

# Chrono Cross Save State Hacking Guide

by demonsword2

Updated to v0.96 on Dec 8, 2010

Chrono Cross (c) Square, 1999

Save State Hacking Guide  
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## Version History

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2010 April 9: v. 0.9

-First Version, still a lot to do. Probaly a lot of wrong offsets and values too... and typos... but hey I'm releasing it before prime time bear with me okay? :D

2010 April 14: v. 0.91

-Added the money offsets. NOW you can be filthy rich, at least inside the game :D

2010 April 16: v. 0.95

-Improved way to handle the save state files!!  
-Figured out the Elements/Tech offsets & completed their lists. Most work probably been done... but still missing the remaining char's offsets & their grids with equipped Elements, and some minor stuff

2010 December 7: v. 0.96

-Added quite a few offsets, still a ways to go before guide completion but hey! Most of them untested yet. See on the thanks section for our brave contributors' names :)

-----  
This is a save state hacking guide for Chrono Cross, a classic PSX RPG by Square. Why I bothered writing this stuff? Well... this game is GOOD I can tell you, and you probably know it if you are reading this! I've beaten it beginning to end a handful of times but oh well... there's a lot of stuff that requires far too many time to accomplish (i.e. get all summon elements is one of them)... the game isn't hard but it ain't a pushover too and sometimes you just want to breeze through it... I could go on but I guess you got my idea right? :) So I did fiddle a little with a hexeditor, a diff tool, some save states and now I want to share it with you, my dear lazy classic RPG gamer. Enjoy :)

PS: This guide won't teach you hex editing. There are plenty of other guides who'll teach you better than me.

PS2: I used ePSXe. State hacking with ePSXe is a bit tricky but I'll explain it in detail on section 1.0.

PS3: Use this guide with moderation! You can ruin your fun if you go overboard and max out everything. In fact, I recommend that you beat the game first without cheating, and in subsequent replays hexedit away.

And, before anyone bug me with annoying accusations, I played on a emulator yes, but I DO OWN a copy of this game!

Well, on to the guide...

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#### 1.0 Save state?

Save state is a file with a snapshot of the game progress on a given instant. More specifically, its the CPU & Memory data on a given instant. This guide was made and tested on ePSXe for Linux (stated above, before the index). I guess that the files structure are the same on Linux and Windows but I cannot be certain, since I can't and won't install Windows EVER AGAIN :P

EDIT: in fact the save states works in both versions. Just tested the Windows version using wine. (and, surprise! running the Windows version via wine is way better than playing the native Linux version. Go figure...)

As I said earlier it takes some effort to hack the states. First thing, ePSXe save states are compressed using gzip, so before you edit anything at all you must decompress it (used gunzip but I guess 7-Zip, WinRAR, etc should do the trick on Windows). Then you load the file on your hexeditor, edit whatever you want, then recompress the file. Remember to remove any file extension that gets added to the recompressed file, if any. Now you can load the save state on the emulator. A word of warning, it seems that ePSXe somehow keeps the save state in memory, so to edit it you must close it before. Phew! I said it was tricky :)

EDIT: I recently used ePSXe 1.7 -- wine emulation :P -- and there's no need to gzip the file again after you're done editing it... just load it (no need to restart the emulator too!!)

So, to be clearer, that's how I (used) to do it myself:

```
$ mv SCUS_942.54.001 SCUS_942.54.001.gz
$ gunzip SCUS_942.54.001.gz           #decompressing the file
$ bless SCUS_942.54.001              #loading on the hexeditor
$ gzip SCUS_942.54.001               #done editing, recompressing it
$ mv SCUS_942.54.001.gz SCUS_942.54.001 #removing file extension
$ cd ..
$ ./epsxe                             #play away
```

Since now there's no need to gzip again the file neither restart the emulator it may be already running... SO here's the improved way:

```
$ wine ePSXe.exe & #yeah the windows version IS better :P
$ cd sstates/
$ mv SCUS_942.54.001 SCUS_942.54.001.gz #save state name of course
$ gunzip SCUS_942.54.001.gz #decompress file
$ bless SCUS_942.54.001 #load it on hexeditor
#reload it on ePSXe and play away
```

BACKUP YOUR FILES before you edit them to save yourself a lot of grief in case something goes wrong! Saving in two or more slots and editing one does the trick neatly.

