

Should I have the level controls on my amplifier turned all the way up?

It depends on the system and how much gain you have prior to the amplifier. The level control can be thought of as an input attenuator. It does not limit the power available from the amplifier. With the level controls turned down the amplifier can still reach full rated output power, it just takes more drive level from your mixer to achieve it. Generally, you should set the mixer's individual channel fader and master gain to 0 dB, then adjust the amplifier level controls to the desired sound level.