

Warsong Game Data Guide

by Amuseum

Updated to v2.0 on Apr 4, 2005

Guide to Warsong ROM Data ~v2.0 by Amuseum
My website Warsong Amuseum can be found at
<http://www.hostinganime.com/amuseum/warsong/warsong.php>

Changes:

4/19/04: Found addresses for promotion, troops you can buy, gold per kill, and flag for immunity.

Introduction

I scrounged inside the Warsong ROM and I came up with this. I have yet to find the data on spells, so the stuff on spells is from game experience. The notes after each section are mostly from game experience, too.

Note about text alignment in ROM: Every other letter is put in two separate sections. For example, Garrett goes by two parts, aet and Grt. Do a search for aet or Grt.

Magic

Order	Spell	MP	HP	Distance	Area of Effect
1	Magic Arrows	2	1/2	6/7	0/1
2	Fireball	4	1-2/2-3	5/6	3/4
3	Blizzard	4	1-2/2-3	5/6	3/4
4	Lightning	4	1-2/2-3	7/8	linear
5	Thunder	8	1-5/2-6	5/6	3/4
6	Earthquake	16	1-3/2-4	4/5	10/11
7	Tornado	8	1-4/2-5	5/6	5/6
8	Fireball 2	8	1-4/2-5	5/6	5/6
9	Healing 1	2	2/3	4/5	1/2
A	Healing 2	4	4/5	5/6	1/2
B	Healing 3	8	8/9	6/7	2/3
C	Sleep	4	0	4/5	2/3
D	Confusion	8	0	7/8	0/1
10	Stone Monument	0	0	6/7	1

Notes:

When a commander reaches level 5 in any class, his/her magical skills are enhanced until he/she advances to the next class. A spell's amount of damage or of healing is increased, noted by the value after the slash under HP. The spell's distance and area of effect are also increased by 1, noted by the value after the slash under distance and area of effect, respectively.

Area of Effect: 0 means only affects one target. 1 means target plus one square around, like a cross. 2 means target plus two squares away, like a diamond with diameter 5 across. 3 is diamond 7 across, and so on. For Lightning, the area of effect is a line from the caster to the target. All the enemy targets along this line will also get damaged.

Stats

Unit	AT	DF	MP	MV	A+	D+	XP	To Next Lvl(x8)
Archer	19	14	0	7	0	0	3	
Arch Mage	31	17	32/16	6	9/7	2/0	10	5/4

Barbarian	19	14	0	6	0	0	3	
Basilisk	27	27	1	6	3	2	15	4
Bishop	27	20	16	6	6/4	4/6	10	6/4
Carrion Crawler	20	24	0	6	0	0	3	
Chaos	35	35	40	7	4	4	40	4
Citizen	0	6	0	6	0	0	1	
Cleric	23	17	8	5	0	4	7	2
Conjurer	19	20	16	6	1	2	10	4
Crocodile Kni.	28	20	0	7	2	2	10	2
Dark Elf	20	14	0	7	0	0	3	
Dragon Knight	34	24	4	9	4	2	12	6
Elemental	23	20	0	7	0	0	2	
Evil Ant	19	16	0	8	0	0	2	
Fighter	23	20/21	0	6	0(2)	2	7/8	2
Fire Elemental	41	34	16	8	0	0	45	8
Gargoyle	27	14	0	7	0	0	3	
Golem	19	40	0	6	0	0	8	
Gorgosaur	31	28	12	6	5	0	20	4
Grand Knight	33/31	28/25	0	6	8/6	4	12/10	6/4
Great Dragon	35	35	16	3	5	4	25	4
Great Slime	19	28	0	6	2	2	9	3
Gryphon	27	13	0	9	0	0	4	
Guardman	16	10	0	6	0	0	2	
High Priestess	27	32	32	6	4	8	10	6
Horseman	21	15	0	8	0	0	3	
Kaiser	32	32	12	6	4	4	15	4
King	31	28	12	6	6	4	15	6
Knight	31	20/19	0	8	4	2	7/9	4
Knight Master	34	24	8	8	8	2	10	6
Kraken	29	26	0	6	0	2	17	4
Leviathan	27	13	0	7	0	0	3	
Living Armor	32	30	8	6	5	4	10	4
Lizard man	23	6	0	7	0	0	3	
Lord	27	24	8	6/5	2	4	10	4(3)/3
Magic Knight	31	25	16	8	6	4	10	6
Merman	24	6	0	7	0	0	3	
Monk	20	13	0	6	0	0	3	
Necromancer								
Priestess	27	24	16	6	2	6	7	5
Queen Ant	31	20	0	8	6	5	12	3
Ranger	41	28	16	9	0	0	20	8
Royal Guard	35	21	4	8	6	4	15	5
Royal Soldier	24	18	0	6	0	0	5	
Saint	31	24	24	6	9	4	10	6
Serpent Knight	32/31	24	0	7	6/4	2	12	3
Shaman	25	15	4	4	0	0	10	2
Skeleton	24	21	0	6	0	0	3	
Slime	19	20	0	4	0	0	3	
Soldier	20	14	0	6	0	0	2/3	
Sorcerer	27	20	16	6	3	2	15	3
Styracosaur	23	24	0	6	0	0	3	
Sword Master	25	22	0	6	0	9	15	3
Warlock	27	13	10	6	3	2	7	1
Werewolf	25	17	0	6	0	0	3	
Werewolf	29	21	0	6	6	4	10	3
Wight	31	34	16	6	7	6	20	4
Wizard	27	15/16	16	6	6/4	2/0	7/8	3
Wyvern	31	24	8	7	3	2	15	4

