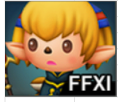


This is a list of notable characters in Final Bar Line, it does not mean you need to level them up all to star levels, some of them are only here for specific quests and require only their basic moveset.



Terra
Dualcast Riot Blade Ultima

No surprise here, Terra is simply a must max character as she's the best boss killer available.
Riot Blade (her unique skill) and Ultima both do massive damage and target the first boss. Add Dualcast and both will be cast TWICE.
Must have for killing boss under X seconds.
Alternatives/helpers include Cloud, Sephiroth, who both have 2 skills targeting the boss (there may be others out there)



Shantotto
Bluff Play Rough Bluff

Highest damage with a single skill, for all the quests deal X damage with a single skill.
She may be outperformed in the future with a team composition, or when the boss has a weakness, because Ultima do not have an element.
Her unique skill boost her magic abilities damage by 2.5 when the boss appear, plus she has Bluff, for a further 1.6 multiplier, Ultima is casted against the boss, so it's always boosted.
Much more reliable than Golbez, his unique require 6 enemies to be defeated, and Meteor a big enough chain, so no guarantee Meteor will be boosted by Onyx Dragon !

The best helpers need to be determined, Shantotto having 2 skills to cast against the boss, he may be able to be leader and boosted by Spiritus (x1.7 to party leader) while still benefiting from others skills lowering resistance or magic defense.
"Stacking of damage multipliers still need to be determined"



Yuna
Grand Summon Mana Cede Swiftness

Niche, but a no-brainer in that niche.
Her unique skill Grand Summon immediately calls a summon at the start of a stage. And she has the others summon faster skills too, perfect.
While on regular quests she will likely only help for the first wave, you will need her for quests requiring X summoning.



Bartz
Job Mastered! Mimic

Likely the best Trigger attacker.
Job Mastered! and Mimic both share the same activation condition, and both can be used twice, so you get 4 times +150 all stats after the 130th Trigger (on expert)
As the activation is based on Triggers hit and not the song duration like Ramza, it become incredibly efficient on long tracks.



Yuffie
Rare Summoner Discerning Eye All Creation

Among all the Treasure Hunters, Yuffie is the only one learning Rare Summoner, which is a must-have skill if you're farming summonstones.
If it wasn't enough, she also learns Discerning Eye to increase the drop rate of summonstones, and her unique skill helps further while doing damage, perfect!
If you cannot grab summonstones from internet, she must be on your farming team.
To maximize summonstones farming, you'll need 3 others Rare Summoner through scrolls: you should get one as a reward at 41500 Rythmia (the next one is at around 124k...), for the others 2 you will need to complete FFX and MOBIUS Final Fantasy quests.



Cloud
Omnislash Aero Blade family Squall Blizzard Blade family
Lion Heart

I've yet to see a big bad "Exploit X times the enemy weakness" quest in Endless Mode, but I feel like they're lurking around.
Many characters can have a full skillset of a particular element, but they're all behind Cloud and Squall for Wind and Ice.
Their ultimate target the boss and hit 3 times, so it's super efficient AND 100% reliable. Plus you still have 2 skill slots for their elemental blade skills.
Cloud is also a boss nuker, you can't go wrong with him.

Best for: Exploit weakness, kills with elemental attack.



Lilisette
Vivifying Waltz Cid Raines Seraphic Ray

Weakness enablers
Lilisette is able to turn an Ice or Lightning resistance into a weakness, and it seems true but I'm not sure it always work yet, some boss might have higher resistance than others.
Cid's Seraphic Ray is less efficient, but reduce all attributes, all those not resistant attributes become weaknesses.
Unlike Imperil their ability target the boss, so it's a reliable solution for Weakness quests.
It's likely they will be very useful as damage enablers as well.



Noctis
Armiger Aranea Highwind

Multiple boss killers, niche.
Their unique skills have an unlimited usage and a condition which allow them to use it more than once or twice, unlike most of the others unlimited usage abilities.
There is a track featuring only bosses, a few of them got quite a lot of them too, but it's hard to know beforehand unfortunately.
You'll also meet quite a lot of boss on "farm" stages (BMS where you inflict double damage), but you'll likely prefer some Treasure Hunters to carry your team.

