

**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.

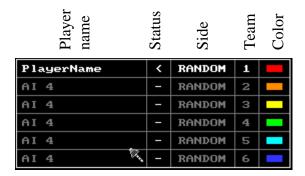
Obstacles - count of obstacles.

*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;

 $\langle\langle \mathbf{C}\rangle\rangle$  – Computer player.

For multiplayer game:

«+» or «-» - Player «ready» status;

«?» – Connection problem;

«@» − Host player (server);

<<>> − You position.

Side - Hell or UAC.

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;

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;

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

#### Game minimap:

Minimap alarm indicators types:

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

#### *Line under minimap:*

```
Energy section – free energy level / maximum energy level;

Army section – number of all units (units + buildings).
```

#### 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;

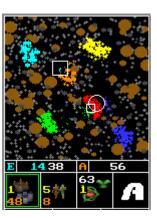
Purple - number units of this type in selected transport(s);

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} xupgrade max level Description Requirements: (if exits)

#### 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 this group. (F2) hotkey will select all battle units on map.

#### Orders:

- Right click «Move» or «Move»+«Attack» (you can switch action in menu);
- «Move» (Q), «Stay» (W), «Patrol» (E), ignore enemies;
- «Move» (Q), «Stay» (W), «Patrol» (E), attack enemies;
- $(Action)(\mathbf{Z})$  do some ability (if unit have it).
- «Destroy» (**Delete**) destroy selected units.
- «Right click action» (X) switch right click action;
- «Cancel production» (C) abort current production (work on Units or Upgrades/researches tabs);



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.

**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. 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.

<sup>\*</sup> it possible to produce this upgrade in many buildings at time.

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.

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

#### **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 OPTIONS Game: DOOM 2 Game mode: Skirmish Starting base: 1 builder Show player starts: Fill empty slots: AI 4 Random skirmish

#### 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 "#" 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:





Invulnerable unit have white aura:



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**

## HELL

Sprite	Icon / Hot key		Description
	R	place; - Decay Aura – HK s - Sight radius upgrad - Free teleportation obstacles;	ation – allow <b>HK</b> to teleport to any map start damage enemy units around;
	T	Hell Gate  Hits Size Building time Sight radius Max count Energy required  Produce units.	1500 60 41 200 Unlimited
	Y	Hell Symbol  Hits Size Building time Sight radius Max count Energy required Energy provided  Provide energy.  Possible upgrades: - Short distance telep	200 24 10 200 Unlimited 1 1

	Hell Pool	
F	Hits Size Building time Sight radius Max count Energy required Research upgrades.	1000 53 41 200 Unlimited 6
	Hell Tower	
G	but Revenants - with  Possible upgrades: - Range attack upgrades: - Attack/sight radius - Short distance telep	Unlimited 2 tacking all units with <b>Revenant</b> fireballs, <b>Cacodemon</b> fireballs.  ade; supgrade;
H	click to set destination Hell Teleport or it depend from unit pow  Possible upgrades: - Teleport upgrade -	500 28 31 200 1 4 point: select Hell Teleport and do right n 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	
V	There is 2 methods to 1) Select <b>Hell Monas</b>	1000 65 100 200 Unlimited 10 Hell Pool building  es for units advancing; make advance any unit: stery and do right click on unit; right click to Hell Monastery building banel;
В	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  ucture. Attacking like ArchVile unit.  ade; s upgrade;
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

Max count Unlimited Lost Soul unit Requirements

Hell Eye upgrade

250

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

#### Possible upgrades:

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

- Invisibility;

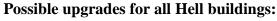
#### **Hell Military Unit**

Hits 1500 70 Size **Sight radius** 200 Max count Unlimited

advanced Lost Soul unit Requirements

UAC Military Unit building

Produce zombies and Hell units.



