Action») do some ability (if unit have it).
- «Delete» («Destroy») destroy selected units.
- «**Space**» («Cancel») cancel order (for units stop here; for production buildings stop current production);
- -«Alt» draw colored rectangles and health bars above units;
- $-\langle\langle Ctrl\rangle\rangle + \langle\langle A\rangle\rangle$ select all battle units on map.
- «Pause/Break» pause/continue game in network game. Client can't cancel server's pause.
- «PrtScr» make screenshot.

Resources and army limit

There is no gold/wood/minerals/etc. like in other RTS games. There is energy level that means how many units produce/build buildings/research upgrades at one time you can. Maximum unit count (all units + all buildings!) for all players - 110.

Game settings



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 in it.

Assault – like invasion, but you must destroy enemy base in center of map.

Starting base: player resources on game start;

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

Fill empty slots: 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.

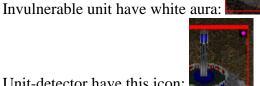
Unfinished buildings have less armor and take more damage. If maximum energy level = 0 - all buildings will explode. In non-campaign games, if player loss all their builders – all his units revealed on map.

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:





Unit-detector have this icon:

Units categories:

Mechanical:

- buildings;
- mechs;

Biological:

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

HPS – hits per second.

SDR – splash damage range.

BUILDINGS

HEDI

Sprite	Icon / Hot key		Description
		Hell Keep	
		Hits	3000
		Size	66
		Building time	75
346		Base sight radius	280
		Max count	Unlimited 8
W STATE W		Energy required Energy provided	6
		Main building. Allows	s you to build base.
	Q		ation – allow HK to teleport to any map
		place;	itart damaga anamy units around:
		- Decay Aura – HK S - Sight radius upgrad	start damage enemy units around;
			n – allow HK teleporting on map
		obstacles;	anow The teleporting on map
		,	– increase provided energy level.
		Hell Gate	
391 St. 391 St. 39 St.			
A DESCRIPTION AND ADDRESS OF THE PARTY OF TH	6376 3	Hits	1500
		Size	60
	A STATE OF THE PARTY OF THE PAR	Building time	41
		Sight radius Max count	200 Unlimited
	\mathbf{W}	Energy required	4
		Energy required	7
		Produce units.	
		Hell Symbol	
		TT*.	200
		Hits	200
		Size Puilding time	24 10
	Marie .	Building time Sight radius	200
		Max count	Unlimited
		Energy required	1
	E	Energy provided	1
		Provide energy.	
		Possible upgrades:	
		- Short distance telep	oortation;
		_	

	Hell Pool	
A	Hits Size Building time Sight radius Max count Energy required Research upgrades.	1000 53 41 200 Unlimited 4
	Hell Tower	
S	but Revenants - with Possible upgrades: - Range attack upgra - Attack/sight radius - Short distance telep	Unlimited 2 tacking all units with Revenant fireballs, Cacodemon fireballs. ade; supgrade;
D	click to set destination Hell Teleport or it depend from unit pow Possible upgrades: - Teleport upgrade -	500 28 25 200 1 4 point: select Hell Teleport and do right in point; select units and do right click on icon. Reload time after teleportation wer. Can teleport allies units. decrease reload time; units can teleport back to Hell Teleport.

	Hell Monastery	
Z	There is 2 methods to 1) Select Hell Monas	1000 65 100 200 Unlimited 6 Hell Pool building es for units advancing; make advance any unit: stery and do right click on unit; o right click to Hell Monastery building banel;
X	Hell Totem Hits Size Building time Base sight/attack ra Max count Energy required Requirements Advanced defense str Possible upgrades: - Range attack upgr - Attack/sight radius - Short distance tele - Invisibility.	Unlimited 3 Hell Monastery building Ancient Evil upgrade ructure. Attacking like ArchVile unit. ade; s upgrade;
C	Hell Altar Hits Size Building time Sight radius Max count Energy required Requirements Cast Invulnerability Possible upgrades: - Invulnerability- ch	

SPECIAL BUILDINGS

is in

Hell Eye

Base sight radius 250

Max count Unlimited

Requirements

Unlimited

Lost Soul unit

Unit Framework

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

Requirements advanced *Lost Soul* unit

Produce zombies and Hell units. To start zombie production - press

bottom on control panel or **M** hot key. To change **zombie** type – select **Hell Military Unit** and do «Action» order.