Noctis has Mug to get an additional loot if you're lucky, and Blink, which is an important skill for quest requiring X skill used.
Aranea has Berserk, Meteor Blade, and Ultima Blade, so she has some good damage moves.



Edge
Mirage Blink Smoke

Damage avoider and skill user Ninja god
I find his moveset magnificent, he has FOUR abilities to avoid damage, Mirage can indeed be replaced by Escape in FMS.
Mirage MUST be equipped in the first skill slot in BMS, it has only 50% probability to proc when you fail a trigger, if it fails Blink or Smoke will be used instead, so you can safely consume its 6 charges.
At difficulty 14, you already need to use 20 abilities to complete the quest, and the track might be short, no need to look for Blink users when you have Edge, him alone can use 16 abilities in any song, you simply need to fail triggers!

FAQ & Mechanics

Blue text is recent change / new stuff

Star levels

Once a character reach level 99, they can continue to level up to 9 stars. Each star level require around 100k exp.
Each star level is +50 in ALL stats (+300 for HP)

Each star level provide an additional 5% base damage bonus for abilities (but nothing for Trigger attacks)

BASE attack bonus means you gain 5% bonus with the first star level (100% => 105%) but only 3.57% from 8th star to 9th (140% => 145%)

This is completely unrelated to the bonus stats you get from each star (+300HP and +50 all stats), a level 9 stars characters will do 45% more damage than a 0 star character with the same stats.

Experience cap per stage

You cannot gain more than 9999 exp at once in a stage, this is very easily reachable with exp eggs.

Bonus experience is multiplicative, not additive

Using both a silver egg (x2) and a golden egg (x4) will provide a bonus of x8, not x6

You can also add the total bonus of your summonstone, for example 40%, you end up with x11.2

CollectaCards bonus

Depending on the card type and its rarity, you get a permanent bonus when you collect them:

Characters	Flat stats added directly to the character stats	All stats (except HP) +1/3/5/10 (N/R/P/S rarity)	No known cap except the out-of-battle stat cap of 999
Summons	Additional damage when summoned	+1/1/3/5% damage (N/R/P/S rarity)	Cap at +30% (1.30 damage multiplier)
Enemies	Additional exp when killed	+2% exp (only S rarity exist)	Cap at +20% (1.20 exp multiplier)

Characters statistics

HP Each character's HP is added into a global pool: the HP gauge.

Strength Used for trigger attacks. In BMS, a character attacks only if the Trigger is on his lane (except Critical Trigger maybe*). In FMS, characters attack one after the other.

Magic Each character's Magic stat seems to be used when summoning, not only the leader one.

Agility Increase running speed in FMS. It's likely a group stat as well now, but it need to be tested. No other function than chaining battles faster in FMS.

Spirit No effect (outside of abilities scaling on Spirit)**

Luck From the loading screen tip, increase your probability to get loot.

Abilities mention in their description when they scale with a statistic

*Critical Trigger are those shiny triggers which make your whole team attack (animation-wise at least, I have not checked the damage)

**I have yet to find any use of Spirit by itself. As tested below it does NOT improve summon damage, summoning speed. It does NOT improve healing, unless it's specified in the description (Pray, Arise...)

Difficulty scaling

There is not much proof you get better loot on higher difficulties for now.

You get more Triggers so you inflict more damage during the song, however there is an HP scaling for enemies too, so you will likely kill as much enemies between Basic, Expert, and Ultimate.

Example on "The Price of Freedom (Crisis Core FF7)"

Difficulty	Basic	Expert	Ultimate
Soldier HP	232	333	482
Ratio	48,13%	69,09%	100,00%

I did not notice it a first, but quests requiring you to do X total damage DO scale with the difficulty. You have to change the difficulty, then Cancel, and you will see the mission text will update !