- 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
	R	to fly (use «Action» of - Sight radius upgrawhen it on ground; - Command Center (attacking like Major	4000 66 80 280 Unlimited 8
	Т	UAC Military Unit  Hits Size Building time Sight radius Max count Energy required  Produce units.	1700 66 40 200 Unlimited 4
	Y	Hits Size Building time Sight radius Max count Energy required Energy provided Provide energy.	400 42 20 200 Unlimited 2 2

		UAC Weapon Factor	Po£1
		UAC Weapon racio	ry
		_ Hits	1700
D. C.	25 75		
		Size	62
		Building time	40
	Santa	Sight radius	200
		Max count	Unlimited
	${f F}$	Energy required	6
		Research upgrades.	
		UAC Chaingun Tur	ret
		Hits	400
		Size	17
		<b>Building time</b>	15
		Base sight/attack ra	
		Max count	Unlimited
		Energy required	2
<u> </u>	1.1	Energy required	12
	3 ± 8	Attack	
			4 HPS
	G	Defense structure. Att	tacking like <b>Mastermind</b> unit.
		Possible upgrades:	
		- Range attack upgra	ade;
		- Attack/sight radius	supgrade;
		- Turrets armor;	
		UAC Radar	
		Uita	500
		Hits	500
		Size	35
		Building time	31
	A TON	Base sight radius	200
gore rotal	1	Max count	1
		Energy required	2
The state of the s	Н	Reveals map. To reveright click on this area	eal any map area – select <b>Radar</b> and do a.
		Possible upgrades:	
		- Detectors;	
			aranga radar agastina tima and malina
		- Kauar upgraue - In	crease radar scouting time and radius.

UA	AC Tech Center	
V Carrow Aunit - Fitting To	its; <b>Fast rearmament</b> - ne.	1700 62 94 200 1 10 UAC Weapon Factory building  - Tech Center will be able to upgrade decrease Tech Center upgrade reloads lect unit and do right click on Tech ontrol panel.
B De Po	AC Plasma Turret lits ize uilding time ase sight/attack adius lax count nergy required equirements	400 17 20 250 Unlimited 2 UAC Tech Center building acking like Major unit.
H Si B Si M E R Pro	rike" research. Miss al x0,05 damage to	ser Station  500 40 31 200 1 4 UAC Tech Center building  e. Missile strike requires "Missile ile have 300 damage and 150 SDR. light 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
all the second		Energy required	4
	Ctrl	Requirements	UAC Tech Center building Rocket turrets upgrade
	T T	Defense structure. Attacking HPS.	g like <b>Cyberdemon</b> unit with 0,6
		Possible upgrades: - Range attack upgrade; - Attack/sight radius upgra - Turrets armor;	de;

### **SPECIAL BUILDINGS**

	Mine	
	Hits Size Base sight radius	1 5 100
	Max count	Unlimited
	Requirements	advanced <i>Engineer</i> unit
<b>⊗</b>	 Set by advanced UAC	C Engineers.
	Possible upgrades:	
	- Detectors;	
	- Mine-sensor - min	e can switch to sensor mode that provide
		d not explode under enemy unit (use
	«Action» order to swi	itch 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.

	Loon		
	Icon		
Sprite	'		Description
_	hot		•
A	key	<b>T</b> 40 <b>T</b>	
		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
<b>A</b>	A	Possible upgrades: - Melee attack upgrade; - Hell Eye – Lost Soul ca	n transform to <b>Hell Eye</b> (use «Action» order);
N.		_	around light
		Class	ground, light
	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
		110001	1 HPS
			ranged attack. Deal x0,5 damage to <u>air</u> and ing other <b>Imps</b> only with melee attack (damage dvanced <b>Imp</b> has 2 HPS.
		Possible upgrades: - Firepower – increase mi	issiles speed.

	Demon	
17	Class	around modium
	Hits	ground, medium 150
Y		
	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
	Fast ground unit with melee	e attack. Cannot attack <u>air</u> units (except Lost
	Soul). Advanced <b>Demon</b> has	
	Possible upgrades:	•
		Demon's movement speed and attack.
X X	Cacodemon	1
Said Said		
	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.
		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	
	Possible upgrades:	
	- Firepower – increase miss	nes speed.
**	Baron of Hell / Hell Knight	t .
	Class	ground, medium
	Hits	350
M.	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
	Auack	0,8 HPS
	Base armor	3
	Heavy ground unit with ran	ged attack. Attacking other Barons/Knights
	only with melee attack (d	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

**Energy required** 8 **Speed** 10 **Size** 20

Base sight/attack radius

250 common
190 against <u>air</u>

Pain state 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

275 common
205 against <u>air</u>
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.

