Master Effects and Rendering Songs

Recording, Engineering, and Mixing

The last step to completing a mix is to add any necessary effects to the master channel and to create a mixdown of the song that you can listen to on a CD or mp3 player.

Typically, the effects you would add to the master channel would be EQ and compression, in that order. The master channel is located all the way on the left-hand side of the mixing window – it looks like any other channel, but the volume and effects for the master channel are applied to the entire song.

The compressor I would use for the master channel is the Blockfish compressor – set it to a relatively fast response time, make sure the "stereo" setting is enabled, and keep the saturation knob to a minimum. You aren't looking for dramatic compression in the master channel – you might get 4-6 LEDs to light up, but you shouldn't get more than that.

For EQ, you can use ReaEQ or ReaFir. Either way, you are only going to be making subtle, "sweetening" changes. Any changes should be minimal – 1 to 2 db at the most, and you should use a relatively wide bandwidth.

After you've got your mix sounding the way you like, you can mix down your song so you can burn it to a CD or copy it to an mp3 player. Go to the "File" menu in REAPER and choose "Render". The settings you pick will have to be correct in order for your song to play on other equipment – here are the correct settings:

- 1. Sample rate should be 44,100 Hz
- 2. The "stereo" button should be selected
- 3. The "render entire project" option should be selected
- 4. The "output file" should be set to a file on your H: drive or your thumb drive, and the name should be short (8 10 characters)
- 5. The "render master mix" and "dither" boxes should be checked
- 6. The "output format" should be set to MP3
- 7. The "mode" should be set to "CBR", "Joint Stereo", and the constant bitrate should be 128.
- 8. Quality should be set to "normal"

With these settings, your file should be playable on any CD or mp3 player.

If you have trouble rendering the file to an MP3, you may need to copy the file "lame_enc.dll" from the REAPER folder on the student file server to your REAPER folder on your thumbdrive.