Example, quest difficulty 22, Dissidia Arcade - The Rebel Army, total damage requirement:	Beginner	Expert	Ultimate	Supreme
Damage Req	7700	12000	18500	30000
Ratio/Ultimate	41,62%	64,86%	100,00%	162,16%

Does effect X stack with itself ? Does effect X stack with Y ?

Yes it does. By default, assume everything is stacking, aside status effects (Poison, Blind, Silence...) which is explained on a loading tip, you cannot have or inflict more than one status effect.

Damage multipliers are multiplicative so far. A x2.5 and x1.6 multiplier results in x4.0 damage, exactly like for the experience.

Status effect spells in combat (Poison, Blind, Silence...)

As said in a loading tip an enemy cannot be afflicted by 2 status effects at the same time, but there is more than that about the spells inflicting those abnormal states.

This is shared by all status effect spells, as soon as an enemy is affected by a status effect, no status effect spell will be cast until the target dies or the status wear off.

If the status effect wear off, a new status effect spell will be cast, so you can consume 2 charges in the same round if you're not fast enough!

The leader will have to use ALL his spells (looking at you Maria!) before the second character can cast his own, etc...

Unique abilities inflicting damage + a status effect will still be cast, but it doesn't overwrite the existing one, the effect is simply lost.

Abilities activation queue and priority

All items and abilities are activated one at a time, but we can consider there is a queue (or is it more like a delay?) and a priority, this bring some unfortunate effects:

Some skills order cannot be changed, Terra will always cast her unique Riot Blade before Ultima, whatever the position you set them in.

Terra will double cast Riot Blade, then double cast Ultima, you would expect Ultima to not be casted if Riot Blade kills the target, but that's not the case, even if the first hit of Riot Blade kills the target, Ultima is still wasted.

It's either because of a delay which leave Terra enough time to cast it before the damage kicks in and the boss is considered dead, or the skill is simply considered used as soon as the activation condition is satisfied.

Some skills are immediate and will delay everything else until resolved, think about Blink, which avoid damage if you get a BAD or MISS trigger, it will delay attacking skills.

What are the differences between the summons ?

Aside from the obvious Phoenix which heal you, they require a different number of Triggers to be summoned, can have an elemental attribute, and they're attack power are different.

Tested on expert, with a party of 4x999 Magic. Because one or two triggers may not have been critical, the Trigger numbers are not perfect, at most a 1 trigger difference.

It's likely Touch, Slide, and Hold Triggers don't fill up the same amount of the summon gauge, but I didn't bother to check. Reminder: Spirit doesn't help summoning faster.

Summon	Triggers	Damage	Dmg/Trigger	Additionally, the ability Swiftnes help summoning faster. It's not a multiplier, so the bonus stack additively, increasing your base summoning speed by 10%
Phoenix	107	446,5	4,17	
Leviathan	112	690	6,16	Leviathan 112
Shiva	125	785	6,28	Swiftnes 101 110,89%
Ramuh	125	785	6,28	Swiftnes x2 93 120,43%
Ifrit	125	785	6,28	Swiftnes x3 86 130,23%
Bahamut	139	886	6,37	Swiftnes x4 80 140,00%
Odin	185	1279	6,91	+Garnet 74 151,35%
Alexander	197	1404	7,13	
Knights	205	1468	7,16	Garnet's unique ability, Blessing of Alexandria, have the same effect as Swiftnes, the data shows a higher effect, but I believe it's my lack of accuracy.

Section below require more testing and is subject to change

Summoning power stat

This is still Magic, but this is now the sum of Magic of your team's party members.

What's the point of the Spirit stat then ?

No idea, it does not raise your summon damage, it doesn't make you summon them faster either.

Maybe it improve the summon abilities efficiency, but I believe they would have specified it in their description.

What's the best ability ? Fire ? Blizzard ? Thunder ?

If you're a newcomer, those skills have different proc conditions: Touch+Slide, Touch only, Hold, etc... It was already the case in the previous games, there's likely no clear winner here again, it depend of the song.

What's the best ability ? Fire ? Fira ? Firaga ?