h million a			
(a) (a) (m) (a)	100 A	Pain Elemental	
		Class	air, medium
		Hits	200
	В	Production time	40
			6
		Energy required	
		Speed	9
		Size	14
		Sight radius	250
		Attack radius	350
		Pain state	every 3 hit
		A 44 P	spawn Lost Soul
		Attack	0.6 HPS
		Requirements	Hell Monastery building
		_	I on attack or on «Action» order. Advanced <b>Pain</b>
0.90		-	Lost Souls and spawn 3 Lost Souls after death.
481		Revenant	
1	37		
		Class	ground, light
	<b>N</b> .T	Hits	200
	N	Production time	40
		Energy required	4
		Speed	12
		Size	13
		Base sight/attack radius	250
		Pain state	
		Fain state	every 7 hit
		Attack	30
			0.8 HPS
		Requirements	Hell Monastery building
			ck. Deal x1,5 damage to <u>mechs</u> and x0,75 to <u>air</u>
		and <i>buildings</i> . Attacking oth	ner Revenants only with melee attack (damage
		same as ranged attack). Adva	nced <b>Revenant</b> has 325 attack ranges.
		Possible upgrades:	
		- Revenant missile upgrade	- missiles become homing.
		Mancubus	<u> </u>
	11/4	Class	ground, massive
		Hits	400
	Ctrl	Production time	60
	+	Energy required	6
	R	Speed Speed	6
	11	Size	20
		Sight radius	250
		Attack radius	300 common
			150 against <u>air</u>
		Pain state	every 4 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 <b>Mancubus</b> . Advanced
		<b>Mancubus</b> have «pain state»	resist.

POPPA .	. 450	Arachnotron	
	1200		
		Class	ground, massive
	Q. 1	Hits	350
	Ctrl	Production time	50
	+	Energy required	6
	T	Speed	9
		Size	20
		Sight/attack radius	250
		Pain state	every 4 hit
		Attacl	15
		Attack	4 HPS
		Base armor	4
		Dogginom anta	Hell Monastery building
		Requirements	Ancient Evil upgrade
ki .		ranges against <u>air</u> . <b>ArchVile</b>	
	5	ArchVile	1 1
*	5	ArchVile Class	ground, medium
	Ctrl	ArchVile Class Hits	400
	Ctrl	ArchVile  Class  Hits  Production time	400 90
	+	ArchVile  Class Hits Production time Energy required	400 90 10
		ArchVile  Class Hits Production time Energy required Speed	400 90 10 15
	+	ArchVile  Class Hits Production time Energy required Speed Size	400 90 10 15 15
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius	400 90 10 15 15 250
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius	400 90 10 15 15 250 400
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius	400 90 10 15 15 250 400 every 12 hit
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius Pain state	400 90 10 15 15 250 400 every 12 hit
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius	400 90 10 15 15 250 400 every 12 hit 90 0.4 HPS
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius Pain state  Attack	400 90 10 15 15 250 400 every 12 hit 90 0.4 HPS 15 SDR
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius Pain state  Attack Base armor	400 90 10 15 15 250 400 every 12 hit 90 0.4 HPS 15 SDR 3
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius Pain state  Attack	400 90 10 15 15 250 400 every 12 hit 90 0.4 HPS 15 SDR 3 Hell Altar building
	+	ArchVile  Class Hits Production time Energy required Speed Size Sight radius Attack radius Pain state  Attack Base armor Requirements	400 90 10 15 15 250 400 every 12 hit 90 0.4 HPS 15 SDR 3

### **SPECIAL UNITS**

	Ctrl	Zombies	
17 17 W	+		
	F G	Class	ground / air, light
	HV	Size	12
7	ΒN	Pain state	every 2 hit
		Requirements	Hell Military Unit building
	U	UAC Infantry that corrupt	ed by advanced <b>Lost Soul</b> . <b>Zombies</b> don't have
	, v	-	ngineer'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