### 1.1 Chars stats offsets (alphabetical order)

BEFORE you get frustrated, let me say that the status won't change immediately after you change them. If you played before you remember that after you grab a star your stats raise a bit and then a little more with battles after it. It's the same thing here, you raise a stat then you must fight some random battles, then it'll reach the value you hacked in.

TODO not all chars done!! read below.

You probably know that there's a ton of chars in the game. I plan to beat the game to test it, but for now if you don't wanna wait it out you can (at \*your\* own risk of course!) try to raise the other char's stats. Each char seems to be described by 204 bytes, that always start as:

```
0x40 0x00 0x40 0x00 0x40 0x00
```

SO, I guess that all stats positions are the same for every char -- i.e Max HP is 124 bytes off the char start offset, and so on. Have fun!! :D

ALSO you can send me your results if you don't mind... getting all the possible characters requires at least some four playthroughs you know... that's A LOT of work!! So help me out, ya? Pretty please? :D

EDIT: only eleven chars so far so lots of hacking yet so... have fun again :D

Note: Stamina Recovery seems to be fixed by char, issue still open to further investigation at this point...

#### Draggy

Current HP	0x7015A
Max HP	0x7015E
Strength	0x70162
Accuracy	0x70164
Resistance	0x70166
Agility	0x70168
Magic	0x7016A
Magic Res.	0x7016C

#### Fargo

Current HP	0x6FBC6
Max HP	0x6FBCA
Strength	0x6FBCE
Accuracy	0x6FBD0
Resistance	0x6FBD2
Agility	0x6FBD4
Magic	0x6FBD6
Magic Res.	0x6FBD8

#### Glenn

Current HP	0x6FD5E
Max HP	0x6FD62

Strength	0x6FD66
Accuracy	0x6FD68
Resistance	0x6FD6A
Agility	0x6FD6C
Magic	0x6FD6E
Magic Res.	0x6FD70

#### Harle

Current HP	0x6FFC2
Max HP	0x6FFC6
Strength	0x6FFCA
Accuracy	0x6FFCC
Resistance	0x6FFCE
Agility	0x6FFD0
Magic	0x6FFD2
Magic Res.	0x6FFD4

#### Karsh

Current HP	0x6F3CE
Max HP	0x6F3D2
Strength	0x6F3D6
Accuracy	0x6F3D8
Resistance	0x6F3DA
Agility	0x6F3DC
Magic	0x6F3DE
Magic Res.	0x6F3E0

#### Miki

Current HP	0x6FEF6
Max HP	0x6FEFA
Strength	0x6FEFE
Accuracy	0x6FF00
Resistance	0x6FF02
Agility	0x6FF04
Magic	0x6FF06
Magic Res.	0x6FF08

#### Orlha

Current HP	0x70FB2
Max HP	0x70FB6
Strength	0x70FBA
Accuracy	0x70FBC
Resistance	0x70FBE
Agility	0x70FC0
Magic	0x70FC2
Magic Res.	0x70FC4

#### Riddel

Current HP	0x6F302
Max HP	0x6F306
Strength	0x6F30A
Accuracy	0x6F30C
Resistance	0x6F30E
Agility	0x6F310
Magic	0x6F312
Magic Res.	0x6F314

#### Serge/Lynx (yeah shared stats to both!)

Current HP	0x6EE3A
Max HP	0x6EE3E

Strength	0x6EE42
Accuracy	0x6EE44
Resistance	0x6EE46
Agility	0x6EE4A
Magic	0x6FD6E
Magic Res.	0x6EE4C
Current equip	0x6EDA2

