

Bass Race is a format of auto sound competition specifically tailored for “real” auto sound systems.

Safety Guidelines

The safety of the competitors, judges, and bystanders at a Bass Race event are of paramount importance. As the operator of the competition vehicle and its sound system, the competitor has a tremendous responsibility both to himself and to those around him with regards to safety. Competitors should clearly understand the following issues prior to participating in a Bass Race event.

- Operation of a motor vehicle is inherently dangerous. You **MUST** insure that the operation of your vehicle will not endanger yourself or those around you. Please adhere to all local laws and verify that your pathway is clear before moving your vehicle. Although officiating staff members may sometimes offer assistance in moving and/or directing traffic, the responsibility for the operation of the competition vehicle ultimately lies with the competitor.
- Auto sound systems are capable of producing high sound pressure levels. Exposure to high sound pressure levels may cause hearing damage. **NEVER** operate your sound system in such a manner as to expose yourself or others to high sound pressure levels. In addition, listening to your sound system at high volumes while driving may prevent you from hearing emergency vehicles, vehicle or train horns, etc. Always operate your sound system in accordance with local laws and never operate your sound system in a manner that could interfere with the safe operation of your vehicle. This includes making adjustments to your sound system while you are driving.
- Custom auto sound installations may affect the safety and/or integrity of your vehicle. Although some competitors may elect to have their sound system installed by others, it is ultimately the competitor's responsibility to validate that his or her installation is safe. Particular care should be taken with regards to electrical wiring. All power wires should be fused directly at the battery to minimize the risk of a fire hazard. Sound components such as speakers, amplifiers, enclosures, etc. should be fastened to the vehicle in such a way as to prevent them from causing injury or damage in the event of an accident. Vehicles that have been structurally modified to accommodate the sound system or vehicles that exceed the maximum gross weight limits as detailed in the vehicle's operating manual should never be driven on public streets or highways.

The dB Drag Racing Association and its affiliates are not qualified to determine the safety and/or legality of a given competition vehicle. This responsibility lies with the competitor. As such, the dB Drag Racing Association and its affiliates cannot be responsible for any accidents, damages, or injuries that occur at a Bass Race event. By participating in a Bass Race event, the competitor agrees to take full responsibility for his or her actions and any accidents, damages, or injuries that may occur. The dBDRR strongly encourages competitors to operate their vehicles and sound systems in a manner that is consistent with local laws. Flagrant disregard for safety will result in disqualification and subsequent ejection from the event.

Bass Race Highlights

- Simple rules.
- Contestants must play music (instead of tones, sweeps, etc.)
- Contestants are classified by the performance of their system (as opposed to equipment, cost, experience, etc.)
- Contestants are required to skillfully control the operation of their sound system. (This added dimension adds excitement to the contest.)

A Bass Race competition is comprised of two parts... Qualifying & Eliminations.

Qualifying

During qualifying, each contestant's sound system is measured with an SPL (Sound Pressure Level) meter. This meter measures the average SPL of the contestant's sound system in dB over a period of 30 seconds. (Remember, you can only use music CD's while competing. In addition, all doors, windows, and other openings to the vehicle must be closed.) At the end of the 30 second measurement period, the contestant will be placed into one of six Bass Race classes based upon the contestant's score.

The classes are:

- 120.0 dB to 129.9 dB
- 130.0 dB to 139.9 dB
- 140.0 dB to 149.9 dB
- 150.0 dB to 159.9 dB

This method of classification groups contestants with similar scores in the same class. The result is a contest that is fair for the contestants and exciting for everyone!

Eliminations

After everyone has had an opportunity to qualify, the 8 loudest contestants in each class will be randomly paired against one another in the quarter-final elimination bracket. Each pairing of competitors will compete against one another in a head-to-head fashion. The winner will advance to the next round of eliminations and the loser will be eliminated from the contest. This form of competition will continue (semi-finals and finals) until there is a winner for each class.

The elimination rounds are where things get tricky. The following violations will result in a score of ZERO.

- Red Light – Playing your sound system BEFORE the 30 second clock begins.
- Over Shot – Exceeding your classes' maximum score at any time during the run. (Example: A contestant scoring a 132.0 at any time during an elimination run in the 120.0 – 129.9 class would result in a score of ZERO.)
- Over Rev – Revving the motor in excess of 2000 RPM's.
- Venting – Opening a door, trunk, hatch, sun-roof, window, etc. during the run.
- High Freq – Playing a bass note in excess of 80 Hz to obtain a maximum average score.
- Test Tones – Using test tones or sine sweeps for program material.

Tie Breaker

In the case of a tie, the following steps will take place to determine the winner...

- First Tie-Breaker – Re-run the round.
- Second Tie-Breaker – Shut down the engines and re-run the round.
- Third Tie-Breaker – Shut down the engines and re-run the round by operating the system from outside the vehicle.

Although the rules for Bass Race may seem simple, a certain amount of practice will be required to become proficient. The following section will help you improve your score.

Tips, Tricks, and Techniques

Music – Find a commercially available music CD (no burned CD's, test tones, etc.) that contains a minimum of 30 seconds of bass. Each sound system is different so don't hesitate to experiment to find the song that works best for you.

Average – To maximize your score, you need to fully understand how the SPL meter averages your score. The following examples describe this process...

Example 1:

If in the 1st "second of time" you have a score of 90 dB, your average score is 90 dB.

If in the 2nd "second of time" you have a score of 100 dB, your average score will be $(90+100) / 2 = 95$ dB.

If in the 3rd "second of time" you have a score of 120 dB, your average score will be $(90+100+120) / 3 = 103$ dB.

The same process is carried out for each second of measurement in the 30 second judging period to determine your final average score.

Example 2:

If in the 1st "second of time" you have a score 0 dB, your average score is 0 dB.

If in the 2nd "second of time" you have a score of 0 dB, your average score will be 0 dB.

If in the 3rd "second of time" you have a score of 120 dB, your average score will be $(0+0+120) / 3 = 40$ dB.

As you can see, reaction time is crucial. But be careful. If you play your system prior to the start of measurement, you will "Red Light" and your score for the run will be set to 0.

Be Prepared – Have your CD ready. Reaction time is very important. You want bass music to begin as soon as the SPL meter starts to measure. Songs with long introductions (and no bass) are not recommended. Music tracks with a strong and continuous bass beat work best.

Stay Informed – Once in the lanes, park your car so that you can clearly see the display score board. The information displayed here is critical to controlling your sound system. Remember, you want to maximize your average score WITHOUT busting out of your class (Over Shot). For example: If you are competing in the 120.0 to 129.9 class, the ideal score would be a 129.9. This is as loud as you can play your system without exceeding your class maximum.