Note:

Enemies of the same name may have different values. Those values are given after the slash.

Enemy Fighters and Garrett have 21 DF. Also, Garrett gets 2 A+.

Enemy Grand Knights have lesser values in AT, DF, and A+.

Only Commanders have To Next Lvl. This is the length of experience bar.

This number is multiplied by 8 to get actual XP needed to get a level.

Garrett's Lord XP bar has length 4, others are 3.

Hex: 2c4e2-2db63; check AT-DF-MV eg. Archers 13 0E 07; length 64 bytes

Order of hex:

Fighter (Garrett), Fighter (men), Fighter (women), Lord, "", "",
 , Sword Master, King, Ranger, Knight, "", "", Knight Master, "",
 "", Magic Knight, "", "", Grand Knight, "", Crocodile Kni., Serpent
Knight, Dragon Knight, "", Warlock, Wizard, Arch Mage, Bishop,
Cleric, Priestess, High Priestess, Saint, Warlock, Fighter, "", Lord,
Kaiser, Knight, "", Royal Guard, "", Grand Knight, Serpent Knight,
Wizard, Arch Mage, Bishop, Great Slime, Queen Ant, Werewolf,
Necromancer, Conjuror, Sorcerer, Living Armor, Wight, Kraken,
Gorgosaur, Basilisk, Wyvern, Great Dragon, Chaos, Shaman, Fire
Elemental, ?? (0c 0a 06) , "", Soldier, Horseman, Archer, Monk,
Merman, Gryphon, Guardman, Citizen, ?? (0c 0a 06) , "", Soldier,
Horseman, Dark Elf, Lizard man, Royal Soldier, Slime, Evil Ant,
Werewolf, Skeleton, Styracosaur, Carrion Crawler, Golem, Leviathan,
Gargoyle, Barbarian, Elemental

