



2020 SPL Rulebook



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Events & Points Accumulation Guidelines

September 27, 2020 Deadline to Qualify for World Finals Soundfest

45 Total Points in each Sound Pressure and Park & Pound class in the Sound Pressure League earn National Points Champion eligibility for each class and World Finals Soundfest invitation.

45 Total Points **and compete at one 4X event** in each Sound Quality, Install, RTA Freq Out, and Dueling Demos class in the Sound Quality League earn National Point Champion eligibility for each class and World Finals Soundfest Invitation.

For 2020 Show & Shine: 45 points are required to qualify for National Points Champion eligibility. No requirements for Show & Shine at World Finals Soundfest; it is an open registration.

SQ2/SQ2+ 2020: 25 points **and compete at one 4X event** required to qualify for Finals.

For active military personnel, first responders, individuals with medical issues and for people with no shows within 250 miles of their home the 4X show requirement may be waived and the points requirement is reduced to 30 points with Commissioner approval.

Competitor and his/her vehicle must be at the event to have scores posted by judge(s). If Competitor cannot be present, the vehicle must be presented by a Teammate or Support Team member. This does not apply to points sharing with other organizations or groups' events.

For those having issues with Finals Qualification points, MECA will allow 2 1X "points sharing" events per class, per season. This program begins September 1st, and is available until the last day of the season. This enables MECA Members to receive points for non-MECA events. The maximum permitted is 5 points for each contest. So, this gives MECA Members the opportunity to earn a total of 10 points per class for the 2 events. MECA Members can contact the Commissioner - mecacaraudio@comcast.net - to arrange for "points sharing" score sheets to be purchased at \$20 each.

1X Single Point Event - 1st through 5th places awarded points. 1st = 5 pts, 2nd = 4 pts, 3rd = 3 pts, 4th = 2 pts, 5th = 1 pt

If SPLite, Limited Classes event: points are awarded to members in standard MECA SPL classes, based on actual standing from that event.

Host/sponsor provides awards, 1st - 3rd places, Host/sponsor judges the contest. Points are earned for State Champion Program.

Either SPL, SQL, or both, can be offered by host/sponsor.

SPLite (Limited Classes) - 12 Classes - 3 Street, 2 Modified Street, 1 Trunk, 2 Modified, 1 "Radical X", 3 Park & Pound ("Radical X" & Park & Pound are optional)

SP (Sound Pressure) Format - 5 Divisions and 17 "Pressure Classes": 4 Street, 4 Modified Street, 2 Trunk, 5 Modified, 2 "Radical X",

"Park & Pound" Format - 5 "Pressure Classes", 8 Phat Awards, Best of Show (optional)

SQL - 7 Sound Quality Classes: Stock, Street, Modified Street, Modified, Modex, Extreme, Master. Optional - 4 Install Classes (Stock, Street, Modified, Extreme), RTA Freq Out, SQ2, Dueling Demos - 5 Classes (Optional), Best of Show, 4 Phat Awards + Phat ICE, Best of Best of Show

2X Double Points Event - 1st through 5th places awarded points. 1st = 10 pts, 2nd = 8 pts, 3rd = 6 pts, 4th = 4 pts, 5th = 2 pts

Host/sponsor provides awards, 1st - 3rd places. MECA Judges conduct the contest. SPL & SQL scores count for State Champion Program.

Either SPL or SQL, or both, can be offered by host/sponsor.

SP (Sound Pressure) Format - 5 Divisions - 17 "Pressure Classes": 4 Street, 4 Modified Street, 2 Trunk, 5 Modified, 2 "Radical X",

"Park & Pound" Format - 5 "Pressure Classes", 8 Phat Awards, Best of Show

SQL - 7 Sound Quality Classes (Stock, Street, Modified Street, Modified, Modex, Extreme, Master),

4 Install Classes (Stock, Street, Modified, Extreme), RTA Freq Out, 2 SQ2 classes, Dueling Demos - 5 Classes (Optional), 4 Phat Awards, Best of Show, + Phat ICE, and Best of Best of Show

3X Triple Points Event-SOUNDFEST- 1st through 5th places awarded points. 1st = 15 pts, 2nd = 12 pts, 3rd = 9 pts, 4th = 6 pts, 5th = 3 pts

Host/sponsor provides awards, 1st - 3rd places. For Finals Soundfest, 1st - 5th places are awarded.