#### Sprigg

Current HP	0x702F2
Max HP	0x702F6
Strength	0x702FA
Accuracy	0x702FC
Resistance	0x702FE
Agility	0x70300
Magic	0x70302
Magic Res.	0x70304

#### Zoah

Current HP	0x6F49A
Max HP	0x6F49E
Strength	0x6F4A2
Accuracy	0x6F4A4
Resistance	0x6F4A6
Agility	0x6F4A8
Magic	0x6F4AA
Magic Res.	0x6F4AC

### 1.2 Money

Money offsets are reversed i.e. the most significant digit is the last one. As a little example, say you want 150000G (wow that's a lot right!) 150000(decimal) = 0x249F0. You should fill the offsets like this: F0-49-02.

Money offsets: 0x71B62 - 0x71B63 - 0x71B64

### 1.3 Items

There's only one inventory, shared by **all** equippable items and materials. It works like this: there's an offset where you define which item you want, and another where you define its quantity. Quite simple huh? But mind that in the definition offsets you must space the items with a 0x00 between them, like this:

```
--first offset: 0x7149A, say you want a @Rainbow Shell: 0x06
0x7149A -- 0x06
--let's say you want forty of them (plenty huh)
0x7179A -- 0x28
```

```
--now you want five Sunglasses 'cause they rock so much: 0xF7
0x7149B -- leave empty, 0x00
0x7149C -- 0xF7
--five of them right?
0x7179B -- 0x05
```

Inventory -- items, weapons, etc

```
Item definition offsets (start):    0x7149A
Item quantities offsets (start):    0x7179A
```

So simple right? Now go nuts with the @Shiny materials that are SO damned

boring to create... :)

#### 1.4 Elements/Techs

Elements are just like inventory items: there are two relevant offsets, one defines the element and the other its quantity. Element definitions are spaced with one empty offset 0x00 just like the inventory ones. As a example, say you want 10 Volcanoes and 12 Black Holes:

```
--first offset: 0x7191A, Volcano is 0x0C
```

```
0x7191A -- 0x0C
```

```
-- ten of them...
```

```
0x71A9A -- 0x0A
```

```
-- now the Black Holes:
```

```
0x7191B -- leave empty, 0x00
```

```
0x7191C -- 0x24
```

```
--...12 Black Holes
```

```
0x71A9B -- 0x0C
```

Techs show as regular elements too, but you won't be able to use most of them, at least until I find out the equipped Elements offsets of course -- IF it is possible to use a Tech that wasn't designed for a given char that is. But it will be very fun to find out!! :)

EDIT: it is possible to equip Serge's skills on Lynx!!!! The game doesn't lock but the animation sprites look quite odd -- see it for yourself! ALSO as they are White-innate they do great damage (as Lynx)... Using the MasterMune with FlyingArrow shows Masa&Mune as your 'shadow'... if the sprites didn't look so messed up you bet I would use it all the time :D

Elements -- all of them (attack, healing, consumables, traps, techs...)

Element definition offsets (start): 0x7191A

Element quantities offsets (start): 0x71A9A

#### 1.5 Lists

As far as I know this section is complete! (unless I made a mistake somewhere, kindly mail me if you find something wrong)

##### 1.5.1 Materials List

@Bone	01	@Copper	02	@Iron	03	@Mythril	04
@Denadorite	05	@Rainbow Shell	06	@Eyeball	07	@Humour	08
@Feather	09	@Scale	0A	@Fur	0B	@Leather	0C
@Fang	0D	@Carapace	0E	@Screw	0F	@Seed	10
@Shiny Ember	11	@Shiny Dew	12	@Shiny Leaf	13	@Shiny Sand	14
@Shiny Salt	15	@Shiny Soot	16	Invalid materials -- 17 to 30			