Commanders

Cmdr	Troops	Magic
Arch Mage	Archer, Soldier	Magic Arrows, Fireball, Earthquake; Tornado, Fireball
Basilisk	Styracosaur	Stone
Bishop	Archer	Fireball 2, Healing 2, Confusion; Healing 2 Magic Arrows Fireball 2
Chaos	Elemental	Thunder, Earthquake, Healing 2
Cleric	Guardman, Civilian	Healing 1
Conjuror	Golem	Blizzard
Crocodile Kni.	Merman	n/a
Dragon Knight	Gryphon	Blizzard
Fighter	Soldier, Dark Elf, Civilian	
Fire Elemental	-	Fireball
Gorgosaur	Carrion Crawler, Styracosaur	Fireball
Grand Knight	Soldier, Horseman, Archer/Dark Elf	
Great Dragon	Styracosaur	Fireball
Great Slime	Slime	
High Priestess	Guardman, Monk	Healing 2+3, Sleep
Kaiser	Royal Soldier	Healing 1, Blizzard
King	Soldier, Horseman, Archer	Magic Arrows, Healing 1
Knight	Soldier, Horseman	
Knight Master	Soldier, Horsmen, Archer	
Kraken	Leviathan	
Living Armor	Skeleton	Blizzard
Lord	Soldier, Archer; Dark Elf, Royal Soldier	Healing 1
Magic Knight	Soldier, Horseman, Archer	Thunder, Healing 1
Priestess	Guardman, Monk	Healing 1+2
Queen Ant	Evil Ant	
Ranger	-	Earthquake, Sleep, Confusion
Royal Guard	Horseman	Lightning
Saint	Guardman, Monk	Fireball, Tornado, Healing 2
Serpent Knight	Lizard man, Merman	
Shaman	Barbarian	Magic Arrows
Sorcerer	Skeleton	Healing 2, Sleep, Confusion

Sword Master	Soldier, Horseman, Archer	
Warlock	Guardman	Magic Arrows
Werewolf	Werewolf	
Wizard	Guardman, Soldier	Magic Arrows, Fireball; Blizzard
Wight	Styracosaur	Thunder
Wizard	Soldier, Guardman	Magic Arrows, Fireball
Wyvern	Gargoyle	Fireball

Notes:

Range is the maximum distance away from the commander that his/her troops can receive attack and defense bonuses; also known as sphere of influence. If a troop is not within his/her commander's sphere, instead of the commander's picture in battle, it will be replaced by the words "Out of Range".

All commanders have Range of 4, except for your Fighters, who have 3.

The Amulet item increases a commander's range to 9.

If enemy's magic differs from yours, they are given after the semicolon.

Promotion

Found that section at 2c402. Each class has at most two promotion paths.

Only good commanders can be promoted.

Buying Troops

Found that section at 2c202. Soldiers start at 0x41, up to 0x47 for Guardman. Each commander can have up to 3 unit types, but the max for each commander might be held at somewhere else. For instance, if you try to give Rangers some troops to buy, it might cause the ROM to malfunction. So it's safer to just change the troops rather than to add a troop.

Notes:

It is possible to get 3 Rangers by the time you finish the game without cheating. Only Sabra, Calais, and Mina can become Rangers. Rangers cannot buy armies, hence, their A+ and D+ values are 0.

Here's how to advance them to get Rangers:

Sabra: Fighter --> Lord --> Magic Knight --> Ranger

Calais: Warlock --> Wizard --> Magic Knight --> Ranger

Mina: Cleric --> Warlock --> Wizard --> Magic Knight --> Ranger

Terrain

Tile	Foot	Horse	Swimmers	Flyers	Monsters	Defense	Bonus %
1 House	1	2	1	1	1	10	
2 Forest	1	3	2	1	1	20	
3 Plains	1	1	2	1	1	10	
4 Road	1	1	1	1	1	0	
5 Hill	2	3	3	1	3	30	
6 Mountain	X	X	X	1	X	45	
7 Shallow Water	3	3	1	1	3	0	
8 Deep Water	5	X	1	1	4	0	
9 Castle Wall	4	X	4	1	X	40	
10 Building Wall	X	X	X	1	X	40	
11 Indoors	1	2	2	1	1	10	
12 Bridge	1	1	2	1	1	0	
13 Cave	1	1	1	1	1	10	
14 Rubble	3	3	3	1	3	15	
15 Void	X	X	X	X	X	0	

Notes:

Some monsters, including Grand Knight who rides atop a Styracosaur,

moves like footmen with the following exceptions: they can't climb castle walls; they take 3 movement points to cross hills and 4 points to cross deep water. Yes, GK moves like Monsters.

Check the icon in the lower left to see the actual underlying terrain. There are only 15 types, including black Void squares.

For example, a throne counts as a castle wall. Building walls come in several flavors, too.