Tested on expert, with some "Blade" abilities on the same mob, with different characters, what's we're looking for today are the damage ratio, as they had different stats.

Damage	Aero Blade	Aerora Blade	Aeroga Blade	Dmg ratio	Aero Blade	Aerora Blade	Aeroga Blade	Triggers Req	Aero Blade	Aerora Blade	Aeroga Blade	Trig Ratio	Aero Blade	Aerora Blade	Aeroga Blade
	89	142	292		100,00%	159,55%	328,09%		90	125	200		100,00%	138,89%	222,22%
	Fire Blade	Fira Blade	Firaga Blade		Fire Blade	Fira Blade	Firaga Blade		Fire Blade	Fira Blade	Firaga Blade		Fire Blade	Fira Blade	Firaga Blade
	169	267	548		100,00%	157,99%	324,26%		60	85	135		100,00%	141,67%	225,00%
	Blizzard Blade	Blizzara Blade	Blizzaga Blade		Blizzard Blade	Blizzara Blade	Blizzaga Blade		Blizzard Blade	Blizzara Blade	Blizzaga Blade		Blizzard Blade	Blizzara Blade	Blizzaga Blade
	138	220	452		100,00%	159,42%	327,54%		50	70	110		100,00%	140,00%	220,00%

On paper it looks good for the lv3 abilities (-ga), 220% more triggers for 325% the damage if you compare to the lv1 ability.

The lv2 abilities still have benefits, it's more limited but it's still there, 160% damage for 140% triggers.

Let's address the elephant in the room now, those numbers are meaningless if all that damage is overkilling the target.

Overkill damage from abilities is not carried over the next battle

Current test is simple, you have a song with many times the same trio of enemies (3 soldiers), if damage carry over, then after some big damage, the next round of mobs should require less damage to finish them off.

Round	Damage	Total Damage	
1	1204	1204	To kill the 3 soldiers, you need around 1100-1200 damage. There is little overkill because there is no big ability that early in the song.
2	1149	2353	Again, no big ability, 1150 damage here.
3	1837	4190	A big overkill from Yuffie with her 999 Strength and her "All Creation", 358 damage on the THREE soldiers, 1074 damage total for that single attack !
4	1107	5297	Yet you still need around 1100-1200 damage to kill the next trio of mobs...
5	1164	6461	
6	1956	8417	Here, again, two soldiers are killed with lv3 abilities for 548 and 452 damage
7	1140	9557	And I still needed 1140 damage to get rid of the next trio of soldiers.
8 (Boss)	3006	12563	

I can only conclude for now that there is no damage carry over in Final Bar Line, which make me doubt the usefulness of high level abilities in most cases.

At least it make ability aiming specifically for the boss more interesting, as you're less likely to overkill them ?

Damage stacking

Yuffie, 999 Strength, First Strike ability, Expert, on MP soldier (FF7 Crisis Core - The Price of Freedom)

I was hoping for 100 damage, but she do 99 damage unfortunately :(

Damage	Ratio/base		Trigger
99		Base	
118	119,19%	With a summonstone +20% Physical damage (2x10% bonus)	23-24 With triggers we're dealing with fractions at minimum
168	169,70%	With Materia and her unique skill (x1.7 damage for Physical abilities)	I'm leaving that for another time
200	202,02%	Both summonstone and Materia	
220	222,22%	Added a brave scroll (x1.1 damage for Physical abilities)	
100	101,01%	Base with 50 Strength added through Cosmos	24-25

I will have to try to stack a ton of buff, but a first quick test clearly show we're on multiplicative damage bonuses.

I had zero doubt between the previous game and the loading tip, but yes, you can go over 999 in stats during battle. Adding 50 Strength through Cosmos did rise the damage a little.

Game Mechanics

I'm gathering here some advanced mechanics I tested. Not necessary at all to finish the game, but if you're curious like me or absolutely want to min-max your team, you're at the right place.

Enemies HP scaling with difficulty

I have already explained it in the FAQ, the higher the difficulty, the more HP the enemies have.