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 mode.



Sprite	Icon / Hot key		Description
	O	to fly (use «Action» of - Sight radius upgrawhen it on ground; - Command Center (attacking like Cyber only ground units (ex	3000 66 93 280 Unlimited 8 6 s you to build base. flight - Command Center gains ability order to fly up or land CC); de; this upgrade have effect on CC only Turret - CC can attack when it flying rdemon, 0,33 HPS, 250 range, can attack
	W	UAC Military Unit Hits Size Building time Sight radius Max count Energy required Produce units.	1700 66 40 200 Unlimited 4
	E	Hits Size Building time Sight radius Max count Energy required Energy provided Provide energy.	400 42 20 200 Unlimited 2 2

	UAC Weapon Factory
A	Hits 1700 Size 62 Building time 40 Sight radius 200 Max count Unlimited Energy required 4 Research upgrades.
	UAC Chaingun Turret
S	Hits 400 Size 17 Building time 15 Base sight/attack radius 250 Max count Unlimited Energy required 2 Attack 12 Attack 4 HPS Defense structure. Attacking like Mastermind unit. Possible upgrades: - Range attack upgrade; - Attack/sight radius upgrade; - Turrets armor; - Rocket turrets — can upgrade to Rocket turret (use «Action» order, required 2 energy points and UAC Tech Center).
D	Hits 500 Size 35 Building time 31 Base sight radius 200 Max count 1 Energy required 2 Reveals map. To reveal any map area – select Radar and do right click on this area. Possible upgrades: - Detectors; - Radar upgrade - Increase radar scouting time and radius.

	UAC Tech Center	
	Hits	1700
	Size	62
	Building time	94
	Sight radius	200
	Max count	1
	Energy required	6
	2.00D	UAC Weapon Factory
	Requirements	building
		ounding
	Can advance units.	
A STATE OF THE STA	Possible upgrades	•
The state of the s	10	ry - Tech Center will be able to upgrade
	units;	Total control with or more to upgrade
		t - decrease Tech Center upgrade reloads
	time.	decrease reen center appraise reloads
		select unit and do right click on Tech
	Center or it icon or	
	UAC Plasma Turi	*
	Hits	400
	Size	17
	Building time	20
	Base sight/attack	
	radius	250
	Max count	Unlimited
	Energy required	2
e ditto		UAC Weapon Factory
	Requirements	building
		ounding
	Defense structure.	Attacking like Major unit.
	Possible upgrades	
	- Range attack up	
	- Attack/sight radi	
	- Turrets armor;	10,
	*	can upgrade to Rocket turret (use
		uired 2 energy points and UAC Tech
	Center).	
	UAC Rocket Laur	ncher Station
	Hits	500
	Size	40
	Building time	31
	Sight radius	200
	Max count	1
	Energy required	4
	7	UAC Tech Center
	Requirements	building
	Provide a missile st	trike. Missile strike requires " Missile
	strike" research.	1
	I	

SPECIAL BUILDINGS

	Mine	
⊗		can switch to sensor mode that provide not explode under enemy unit (use
	 UAC Rocket Turret Hits Size Building time Base sight/attack rac Max count Energy required Requirements	500 17 20 250 common 190 against <u>air</u> Unlimited 2 UAC Tech Center building Rocket turrets upgrade acking like Cyberdemon unit with 0,6

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.