##### 1.5.2 Weapons List

Sea Swallow	20	Copper Swallow	21	Steel Swallow	22	Silver Swallow	23
Stone Swallow	24	Spectra Swallow	25	Mastermune	26	Ivory Dagger	27
Bronze Dagger	28	Iron Dagger	29	Mythril Dagger	2A	Denadorite Dgg	2B
Prism Dagger	2C	Silver Staff	2D	Stone Staff	2E	Spectral Staff	2F
Porcelain Rod	30	Brass Rod	31	Iron Rod	32	Mythril Rod	33
Denadorite Rod	34	Rainbow Rod	35	Floral Rod	36	Bone Sword	37
Bronze Sword	38	Steel Sword	39	Silver Sword	3A	Stone Sword	3B
Spectral Sword	3C	Hero's Blade	3D	Viper's Venom	3E	Einlanzer (1st)	3F
Einlanzer (2nd)	40	Slasher	41	Ferrous Gun	42	Argent Gun	43
Denadorite Gun	44	Spectral Gun	45	Shockwave Gun	46	Plasma Pistol	47
Porcelain Pick	48	Brass Pick	49	Iron Pick	4A	Mythril Pick	4B
Pebble Pick	4C	Prism Pick	4D	Carrot	4E	Betta Carotene	4F
Bone Axe	50	Bronze Axe	51	Iron Axe	52	Silver Axe	53
Stone Axe	54	Rainbow Axe	55	*invalid*	56	Great Hammer	57
Master Hammer	58	Bronze Lure	59	Iron Lure	5A	Mythril Lure	5B

Stone Lure	5C	Prism Lure	5D	*invalid*	5E	Bronzerang	5F
Steelrang	60	Silverang	61	Rockerang	62	Prismarang	63
*invalid*	64	Bone Shot	65	Bronze Shot	66	Steel Shot	67
Silver Shot	68	Stone Shot	69	Prism Pellets	6A	Private Deck	6B
Pack of Lies	6C	*invalid*	6D	Spatula Ca20	6E	Besom Cu29	6F
Ladle Fe26	70	Frypan Ag47	71	Saucepan SiO2	72	Crystalpan C6	73
*invalid*	74	Bone Glove	75	Bronze Glove	76	Iron Glove	77
Mythril Glove	78	Granite Glove	79	Spectral Glove	7A	*nothing*	7B-95
Porre army(WTF?)	FF						

### 1.5.3.Armor List

Ivory Mail	96	Bronze Mail	97	Iron Mail	98	Mythril Mail	99
Stone Mail	9A	Prism Mail	9B	Ivory Vest	9C	Bronze Vest	9D
Iron Vest	9E	Mythril Vest	9F	Stone Vest	A0	Prism Vest	A1
Blue Plate	A2	Red Plate	A3	Yellow Plate	A4	Green Plate	A5
Black Plate	A6	White Plate	A7	Feathery Dress	A8	Scaley Dress	A9
Carapace Dress	AA	Screwy Dress	AB	Diva Dress	AC	Wisp Cape	AD
Cloud Cape	AE	Stardust Cape	AF	Energizer Suit	B0	Ghetz's Shirt	B1
*nothing*	B2-B9						