Looking through the RAM (of an emulator) during battle, the devs set the HP for the ultimate difficulty, there's never a fraction for HP in that difficulty.

Difficulty	Basic	Expert	Ultimate	Supreme	
Soldier HP	232	333	482		(MP soldier from FF7 serie)
Ratio	0,4813278008	0,6908713693	1		
Scarmiglione	462,7200012	665,1599731	964	1513,480103	(From FF4, this is the BOSS version)
Ratio	0,4800000012	0,6899999721	1	1,570000107	

So the ratio intended are 48% / 69% / 100% / 157%

For non programmers, those variables are float type, and their precision is not perfect, so we should have $964 \cdot 0,69 = 665,16$ instead we end up with 665,1599731. We can't do much about this.

Trigger attacks

First things first, between Touch trigger, Slide trigger, and Hold trigger, the initial damage was the same. I've only tested the first green trigger for Hold, I suppose it's considered a Hold trigger as it's green, I did not test the triggers you get sometime while holding the button.

So I assume there is no difference between at least Touch and Slide triggers.

Trigger attacks are physical attacks based on the Strength stat. Nothing surprising here.

Abilities damage are integers, they don't have a fraction, they do 233 damage and never 233,456994 for example. I'll talk about skills later.

Trigger attacks on the contrary, use fractions, that's why I needed to search the mobs HP, otherwise you can't really know the damage you're doing. And even like that, there's a lag between when you hit the trigger and when the variable is updated.

Second thing, Trigger attacks damage don't scale with difficulty, a few tests showed exactly the same damage from beginner to supreme. This is expected, the scaling comes from the NUMBER of triggers which rise with each difficulty.

And side note: Goblins do take additional Physical damage, but if you're using First Strike (a physical damage ability), you may have already noticed they're more of an exception than the rule, most enemies takes the same damage from First Strike, so it should be the same for Trigger attacks.

STRENGTH	90	200	250	500	750	999	
DAMAGE	6,5183105	9,2924194	10,4398804	15,465332	19,7019653	23,4204102	Star levels don't make a difference here!
STR / DMG	13,81	21,52	23,95	32,33	38,07	42,66	
STR gained		110	50	250	250	249	
DMG gained		2,7741089	1,147461	5,0254516	4,2366333	3,7184449	
STR/DMG		39,65	43,57	49,75	59,01	66,96	

1. Star levels don't improve Trigger attacks damage like it does with abilities (see FAQ, +5% base damage per star level). So a 999 Strength 0 star will do exactly the same damage as a 999 Strength 9 stars.

2. The more Strength you have, the less it impact your damage. The difference seems huge at first if you look at the Strength / damage ratio, but there is likely a fixed part in the formula, I will need to collect data with a new save to get the damage with very low Strength.

Once you look at the ratio of what we gained, it's not that bad at all, yes you likely need twice the strength to gain a damage at 750 strength vs before around 130 Strength, but it means the decrease is quite slow, and accumulating the stat do help well up to 999.

Siney Etude So is this ability providing 30 Strength worth it in the end ? On expert a song is often like 200-250 triggers, well some triggers are always lost (at least between battles, and even when a mob die I'm not sure it's redirected until the death animation finishes)

You can end up with around 150-200 damage if your team is still weak, not counting the bonus from physical abilities. It sounds ok but I will need to compare that to skills. Not much of a surprise it looks bad at end-game, the strength provide less damage and with your high stats I believe any skill will do at least as much damage.

Rainbow criticals vs non-critical hits

I forgot to mention it before, but the damage stated up there is for a rainbow critical. I'm not sure if the base is the rainbow and you're losing damage, or if you prefer to see it as additional damage. I'm showing up both ratio.

Crit Rainbow	23,4204102	100,00%	112,55%	Before testing I was not sure Rainbow Criticals really did more damage than normal Criticals, so now I can confirm they do, even if it's only around 3,3% more damage.
Crit NOT rainbow	22,6743774	96,81%	108,96%	
GREAT	21,5554199	92,04%	103,59%	
GOOD	20,8093872	88,85%	1	
BAD / MISS	0			

Chain Trigger attacks

To be continued, Trigger attacks have bonus damage which seem dependant to your current chain.