	Loon		
	Icon		
Sprite	'		Description
_	hot		•
A	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
		1 am state	10
		Attack	1 HPS
			1 nrs
-	-All	Possible upgrades: - Melee attack upgrade; - Hell Eye – Lost Soul ca	n transform to Hell Eye (use «Action» order);
N.			around light
		Class	ground, light
	T	Hits	70
	1	Production time	6
		Energy required	1
		Speed	9
		Size	12
		Sight/attack radius	250
		Pain state	every 3 hit
		Attack	12
		1 1 ttuch	1 HPS
		<u> </u>	ranged attack. Deal x0,5 damage to <u>air</u> and ing other Imps only with melee attack (damage dvanced Imp has 2 HPS.
		Possible upgrades: - Firepower – increase mi	issiles speed.

66		
	Demon	
17	Class	around modium
		ground, medium 150
Y	Hits Production time	8
_		
	Energy required	2
	Speed	15
	Size	14
	Sight/attack radius	200
	Pain state	every 8 hit
	Attack	40 1 HPS
	Base armor	2
		e attack. Cannot attack <u>air</u> units (except Lost
	Soul). Advanced Demon has	
	Possible upgrades:	, 11, 12, 21, 11, 11, 11, 11, 11, 11, 11
		Demon's movement speed and attack.
Mr. Alexander	Cacodemon	= a mo , amain apara ana anara.
Said Said		
	Class	air, medium
	Hits	225
\mathbf{F}	Production time	20
	Energy required	2
	Speed	9
	Size	14
	Base sight/attack radius	250
	Pain state	every 6 hit
	1 am state	25
	Attack	0,8 HPS
	Base armor	2
		Deal x1,25 damage to <i>light</i> units, 0,75 to <i>air</i>
		echanical units. Attacking other Cacodemons
		lamage same as ranged attack). Advanced
	Cacodemon has 275 attack a	,
	Cuesucinon has 275 under t	and organ runges.
	Possible upgrades:	
	- Firepower – increase miss	iles speed.
	Baron of Hell / Hell Knight	i
	Class	ground, medium
	Hits	350
The second second	Production time	40
	Energy required	4
G	Speed	9
	Size	14
		250 common
	Sight/attack radius	190 against <u>air</u>
	Pain state	every 8 hit
	Attack	50
	Attack	0,8 HPS
	Base armor	3
	Heavy ground unit with ran	ged attack. Attacking other Barons/Knights
	1	amage same as ranged attack). Deal x0,5

damage to \underline{light} units, x0,75 to \underline{air} and $\underline{mechanical}$ 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 *air*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

Hits2000Production time90Energy required8Speed10Size35

Base sight/attack radius

Pain state

250 common
190 against air
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 275 attack (against *ground*) and sight ranges.

a mellion d			
dimet.	100	Pain Elemental	
	- 142	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
			spawn Lost Soul
		Attack	0.6 HPS
		Dagwinamanta	
		Requirements	Hell Monastery building
			l on attack or on «Action» order. Advanced Pain
		Elemental spawn advanced I	Lost Souls and spawn 3 Lost Souls after death.
/		Revenant	
10.	33		
4 1	<i>{ L</i>	Class	ground, light
		Hits	200
	N	Production time	40
		Energy required	4
		Speed	12
		Size	13
		Base sight/attack radius	250
		Pain state	every 7 hit
		A 7	30
		Attack	0.8 HPS
		Requirements	Hell Monastery building
			ck. Deal x1,5 damage to <u>mechs</u> and x0,75 to <u>air</u>
			her Revenants only with melee attack (damage
			· · ·
			nced Revenant has 325 attack ranges.
		Possible upgrades:	
Cition.		- Revenant missile upgrade	- missiles become homing.
		Mancubus	
		Class	ground, massive
	T 7	Hits	400
	U	Production time	60
		Energy required	6
		Speed	6
		Size	20
		Sight radius	250
		Sight radius	300 common
		Attack radius	225 against air
		Pain state	every 5 hit
		Attack	35x2 1.2 HPS
		Base armor	3
		Requirements	Hell Monastery building
		_	Ancient Evil upgrade
		units and $x0,75$ to <u>air</u> and <u>m</u>	ged attack. Deal x1,5 to <u>buildings</u> , x0,5 to <u>light</u> <u>echs</u> . Cannot attack other Mancubus . Advanced
		Mancubus have «pain state»	resist.