House and indoors are two different types. The only difference is that swimmers move more easily in house tiles than in indoors tiles. House tiles don't appear too often. Off the top of my head, they are seen in Scenarios 3 and 14.

Defense bonuses are for all units. Some units get additional bonuses (which can be found in their stat section in the rom.) Archers and Dark Elves get additional bonus that add up to 40% in Forests. Flyers always have 30%. Swimmers get a total of 50% in shallow and deep water.

Throne gives 40% since it counts as a castle wall.

Names (numbers after are gold for each kill)

Garett

Baldarov

Calais

Mina

Sabra

Tiberon

Thorne

Bayard

Carleon

Lance

Priest

Soldier

Soldier

Alfador

Efreet

1st Commander

2nd Commander

3rd Commander

Momus

1st Commander

2nd Commander

3rd Commander

4th Commander

Commander

Chief Commander

Chief Commander

Geryon

Emperor Pythion

1st Commander

2nd Commander

3rd Commander

4th Commander

5th Commander

6th Commander

7th Commander

8th Commander

Chief Commander

Lance

The Guards

1st Commander

2nd Commander

3rd Commander

4th Commander
5th Commander
6th Commander
7th Commander
8th Commander
1st Commander
2nd Commander
3rd Commander
4th Commander
5th Commander
6th Commander
7th Commander
8th Commander
Magician
Spell User
High Priest
Soldier
Soldier
Spell User
Naxos
Mortimus
The guards
Ganelon
Monster
Monster
Chaos
Monster
Monster
Monster
Monster
Monster
Monster
Monster
Spell User
Malvese
Stone Monument

01 Fighter
Fighter
Fighter
04 Lord
Lord
Lord
07 Sword Master
08 King
09 Ranger
0A Knight
Knight
Knight
0D Knight Master
Knight Master
Knight Master
10 Magic Knight
Magic Knight
Magic Knight
13 Grand Knight
Grand Knight
15 Crocodile Kn.
Serpent Knight
17 Dragon Knight
Dragon Knight

19 Warlock
Wizard
Arch Mage
Bishop
Cleric
Priestess
High Priestess
20 Saint
Warlock
22 Fighter enemy 50
Fighter (enemy) 50
Lord 100
Kaiser 244
Knight 70
Knight 70
Royal Guard 100
Royal Guard 100
2A Grand Knight 80
Serpent Knight 80
Wizard 100
Arch Mage 150
Bishop 120
Great Slime 50
30 Queen Ant 100
Were Wolf 150
Necromancer 200
Conjurer 44
Sorcerer 100
Living Armor 50
Wight 50
Kraken 150
Gorgosaur 200
Basilisk 200
3A Wyvern 200
Great Dragon 244
Chaos 244
Shaman 80
Fire Elemental 100
- 100
- 100
41Soldier
Horseman
Archer
Monk
Merman
Gryphon
Guardman
48 Citizen
-
- 100
4B Soldier 10
Horseman 15
Dark Elf 15
Lizard man 5
Royal Soldier 20
50 Slime 5
Evil Ant 5
Were Wolf 10
Skeleton 5
Styracosaur 20

Carrion Crawler 20
 Golem 80
 Leviathan 10
 Gargoyle 20
 Barbarian 15
 5A Elemental 10
 . . .
 Warsong
 GSword
 DSlayer
 Evil Axe
 Shield
 Wand
 Cross
 Orb
 Amulet
 -
 Magic Arrows
 Fire Ball
 Blizzard
 Lightning
 Thunder
 Earthquake
 Tornado
 Fire Ball
 Healing 1
 Healing 2
 Healing 3
 Sleep
 Confusion

Notes:

These names appear in this order in the ROM.
 All the allied commanders are listed first, which ends at the second Warlock.
 Then the evil commanders follow, which end at Wight. Monster commanders come
 after them since they are neutral.
 All the allied units are listed after the monster commanders, followed by
 evil units, then monster units (starting with Styracosaur.)
 The first of three same classes is Garrett, followed by men, then the
 women, namely Sabra.