As soon as you chain 2 triggers, there is a discrepancy with my numbers up there:

R.Criticals	2	9
Real Damage	46,9899902	216,1547852
Theoretical Dmg	46,8408204	210,7836918
Difference	0,1491698	5,3710934

So a bonus is added to the second hit, 0,1491698 damage, that's a weird number because whatever the base damage you consider.

It should be the 0,6369%, I have not tested doing 2 non-rainbow criticals, 2 GREAT, or 2 GOOD.

compared to:	RainbowCritical	Critical	GREAT	GOOD
	0,1491698	0,1491698	0,1491698	0,1491698
	23,4204102	22,6743774	21,5554199	20,8093872
	0,6369%	0,6579%	0,6920%	0,7168%

	5,3710934
Divided by	0,1491698
Result:	36,0657372

Anyway the total bonus of the 9 chain is quite obvious if you divide it by the individual bonus.

It's equal to 36 times the individual bonus, it means the bonus is increasing for each hit, as long as you chain.

Trigger number	1	2	3	4	5	6	7	8	9	SUM:
Bonus	0	1	2	3	4	5	6	7	8	36

Then how high can it go ? On beginner difficulty there is more time to capture the HP difference, so after a chain of 100, what's the damage of the 101th hit ? (still a rainbow critical, the chain was likely not all RCrits, but I don't think it matters)

I checked right after, failing a trigger, then doing a critical, and the base damage for a rainbow critical was back to normal (23,4204102)

101th hit	27,000977	3,580567	Max bonus	3,580567	
Normal hit	23,42041	23,42041	Single bonus	0,1491698	
Difference	3,580567	Ratio	15,2882%	Division result	24,00329691

The bonus stop increasing when you get 24 times the individual bonus, which mean at the 25th hit, we're at maximum with +15,29% damage.

A loading tip about points comes to mind: "Get more points by increasing your Chain. The point bonus maxes out at a Chain of twenty-five". Turns out this is exactly the same for Trigger attacks.

This do not affect abilities, I have seen too many times the damage in the middle of a fight, it's the same as when I test them on the first enemy of a song.

Doesn't that mean if you're good, you're very slightly advantaged on higher difficulty ? It likely doesn't represent much at all, and you probably lose damage because it's not as easy to do RCrit on higher difficulties, but you need 24 triggers to maximize your damage,