A.630.A		Arachnotron	
A STATE OF THE PARTY OF THE PAR	MA	Aracimotron	
		Class	ground, massive
		Hits	350
	I	Production time	60
		Energy required	6
		Speed	9
		Size	20
		Sight/attack radius	250
		Pain state	every 4 hit
			15
		Attack	4 HPS
		Base armor	4
			Hell Monastery building
		Requirements	Ancient Evil upgrade
			18
	5	ArchVile	
		Class	ground, medium
	O	Hits	400
		Production time	90
		Energy required	10
		Speed	15
		Size	15
		Sight radius	250
		Attack radius	400
		Pain state	every 12 hit
			90
		Attack	0.4 HPS
			15 SDR
		Base armor	3
		Requirements	<i>Hell Altar</i> building <i>Ancient Evil</i> upgrade
		Strong ground unit with	

SPECIAL UNITS



Zombies

Class ground / air, light

Size 12

Advanced **ArchVile** can resurrect dead units.

Pain state every 2 hit

UAC Infantry that corrupted by advanced **Lost Soul**. **Zombies** don't have **UAC Infantry** abilities (**Engineer'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 units have no *unain state*»

Sprite	Icon		Description
Sprice	hot		Description
4.	key		
7		Engineer	
		Class	ground, light
		Hits	100
	R	Production time	8
		Energy required	1
		Speed	13
		Size	12
		G: 14/44 1 1:	220 common
		Sight/attack radius	165 against <i>air</i>
			6
		Attack	1.7 HPS
		Place in transport	1
		_	ed attack. Can repair own and allies damage
			amage to <u>light</u> units, $x0.5$ to <u>massive</u> and $x0.2$
			d Engineer can paralyze <u>mechs</u> when attack it.
		Possible upgrades: - Advanced repair and healing	ng - increase the efficiency of repairing;
Œ.		10	• •
<u>.</u>		- Advanced repair and healin - Mines - Engineer can set M	ines (use «Action» order).
i.	*	- Advanced repair and healin - Mines - Engineer can set Mi Medic	• •
	T	- Advanced repair and healin - Mines - Engineer can set Mi Medic Class	ground, light
	T	- Advanced repair and healin - Mines - Engineer can set Mi Medic Class Hits Production time	ground, light 100
	T	- Advanced repair and healing - Mines - Engineer can set Mines - Energy required	ground, light 100 8 1
r.	T	- Advanced repair and healin - Mines - Engineer can set Mi Medic Class Hits Production time Energy required Speed	ground, light 100 8 1 13
	T	- Advanced repair and healin - Mines - Engineer can set Mi Medic Class Hits Production time Energy required Speed Size	ground, light 100 8 1 13 12
	T	- Advanced repair and healin - Mines - Engineer can set Mi Medic Class Hits Production time Energy required Speed	ground, light 100 8 1 13 12 220 common
T.	T	- Advanced repair and healing - Mines - Engineer can set Mines - Engine	ground, light 100 8 1 13 12 220 common 165 against <u>air</u>
	T	- Advanced repair and healin - Mines - Engineer can set Mi Medic Class Hits Production time Energy required Speed Size	ground, light 100 8 1 13 12 220 common 165 against <u>air</u> 6
	T	- Advanced repair and healing - Mines - Engineer can set Mines - Engine	ground, light 100 8 1 13 12 220 common 165 against <u>air</u>
	T	- Advanced repair and healing - Mines - Engineer can set Mines - Engine	ground, light 100 8 1 13 12 220 common 165 against <u>air</u> 6 1.5 HPS
	T	- Advanced repair and healing - Mines - Engineer can set Mines - Engine	ground, light 100 8 1 13 12 220 common 165 against <u>air</u> 6 1.5 HPS 1 ed attack. Can repair own and allies damage
	T	- Advanced repair and healing - Mines - Engineer can set Mines - Engine	ground, light 100 8 1 13 12 220 common 165 against <u>air</u> 6 1.5 HPS
	T	- Advanced repair and healing - Mines - Engineer can set Mines - Engine	ground, light 100 8 1 13 12 220 common 165 against <u>air</u> 6 1.5 HPS 1 ed attack. Can repair own and allies damage mage to <u>light</u> units, x0,5 to <u>massive</u> and x0,25 t

