A1 EVO NEXUS

Basic Requirements:

1. Room EQ Wizard Beta (obtain from AVNirvana)
2. Calibration microphone (Audyssey or better) with calibration file (connected to PC)
3. AVR with relevant Audyssey
4. HDMI Cable (PC to AVR)
5. MultEQ Editor App
6. VLC Media Player on PC (enable HDMI passthrough)

Getting the AVR ready:

1. Set your maximum listening volume (e.g. -15db)
2. Find IP address of your receiver
3. Amp assign should be correct
4. Upload sample calibration file to Nexus and export DEQ on/off file (this will reset AVR filters and distances etc. and prepare AVR for measurements).
5. Select HDMI source
6. Connect microphone to PC.
7. AVR > Audio > Surround Parameter > Turn off loudness management / cinema EQ / dynamic compression (options available when an atmos signal is playing)
8. Turn off ECO mode

Getting REW ready:

1. Upload mic calibration file
2. Preferences > View > Set maximum measurements to 500
3. Use ASIO4All version 2.15 drivers
4. If using Java drivers, select the EXCL versions of the drivers.
5. Check levels to ensure mic is working.
6. Disable: Analysis > Loopback delay reference is IR peak
7. Disable: Equalizer > Drop filters if gain is small
8. EQ > Add target curve

Center the microphone:

1. Click measure in REW
2. Set level to 0 dBFS
3. Set range to 10000 to 24000
4. Sweep> Settings > Length to 64k
5. Measure left and right speakers
6. Check overlays > impulse graph
7. Change view to percentage instead of dbFS and zoom in
8. Check distance of peak of left speaker from that of the right speaker.
9. Move mic as per the findings and remeasure left speaker until it is within 3cm of right speaker.

Measuring:

1. Click measure in REW
2. ~~Set level to 0 dBFS~~
3. ~~Set range to 0 to 24000~~
4. ~~Sweep> Settings > Length to 256k~~
5. Open VLC and create a playlist of all the channels relevant to you (from lossless sweeps folder).
6. Playback > from file > select: 256kMeasSweep_0_to_24000_0_dBFS_48k_Float_L_refR.wav
7. Click start and playback relevant channel in VLC
8. Run multiple measurements per channel
9. Run cross correlation for each channel (main measurement should be at the top of the selected measurements e.g. FR0 – FR1 – FR2) – to time align the different mic positions
10. Run vector average of aligned measurements (the result will be the final measurement)
11. Keep only vector averaged measurements and remove the rest
12. There should be only one measurement for each speaker
13. In directional bass setting, there will be 2 subwoofer measurements

Optimizing:

1. Click optimize calibration and follow instructions if any.
2. Use LFE+Main
3. LPF for LFE to 120hz (or 250hz if sub has early cutoff)