### 1.5.4 Accessories List

Ozzie Pants	BA	Flea Vest	BB	Antitoxinal Cap	BC	Poultice Cap	BD	
Plaster Cap	BE	Antiviral Cap	BF	Hero's Medal	C0	Hero's Shield	C1	
Ivory Helmet	C2	Bronze Helmet	C3	Iron Helmet	C4	Mythril Helmet	C5	
Stone Helmet	C6	Prism Helmet	C7	Power Glove	C8	Dragoon Gauntlet	C9	
Power Seal	CA	Magic Ring	CB	Sky Djinn Ring	CC	Magic Seal	CD	
Silver Loupe	CE	Sight Scope	CF	Third Eye	D0	Knee Pad	D1	
Elbow Pad	D2	Waist Pad	D3	Silver Pendant	D4	Gold Pendant	D5	
Memento Pendant	D6	Dancing Shoes	D7	Kung-fu Shoes	D8	Winged Shoes	D9	
Dragoon's Honor	DA	Dragoon's Glory	DB	Defender	DC	Defender Plus	DD	
Silver Earring	DE	Gold Earring	DF	Earring of Light	E0	Earring of Hope	E1	
Stamina Ring	E2	Stamina Belt	E3	Resistance Ring	E4	Resistance Belt	E5	
Sea Charm	E6	Flame Charm	E7	Forest Charm	E8	Earth Charm	E9	
Angel Charm	EA	Daemon Charm	EB	Blue Brooch	EC	Red Brooch	ED	
Green Brooch	EE	Yellow Brooch	EF	White Brooch	F0	Black Brooch	F1	
Dreamer's Scarf	F2	Dreamer's Sash	F3	Trashy Tiara	F4	Golden Tiara	F5	
Profiteer Purse	F6	Moonglasses	F7	Sunglasses	F8	Pendragon Sigil	F9	
Pendragon Sigil	B	FA	Pendragon Sigila	FB	Forget-me-not Pot	FC	Star Fragment	FD
Dreamer's Sarong	FE							

### 1.5.5 Elements List

(legend: \*-Summon, [-Consumable, >-Trap)

AquaBeam	01	AquaBall	02	Deluge	03	IceLance	04
IceBlast	05	Iceberg	06	Fireball	07	FirePillar	08
Inferno	09	MagmaBomb	0A	MagmaBurst	0B	Volcano	0C
Bushwhacker	0D	Bushbasher	0E	Carnivore	0F	AeroSaucer	10
AeroBlaster	11	Tornado	12	Uplift	13	Upheaval	14
Earthquake	15	ElectroJolt	16	ElectroBolt	17	ThundaStorm	18
PhotonRay	19	PhotonBeam	1A	HolyLight	1B	Meteorite	1C
MeteorShower	1D	UltraNova	1E	GravityBlow	1F	Gravitonne	20
FreeFall	21	HellSoul	22	HellBound	23	BlackHole	24
*FrogPrince	25	*BlueWhale	26	*RedWolf	27	*Salamander	28
*Sonja	29	*Genie	2A	*Golem	2B	*ThundaSnake	2C
*Unicorn	2D	*Saints	2E	*MotherShip	2F	*GrimReaper	30
TurnBlue	31	AntiRed	32	Nimble	33	Numble	34
BlueField	35	Vigora	36	TurnRed	37	AntiBlue	38
Strengthen	39	Weaken	3A	RedField	3B	Ninety-Nine	3C
TurnGreen	3D	AntiYellow	3E	EagleEye	3F	BatEye	40
GreenField	41	InfoScope	42	TurnYellow	43	AntiGreen	44
HiRes	45	LoRes	46	YellowField	47	PhysNegate	48

TurnWhite	49	AntiBlack	4A	StrongMinded	4B	WeakMinded	4C
Magnify	4D	MagNegate	4E	TurnBlack	4F	AntiWhite	50
Genius	51	Imbecile	52	Diminish	53	SealAll	54
Cure	55	CurePlus	56	CureAll	57	Heal	58
HealAll	59	HealPlus	5A	Purify	5B	RecoverAll	5C
HolyHealing	5D	Revive	5E	FullRevival	5F	Revenge	60
[Medicine	61	[Ointment	62	[Recharge	63	[Antidote	64
[Brace	65	[WhiteOut	66	[Panacea	67	[BlackOut	68
[Tablet	69	[Capsule	6A	[Nostrum	6B	>Inferno	6C
>Volcano	6D	>RedWolf	6E	>Deluge	6F	>Iceberg	70
>FrogPrince	71	>Earthquake	72	>ThundaStorm	73	>Golem	74
>Carnivore	75	>Tornado	76	>Sonja	77	>FreeFall	78
>BlackHole	79	>MotherShip	7A	>HolyLight	7B	>UltraNova	7C
>Unicorn	7D	ChronoCross	7E	*invalid techs!!*	7F	- 87	