& & 2.	Sergeant	
T	Sergeant	
77	Class	ground, light
■ 7	Hits	100
Y	Production time	10
	Energy required	2
	Speed	13
	Size	12
	Sight/attack radius	240 common
	Signifattack radius	180 against <u>air</u>
		Not advanced: Advanced:
		- min: 9 - min: 12
	Attack	- max: 28 - max: 41
		max SDR: 30 max SDR: 40
		1 HPS, min SDR: 10
	Place in transport	1
	Ground unit with ranged a	attack. Deal x0,5 damage to <u>fly</u> , <u>light</u> and
		echanical units. Damage and splash-range
		rget. Advanced Sergeant deal more damage
	_	ant's attack set Hell units into «pain state»
	more often than other units a	ittack.
*	Commando	
	Class	ground, light
	Hits	100
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
	_	ack. Deal x1,5 damage to <u>light</u> units, x0,5 to <u>chanical</u> units. Advanced Commando has
	invisibility.	manata ints. Navancea Commando has
	Artillery soldier	
23	Class	ground, light
	Hits	100
G	Production time	30
	Energy required	4
	Speed	10
	Size	12
	Base sight/attack radius	250
	Attack	50
		0.6 HPS
	Place in transport	1
	Requirements	UAC Weapon Factory building
	_	

		damage to <i>light</i> and <i>mech</i>	attack. Deal x1,5 damage to <u>buildings</u> and x0,5 as units. Cannot attack <u>air</u> units. Cannot attack s. Advanced Artillery soldier have 275 attack
♦		Major	
	3	Class	ground/air, light
		Hits	100
	H	Production time	20
		Energy required	4
		_	Not advanced: 9
		Speed	Advanced: 13
		Size	12
		Sight/attack radius	250
		Attack	15
		Attack	4 HPS
		Place in transport	1
		Requirements	UAC Weapon Factory building
*		BFG Marine	
	3.5	Class	ground, light
		Hits	100
	V	Production time	60
		Energy required	5
		Speed	10
		Size	12
		Sight/attack radius	250
			125
		Attack	125 SDR
			0.4 HPS
		Place in transport	1
		Requirements	UAC Weapon Factory building
			attack. Deal x0,5 damage to <i>light</i> , <i>mechs</i> units BFG Marine has 275 attack and sight ranges.

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

	·	Air APC		
A STATE OF THE PARTY OF THE PAR		Class	mech, ground	
•		Hits	250	
	В	Production time	25	
		Energy required	3	
		Speed Speed	22	
		Size	33	
		Sight/attack radius	250	
		Signivattack radius	6/12	
		Attack (upgrade)		
			2 HPS	
		Base transport place count	10	
		Base armor	3	
		Requirements	UAC Weapon Factory building	
		1 -	rting all ground UAC units. Advanced Air	
		APC has 14 places.		
		Possible upgrades:		
		- APC turret – give to APC w	eapon.	
		Ground APC		
		Class	mech, ground	
		Hits	350	
	N	Production time	25	
		Energy required	3	
		Speed	15	
		Size	15	
		Sight/attack radius	250	
		Signifattack radius	6/12	
		Attack (after upgrade)	2 HPS	
		Rose transport place count	4	
		Base transport place count	3	
		Base armor		
		Places in transport	8	
		Requirements	UAC Weapon Factory building	
			A TIAC TOP A	
		Fast ground transport. Can transporting all ground UAC infantry.		
		Advanced Air APC has 6 places. Marines can attack while they in APC.		
		Possible upgrades:		
		- APC turret – give to APC w	reapon.	
	i	II		