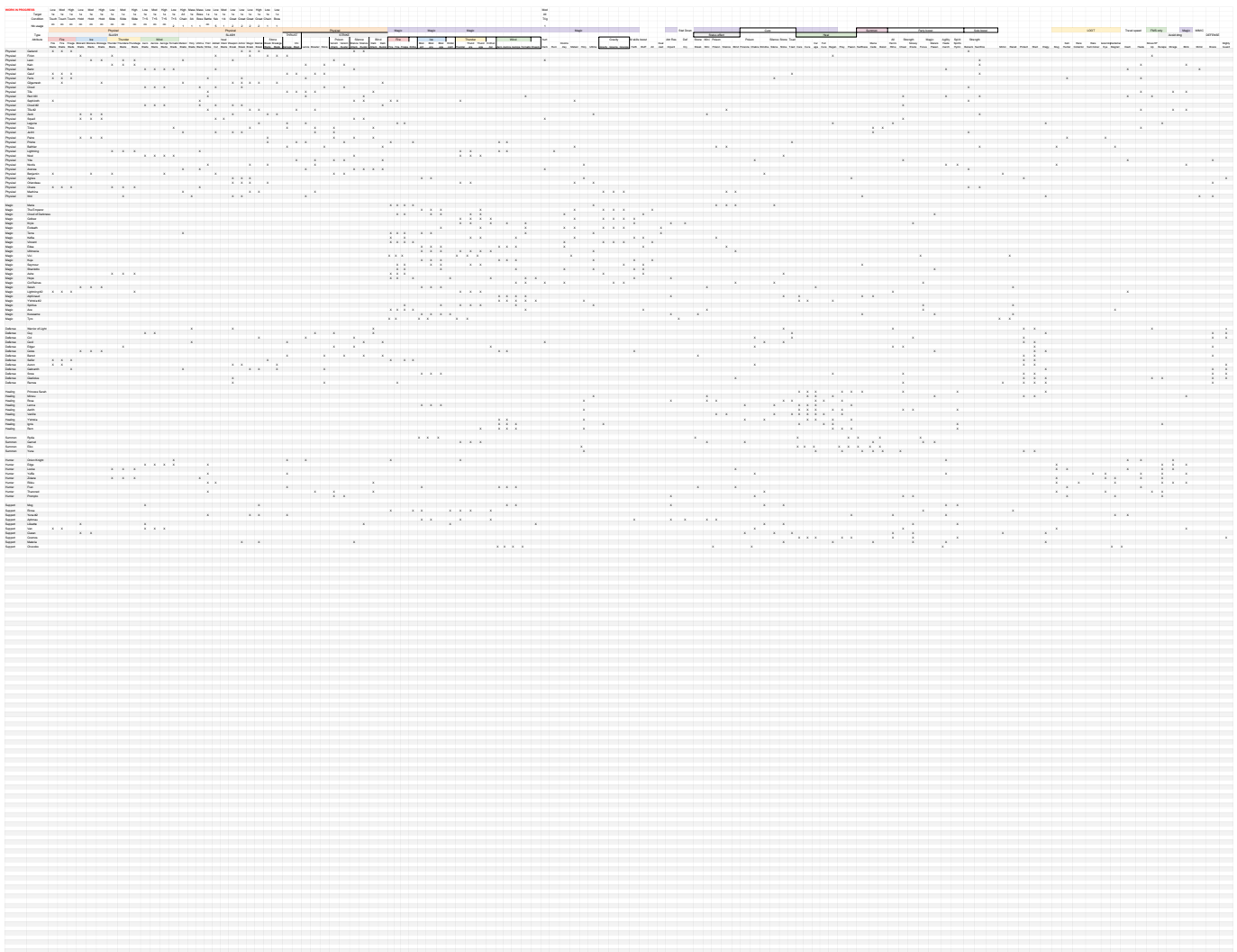
and 24 triggers on beginner represent much more of the song than on Expert for example...

Abilities damage

In the FAQ I have only tested a quick comparison of standard vs -RA vs -GA damage to have a ratio between them.

But what about the MAG stat ? Does it work like Trigger attacks ?

To be continued. Testing Ultima damage to begin with.



Ability name	Description			Target	Times usable	Activation	
Bravery	Multiplies party's physical abilities damage by 1.1 until the end of the MS			Party	1	MS begins	
Drain	Moderate damage (Magic) and restores 20% HP	Magic		1 enemy	1	Song is 3/4 over	
Drain Blade	Moderate damage (Strength) and restores 20% HP	Physical	Slash	1 enemy	1	Song is 1/4 over	
Meltdown	Slightly lowers enemy defense and magic defense. Moderate damage (Magic)	Magic		1 enemy	1	Triggers Critical	125/195/300/500
Mystic Aura	Multiplies leader's abilities damage by 1.4 until then end of the MS			Leader	1	Song is 1/2 over	
Provoke	Greatly lowers enemy defense, but moderately raises enemy attack power			Boss enemy	1	Boss enemy appears	
Rare Collector	Increases rarity level of CollectaCards found in treasure chests			Party	1	MS begins	
Rare Summoner	Increases rarity level of effects on summonstones found in treasure chests			Party	1	MS begins	
Rythmia Plus	Increases Rhythmia earned by 20%			Party	1	MS begins	
Ruin	Moderate damage (Magic)	Magic		1 enemy	unlimited	Triggers	60/95/145/240
Steal	Small chance of stealing an item from the enemy			1 enemy	1	2nd battle starts	