#### 1.5.6 Techs List

Z-Slash	88	DeltaForce	89	DraggyRider	8A	VitalForce	8B
TossedSalad	8C	Flamenco	8D	DoubleTake	8E	PitchBlack	8F
SwordStorm	90	DragonSpike	91	WindSlash	92	DashSlash	93
TheStare	94	MaxDefense	95	GlideHook	96	FeralCats	97
ForeverZero	98	Dash&Slash	99	SonicSword	9A	Dive&Drive	9B
GlideHook(2)	9C	FeralCats(2)	9D	ForeverZero	9E	X-Strike	9F
Dash&Slash	A0	Luminaire	A1	FlyingArrow	A2	Pilfer	A3
RedPin	A4	HotShot	A5	WandaIn	A6	WandaSwords	A7
LightninRod	A8	SpiralRay	A9	SunShower	AA	TopShot	AB
GrandFinale	AC	ChillOut	AD	LimeLight	AE	G-Force	AF
AirForce	B0	FlagBearer	B1	SnakeEyes	B2	SnakeSkin	B3
SnakeFangs	B4	DragonRider	B5	AxialAxe	B6	Axiomatic	B7
DragonRider(2)	B8	Gyronimo	B9	Toss&Spike	BA	Cat'sCradle	BB
StringPhone	BC	WebSurfer	BD	HeadButt	BE	Hook&Sinker	BF
BigCatch	C0	Pin-Up Girl	C1	Mix&Match	C2	TestAmeba	C3
K9-Ball	C4	DoggyDunnit	C5	Unleashed	C6	Raz-Star	C7
Raz-Heart	C8	Raz-Flower	C9	HammerBlow	CA	HammerThrow	CB
BallsOfIron	CC	SpiceOfLife	CD	MysteryMenu	CE	DinnerGuest	CF
LongShot	D0	QuickDraw	D1	VitalEnergy	D2	Pillage	D3
CannonBalls	D4	Invincible	D5	BottomsUp	D6	Folding	D7
DirtyDishes	D8	Dash&Gash	D9	SonicSword	DA	Dive&Drive	DB
MaidenHand	DC	MaidenHeart	DD	MaidenFaith	DE	HeadBopper	DF
SexyWink	E0	DanceOnAir	E1	MoonBeams	E2	MoonShine	E3
Lunaretic	E4	BeatIt	E5	24Carrots	E6	What'sUpDoc	E7
CoughDrop	E8	CoughMix	E9	BigBreath	EA	StarLight	EB
StarBurst	EC	StarStruck	ED	Doppelgang	EE	VoodooDance	EF
CartWheel	F0	HoodooGuroo	F1	VegeChopper	F2	VegeMight	F3
VegOut	F4	PopPopPop	F5	SlurpSlurp	F6	BamBamBam	F7
ClothesLine	F8	Flip-flop	F9	GraveDigger	FA	JugglerVein	FB
BalloonLoan	FC	OnARoll	FD	LumberJack	FE	SporeCloud	FF
Myconoids	001	*invalid gibberish*	002-???				

\*going beyond 0x003 here crashes emulator!\*

BUT I think that Monster Techs are in that range, if you want to try it out, be my guest... IF you find anything interesting mail me so I can update this list! You will be credited for it of course :)

#### 1.6 Thanks & contact info

- Thanks to Square, for this wonderful game, I enjoy it to this day!
- Thanks to the free & open source software people!
- Thanks to the GameFAQs people!
- Thanks to Junior for finding Glenn & Zoaf offsets!!



- Thanks for Stan Chin for Serge's equipped offset & a few Weapons offsets!
- Thanks to DarkPrince for discovering lots of chars offsets :)
- Thanks to anyone who deserves a thanks but I forgot to mention!

You can reach me on demonsword at gmail dot com. Please, if you want to mail me, write in proper English so I can understand you. Offensive mails won't get replied. And please, I'm a busy man, so if I don't reply to you the same day/month/year/century don't be mad at me ok? :)

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