Unit Data

The unit data is organized as follows when you read it starting at
 2c4e1 (number of bytes in parentheses), using Garrett's Fighter as example:

00 - Unit type (1)	00
01 - Always 0A (1 byte)	0A
02 - MP (1)	00
03 - AT (1)	17
04 - DF (1)	15
05 - MV (1)	06
06 - vs Soldiers (2)	+0A, +0D
07 - vs Archers (2)	+0, +0
08 - vs Mounts (2)	+0, +0
09 - vs Flyers (2)	+0, +0
10 - vs Swimmers (2)	+0, +0
11 - vs Undead (2)	+0, +0
12 - vs Slimes (2)	+0, +0
13 - House Mv (1)	01
14 - Forest Mv (1)	01
15 - Plains Mv (1)	01

16 - Road Mv (1)	01
17 - Hill Mv (1)	02
18 - Mountain Mv (1)	FF
19 - Shallow Water Mv (1)	03
20 - Deep Water Mv (1)	05
21 - Castle Wall Mv (1)	04
22 - Building Wall Mv (1)	FF
23 - Indoors Mv (1)	01
24 - Bridge Mv (1)	01
25 - Cave Mv (1)	01
26 - Rubble Mv (1)	03
27 - Void Mv (1)	FF
28 - House Def (1)	+0%
29 - Forest Def (1)	+0%
30 - Plains Def (1)	+0%
31 - Road Def (1)	+0%
32 - Hill Def (1)	+0%
33 - Mountain Def (1)	+0%
34 - Shallow Water Def (1)	+0%
35 - Deep Water Def (1)	+0%
36 - Castle Wall Def (1)	+0%
37 - Building Wall Def (1)	+0%
38 - Indoors Def (1)	+0%
39 - Bridge Def (1)	+0%
40 - Cave Def (1)	+0%
41 - Rubble Def (1)	+0%
42 - Troop cost (1)	0
43 - Gold per kill (1)	0
44 - Experience (1)	07
45 - Spells (3)	FF 00 00 (None)
46 - Always FF (1)	FF
47 - Range (1)	03
48 - unknown (1)	00
49 - unknown (1)	01 (bit 3: immunity)
50 - unknown (1)	09
51 - A+ D+ (2)	02 02
52 - To next level (1)	02
53 - Flags (1)	21

(Total 64 bytes for each unit.)

Explanation:

#00: There are 8 unit types: 00: soldier; 01: archer; 02: mounted; 03: flyer; 04: swimmer; 05: undead; 06: slime; 07: monster.

#6 to #12: Some units have bonuses against one or more types. These bonuses give extra attack and defense (1st and 2nd byte respectively) when fighting against that units of that type.

For example, Soldiers get +2A +4D against archer types--specifically against Archer and Dark Elves.

#13 to #27 are the movement costs over that terrain type. They are pretty standardized for the five movement groups (see Terrain above.)

#28 to #41 are the terrain bonus in addition to the normal bonus. For example, Archers and Dark Elfs get +20% in Forest tiles.

#42 Troop cost is how much you pay to hire that unit.

#43 Gold you get for each enemy of that type that you defeat.

#44 Experience you get for killing that unit. Most troops give 3 and most commanders give 10.

#45 Commanders can have up to 3 spells. See Magic section to find the hex for the spell (1 to D; 10).

#47 Range for commanders.

#49 Flags. Bit 3 (bitwise OR 04) is immunity to sleep, confusion, stone
#51 A+ D+ that commanders give to their troops.
#52 To next level which I already explained in Stats section.
#53 There are some patterns to this byte. The first digit is 2 for good,
3 for enemy. The second digit is 1 or 2 for good, 4 or 5 for evil. I
don't know what they do.

If you want to get all the stats, you can get my Excel file at
<http://www.geocities.com/ffl2/warsong.xls>

```
// notes on personal ROM
// hacked ROM renamed to W.SMD
// harder to gain levels
// many stats changed
// troops are now better
// promotion paths changed for Tiberon and Bishop
// Archmage gets new spell list
// more info in warsong.xls

// still things to look for
// animations, attack styles, sound effects, magic effects
```

This document is copyright Amuseum and hosted by VGM with permission.