A Service			
	1	Terminator	
	\mathscr{E}^2	Class	mech, ground
		Hits	350
	O	Production time	60
		Energy required	6
		Speed	14
		Size	16
			275 common
		Sight/attack radius	206 against <i>air</i>
			6/12
		Attack	8 HPS
		Base armor	3
		Place in transport	3
		Requirements	UAC Tech Center building
		•	High technologies upgrade
		advanced - like Comma	h ranged attack. Attacking with chain gun (not ando/advanced like Mastermind).
		advanced - like Comma Tank	ando/advanced like Mastermind).
		Tank Class	ando/advanced like Mastermind). mech, ground
		Tank Class Hits	mech, ground 400
	U	Tank Class Hits Production time	mech, ground 400
	U	Tank Class Hits Production time Energy required	mech, ground 400 60 8
	U	Tank Class Hits Production time Energy required Speed	mech, ground 400 60 8 10
	U	Tank Class Hits Production time Energy required Speed Size	mech, ground 400 60 8 10 20
	U	Tank Class Hits Production time Energy required Speed	mech, ground 400 60 8 10 20 250
	U	Tank Class Hits Production time Energy required Speed Size	mech, ground 400 60 8 10 20 250 45 SDR
	U	Tank Class Hits Production time Energy required Speed Size Sight/attack radius Attack	mech, ground 400 60 8 10 20 250 45 SDR 0.6 HPS
	U	Tank Class Hits Production time Energy required Speed Size Sight/attack radius Attack Base armor	mech, ground 400 60 8 10 20 250 45 SDR 0.6 HPS 3
	U	Tank Class Hits Production time Energy required Speed Size Sight/attack radius Attack	mech, ground 400 60 8 10 20 250 45 SDR 0.6 HPS 3 7
	U	Tank Class Hits Production time Energy required Speed Size Sight/attack radius Attack Base armor	mech, ground 400 60 8 10 20 250 45 SDR 0.6 HPS 3

- 1	Flyer	
	Class	mech, air
_	Hits	350
Ι	Production time	60
	Energy required	8
	Speed	19
	Size	18
	Sight/attack radius	275
	Attack	30
	Attack	2 HPS
	Base armor	3
	Dogwinomonta	UAC Tech Center building
	Requirements	High technologies upgrade
	Heavy ground unit with	ranged attack. Deal x0,5 damage to <i>ground</i> units
	and <i>buildings</i> . Advanced	d Flyer can attack in moving.

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

OTHER UNITS

Sprite	Description

UPGRADES

Hell

Icon / Hot key	Time Energy Level	Description	Requirements
Q	180 4 4	Range attack upgrade Increase ranged attacks damage.	
W	180 4 4	Unit armor upgrade Increase units armor.	
E	120 4 4	Buildings armor upgrade Increase buildings armor.	
A	60 2 3	Melee attack upgrade Increase melee attacks damage.	
S	120 3 2	Regeneration Damaged units will slowly regenerate their health.	
D	60 2 4	Pain threshold Decrease "pain state" chance.	
Ž	120 3 3	Hell Eye Lost Soul ability & Hell Eye sight radius. In UDOOM game mod, last level of upgrade make Hell Eye invisible.	
X	3 3	Tower range upgrade Increased range of defensive structures.	
C	120 2 3	Teleport upgrade Decrease teleport cooldown.	
R	180 3 1	Hell Keep teleportation Hell keep can teleport to any place.	

