



## IGM Tutorial XX: Tips And Tricks - Part 3

by Kain Vinosec

Today we're going to take a quick look at some of the switches and memories built-in to IGM. You can load up any game file really, then head to "Materials", and we'll start with the "Memories" sub-tab. A lot of the things in here are pretty self-explanatory, but some can work in really interesting ways. The purpose of this tutorial is to open your mind to the possibilities presented by some of these presets.

- Player Speed (%) and Player Max Speed (%): These can be used to adjust your player gadget's overall speed, or you can use them in specific situations to slow your character down (rough terrain, shallow water), or speed them up (running on a conveyor belt or down hill). Imagine you want to have your character ride on a vehicle. Now, instead of setting up a vehicle gadget and doing a ton of extra work to make it function properly, just have the player gadget have Action Programs that display the vehicle's animations, and increase their speed. The player will still have full control of the 'vehicle' because it is still just the player gadget, and it'll be easier to add more functions in. Player Max Speed can be used when you use accelerating movement for your player gadget to limit their speed but doesn't have a purpose for basic movement.

- Player Gravity (%): This can be used to increase your player gadget's jump, or decrease it. Great for springboard gadgets or being weighted down.

- Player Attack Power and Player Max Attack Power (%): Same deal as Speed really. You can make your player gadget weaker or stronger by situation (or even adjust it with weapon items).

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- Player Damage Ratio (%) and Player Max Damage Ratio (%): This is your player gadget's defense stat really. From what I understand there is a formula for calculating damage in IGM:  $\text{Enemy Attack Power} * \text{Player Damage Ratio} / 100 = \text{HP Lost}$
- Player Magic Power and Player Max Magic Power: There are no special rules regarding these two, except that they correspond to each other so that whenever you use "Player Magic Power" it is variable and has a "Max" limit.
- Player Invincibility Time: Use this in a gadget or item to make your player defeat everything it touches (regardless of attack hit detection) for whatever time you specify.
- Bonus Life Score (1st) and Bonus Life Score (2+): Use these to define a score value that will add one to the "Player Lives Left" memory. For (2+) your player will gain an extra life every time that score is achieved (so if you set (1st) and (2+) to 100, you would gain lives at 100 points, 200, 300, 400, etc.).
- Post-Damage Immune Time: This is for increasing difficulty, or adjusting the flow of combat. After you attack something it will become immune to taking damage again for a very short time. This lets you adjust the amount of time.
- Gadget Acceleration Adjust (%): Ever want to slow down or speed up every gadget on the screen? This is the memory for you!
- Time Until Key Repeats and Key Repeat Interval: This allows you to slow down or speed up how quickly your cursor navigates through a menu. "Time Until Key Repeats" is how quickly you go through the entire menu, while "Key Repeat Interval" is the time it takes to switch from one item to another.

•Score and High Score: Score can be used for a lot of things. You have the option to change the score when ANY gadget disappears. This means it could be assigned as currency, or experience points, or just use it as a score. Remember that the “Bonus Life Score” memories are tied to this. For “High Score” set up a gadget that will overwrite “High Score” with whatever the “Score” is, when it is higher than the “High Score”. Kinda confusing but really it can be a great thing to have available if you want a traditional platformer.

•Time Limit: This is an incredibly useful memory. Set this up, and it automatically decreases by a value of one per second. When it hits zero, it automatically drops the memory “Player Gadget’s Health” to zero. Really effective and really fun to play around with. Be wary though, as switching canvases will cause this to reset to the default value.

•Flow Change Data, Stage Number, Area Number, No. Of Continues, and No. Of Clears: These memories are really just placeholders. Things that can come in handy, but you could use a regular memory to do everything that they do.

•Save Memories Up To Here: When you save your game, any memory above this line is retained. So any memories you make that you want to have saved when a player activates a save gadget need to go above this line or they will not be retained.

That covers some of the more unusual memories or memories that we haven’t talked about very much thus far. Next up let’s head to the “Switches” sub-tab and take a look at a few of those.

•Bonus Life For 100 Coins: Turn this on, and everytime the “Player Coins” memory hits 100 it’ll reset and add a value of one to “Player Lives Left”. Nifty hm?

•Initialize All Memories & Switches: This is like a soft-reset for your game. It returns all memories and switches to their default values when it is turned on.

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•Save Switches Up To Here: Same idea as the one for memories. Any switches you want saved need to be above this line.

That's it for today! How many ways can you think of to use some of these elements in your games?

Ready to start your own game in IGM? Purchase IGM at a 10% discount using the coupon code "[igmakerohyeah](#)". Any questions, comments? Ask them in the forums.