	key R	Engineer  Class Hits Production time Energy required	ground, light
	R	Hits Production time	100
	R	Hits Production time	100
	R	<b>Production time</b>	
			10
			10
		Speed	13
		Size	12
		Size	220 common
		Sight/attack radius	
			165 against <u>air</u>
		Attack	6 1.7 LIDS
		Discontinuity	1.7 HPS
		Place in transport	1 ed attack. Can repair own and allies damage
<u>.</u>		Possible upgrades: - Advanced repair and healir - Mines - Engineer can set Mi Medic	ng - increase the efficiency of repairing; ines (use «Action» order).
7	W.	Class	ground light
		Class	ground, light
	$\mathbf{T}$	Hits	100
	-	Production time	10
		Energy required	1
		Speed	13
		Size	12
		Sight/attack radius	220 common
		0	165 against <u>air</u>
		Attack	6
			1.5 HPS
		Place in transport	1
			ed attack. Can repair own and allies damage
		·	mage to <u>light</u> units, x0,5 to <u>massive</u> and x0,25 (Medic can paralyze <u>biological</u> units.
		Possible upgrades:	<b>ng</b> - increase the efficiency of healing.

<b>♣ ♠</b>	Sergeant	
	Class	ground, light
<b>Y</b>	Hits Production time	100 10
	Energy required	2
	Speed Speed	13
	Size	12
		240 common
	Sight/attack 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 fly, light and
		echanical units. Damage and splash-range
		rget. Advanced <b>Sergeant</b> deal more damage
	and have more SDR. Serge	ant's attack set Hell units into «pain state»
	more often than other units a	uttack.
<u></u>	Commando	
Y S	Commando	
- 2	Class	ground, light
	Hits	100
<b>F</b>	Production time	15
	Energy required	2
	Speed	11
	Size	12
	Sight/attack radius	250 common
	Signi, attack Taurus	220 against <u>air</u>
	Attack	6
		8 HPS
	Place in transport	1
	Ground unit with ranged atta	ack. Deal x1,5 damage to <i>light</i> units, x0,5 to
	_	hanical units. Advanced Commando has
	invisibility.	
<b>*</b>	Artillery soldier	
9.9	Class	around light
	Hits	ground, light 100
G	Production time	30
	Energy required	4
	Speed	10
	Size	12
	Base sight/attack radius	250
		50
	Attack	0.6 HPS
	Place in transport	1
	Requirements	UAC Weapon Factory 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 <b>Artillery soldier</b> have 275 attack and sight radius.	
H	_	ground/air, light 100 20 4 Not advanced: 9 Advanced: 13 12 250 15 4 HPS 1 UAC Weapon Factory building attack. Deal x1,5 damage to mechs, x0,5 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 ek. Deal x0,5 damage to light, mechs units G 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 the state of		Class	mech, ground
_		Hits	250
	В	Production time	25
		Energy required	3
		Speed	22
		Size	33
		Sight/attack radius	250
			6/12
		Attack (upgrade)	2 HPS
		Base transport place count	10
		Base armor	3
			_
		Requirements	UAC Weapon Factory building
			2' 11 1 1 1 1 A 2 A 1 1 A 2
		1 1	rting all ground UAC units. Advanced Air
		APC has 14 places.	
		Possible upgrades:	
		- <b>APC turret</b> – give to APC w	eapon.
		Ground APC	
		Class	mech, ground
	N.T	Hits	350
	N	Production time	25
		E	2
		Energy required	3
		Speed	15
		_	
		Speed	15
		Speed Size Sight/attack radius	15 15
		Speed Size	15 15 250 6/12
		Speed Size Sight/attack radius Attack (after upgrade)	15 15 250 6/12 2 HPS
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count	15 15 250 6/12 2 HPS 4
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor	15 15 250 6/12 2 HPS 4 3
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor Places in transport	15 15 250 6/12 2 HPS 4 3
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor	15 15 250 6/12 2 HPS 4 3
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor Places in transport Requirements	15 15 250 6/12 2 HPS 4 3 8 UAC Weapon Factory building
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor Places in transport Requirements Fast ground transport. Can	15 15 250 6/12 2 HPS 4 3
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor Places in transport Requirements Fast ground transport. Can Advanced Air APC has 6 place	15 15 250 6/12 2 HPS 4 3 8 UAC Weapon Factory building transporting all ground UAC infantry.
		Speed Size Sight/attack radius Attack (after upgrade) Base transport place count Base armor Places in transport Requirements Fast ground transport. Can	15 15 250 6/12 2 HPS 4 3 8 UAC Weapon Factory building transporting all ground UAC infantry. es. Marines can attack while they in APC.