		Decay Aura	
施設	120	Decay Mara	
A STATE OF THE PARTY OF THE PAR		Hell Keep will damage all enemies around.	
T	3 2	Also, this aura neutralize stun effects on own	
	_	and allied units.	
(Assistance)	100	Hell Keep range upgrade	
Y	120 2 2	Increased Hell Keep view/build range.	
		Demon's anger	
F	60 3 1	Increased Demon's movement and attack speed.	
	120	Firepower	
G	2 1	Increase missiles speed for Imp, Cacodemon and Baron of Hell/Hell Knight.	
	20	Hell power	
H	20 8 15	Allow Hell Monastery upgrade units.	
290	100	Ancient evil	Hell Monastery building
V	180 10 1	New buildings, units and upgrades.	
X was X	120	Reverse teleport	
В	3 1	Units can teleport back to Hell Teleport.	
** - e.	120	Revenant missile upgrade	
N	2 1	Missiles become homing	
U	120 2 1	Hell Totem and Eye invisibility	Hell Monastery building
	120	Building restoration	Ancient evil upgrade
I	120 2 3	Damaged buildings will slowly regenerate their health.	
	60	Free teleportation	
O	2 1	Hell Keep can teleport on obstacles.	
	20	Short distance teleportation	
J	1 15	Hell Symbols, Towers, Totems and Altars can teleport to short distance.	
		•	•

K	180 10 3	Invulnerability All hell units become invulnerable for 15 seconds.	Ttell Alten building
L	180 4 4	Built-in Hell Symbol Additional energy for Hell Keep.	Hell Altar building Ancient evil upgrade



Icon / Hot key	Time Energy Level	Description	Requirements
Q	180 4 4	Range attack upgrade Increase ranged attacks damage.	
W	120 4 5	Unit armor upgrade Increase units armor.	
E	180 4 4	Buildings armor upgrade Increase buildings armor.	
A	60 3 3	Advanced repair and healing Increases the efficiency of repair/healing of Engineers and Medics.	
S	120 3 2	Lightweight armor Increase infantry move speed.	
D	120 2 2	APC turret Weapon for APCs.	
Z	120 3 1	Detector device Radar and mines becomes detectors.	
X	120 3 3	Turrets range upgrade Increased attack range of defensive structures.	

	120	Radar upgrade	
C	2	Increase radar scouting time and radius.	
	180	Command Center engines	
R	3 1	Command Center gains ability to fly.	
<u>کالاح</u>	180	Command Center turret	
T	4	Flying Command Center will be able to attack	Command Center engines upgrade
	120	Command Center range	
Y	2	Increased Command Center view/build range.	
30 30	120	Mines	
F	2 2	Engineer ability.	
	60	Mine-sensor	
G	2 1	Mine ability.	Mines upgrade
<u>≥</u> ⊘	180	Advanced armory	
H	8 1	Tech Center will be able to upgrade own units.	IIAC Took Conton building
9 6	180	High technologies	UAC Tech Center building
V	8 1	New buildings, units and upgrades.	
	180	Missile strike	
В	10 8	Missile for Rocket Launcher Station.	
<u> </u>	120	Advanced engines	
N	3	Increase mechs move speed.	UAC Tech Center building
	180	Mech armor upgrade	High technologies upgrade
U	4 4	Increase mechs armor.	
	120	Fast rearming	
I	2	Decrease Tech Center upgrade reloads time.	

O	60 2 1	Free placement Command center will be able to land on obstacles.	
J	120 3 2	Turrets armor Additional armor for turrets.	UAC Tech Center building
K	180 4 1	Rocket turrets Turrets can upgrade to Rocket turrets.	High technologies upgrade
L	180 4 2	Built-in generator Additional energy for Command Center.	