3.6	1	Terminator	
	- Page	Class	mech, ground
		Hits	350
	Ctrl	Production time	60
	+	Energy required	6
	R	Speed	14
		Size	16
		Sight/attack radius	275 common
			6/12
		Attack	8 HPS
		Base armor	3
		Place in transport	3
		Trace in transport	5
		Requirements	UAC Tech Center building
		Kequii ements	High technologies upgrade
		Tank	
			mech. ground
		Class	mech, ground 400
	Ctrl	Class Hits	400
		Class Hits Production time	400 60
	+	Class Hits Production time Energy required	400 60 8
		Class Hits Production time Energy required Speed	400 60 8 10
	+	Class Hits Production time Energy required Speed Size	400 60 8 10 20
	+	Class Hits Production time Energy required Speed Size Sight/attack radius	400 60 8 10 20 250
	+	Class Hits Production time Energy required Speed Size	400 60 8 10 20 250 45 SDR
	+	Class Hits Production time Energy required Speed Size Sight/attack radius Attack	400 60 8 10 20 250 45 SDR 0.6 HPS
	+	Class Hits Production time Energy required Speed Size Sight/attack radius Attack Base armor	400 60 8 10 20 250 45 SDR
	+	Class Hits 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
	+	Class Hits Production time Energy required Speed Size Sight/attack radius Attack Base armor	400 60 8 10 20 250 45 SDR 0.6 HPS 3

- Alle		Flyer	
		Class	mech, air
	<i>α</i> . 1	Hits	350
	Ctrl	Production time	60
	+	Energy required	8
	${f Y}$	Speed	19
		Size	18
		Sight/attack radius	275
		Attack	30
			2 HPS
		Base armor	3
		Do autinom outa	UAC Tech Center building
		Requirements	High technologies upgrade
		Heavy ground unit with	ranged attack. Deal x0,5 damage to ground units
		and buildings. 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
R	180 4 4	Range attack upgrade  Increase ranged attacks damage.	
T	180 4 4	Unit armor upgrade Increase units armor.	
Y	120 4 4	Buildings armor upgrade  Increase buildings armor.	
F	60 2 3	Melee attack upgrade  Increase melee attacks damage.	
G	120 3 2	Regeneration  Damaged units will slowly regenerate their health.	
H	60 2 4	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	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 place.	

		Decay Aura	
I	120 3 2	Hell Keep will damage all enemies around. Also, this aura neutralize stun 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 8 15	Hell power  Allow Hell Monastery upgrade units.	TT-11 N/I locilding
Ctrl+R	180 10 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	Free teleportation  Hell Keep can teleport on obstacles.	
Ctrl+V	30 1 15	Short distance teleportation  Hell Symbols, Towers, Totems and Altars can teleport to short distance.	

	180	Invulnerability	
Ctrl+B	180 10 3	All hell units become invulnerable for 15 seconds.	Hell Altar building
	180	Built-in Hell Symbol	Ancient evil upgrade
Ctrl+N	4 3	Additional energy for Hell Keep.	



Icon / Hot key	Time Energy Level	Description	Requirements
R	180 4 4	Range attack upgrade  Increase ranged attacks damage.	
T	120 4 5	Unit armor upgrade Increase units 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.	
B	120 3 3	Turrets range upgrade  Increased attack range of defensive structures.	

	120	Radar upgrade	
N	2 3	Increase radar scouting time and radius.	
U	180 3 1	Command Center engines	
		Command Center gains ability to fly.	
480	100	Command Center turret	
I	180 4 1	Flying Command Center will be able to attack	Command Center engines upgrade
O	120 2 2	Command Center range	
		Increased Command Center view/build range.	
\$ 50 mg	120	Mines	
J	<b>2</b> <b>2</b>	Engineer ability.	
	60	Mine-sensor	Mines upgrade
K	1	Mine ability.	
<b>ॐ ⋘</b> <b>©</b> ← L	180 8 1	Advanced armory	
		Tech Center will be able to upgrade own units.	
چاله	180	High technologies	UAC Tech Center building
Ctrl+R	10 1	New buildings, units and upgrades.	
	180	Missile strike	
Ctrl+T	10 8	Missile for Rocket Launcher Station.	
<u>-</u>	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 upgrade reloads 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	180 4 1	Rocket turrets  Turrets can upgrade to Rocket turrets.	
Ctrl+N	180 4 3	Built-in generator  Additional energy for Command Center.	