MECA Judges conduct the contest. SPL & SQL points count for State Champion Program. No points earned at World Finals Soundfest.

Either SPL or SQL, or both, can be offered by host/sponsor.

SP (Sound Pressure) Format - 5 Divisions, 17 "Pressure Classes": 4 Street, 4 Modified Street, 2 Trunk, 5 Modified, 2 "Radical X",

"Park & Pound" Format - 5 "Pressure Classes", 8 Phat Awards, Best of Show

SQL - 7 Classes (Stock, Street, Modified Street, Modified, Modex, Extreme, Master),

4 Intall Classes (Stock, Street, Modified, Extreme), RTA Freq Out, 2 SQ2 classes, Dueling Demos - 5 Classes (Optional), Best of Show, 4 Phat Awards + Phat ICE, and Best of Best of Show

4X SQL Points Event - All competitors are awarded a minimum of 15 points per class that they compete at these select events (i.e. SQ, Install, RTA, SQ2/SQ2+). 1st through 5th places are awarded as follows for placing in the Top 5 of the class: 1st = 20 pts, 2nd = 19 pts, 3rd = 18 pts, 4th = 17 pts, 5th = 16 pts.

Ride the Light - Neon & Accessory Lighting Contest - No points program.

Host/Sponsor provides awards, 1st - 3rd places. For Finals Soundfest, 1st - 5th places are awarded. 2 Classes: Best Interior, Best Exterior

Boom & Zoom - LOUD & FAST - Dragstrips only - 1X points for Sound Pressue. Some tracks may offer independent series points programs.

Host/sponsor provides awards, 1st - 3rd places.

MECA Judges conduct the contest. B&Z - 4 Classes: BZ1 - BZ4, Medals for Loudest and Fastest in each class

If you have questions on contest classes or awards, please contact the MECA office or the host/sponsor prior to the event.



Team Guidelines & Procedures

1. MECA teams are created by the Retail Members and Manufacturer Members to enhance their customers and employees visibility at MECA events. MECA team members can travel together, work together, and enjoy their MECA experiences more when part of a properly managed MECA team. The team is recognized when the Retail Member or Manufacturer Member pay the yearly membership fee.
2. MECA teams can be independent, and the team must pay a yearly membership fee of \$60 for this official recognition and service.
3. MECA team members must tell the event registration person that they are on a team, and make sure that this is entered on their score sheet on the line that says "MECA Team". The MECA member **MUST** present their membership card and make sure that their membership number is listed on the score sheet. They must do this at every event with every score sheet.
4. MECA team members must be MECA members in good standing to be listed as team members in the event results. This means that their membership must be current.
5. MECA members who are on MECA teams will have that team name listed next to their event results on the web site. This takes extra time and effort, and is much easier to process when the score sheet is properly filled out, listing the MECA team on the appropriate line.
6. MECA team registration includes one competition membership, good for one competition vehicle. A membership card will be issued to the Retail Member, Manufacturer Member, or independent team for the vehicle. This vehicle is usually for the owner of the store or manufacturer representative's demo vehicle, but it can be assigned to one competitor, and only one competitor, for the season. For independent teams, the card is usually for the President or competition leader, but it can be issued to a designated team member for competition registration and privileges.
7. We have established a MECA Team Participation Award that is presented at the end of the season. It is presented to the team that has the most members entered at MECA shows throughout the season. Each member counts one time, for each event attended. This is not based on the number of entries each member makes at the show, but on the fact that they were there and competed. For example, Jimmy Loud of Team Really Loud get 1 point for being at the show, not a point for each format entered. If 5 team members enter a given event, then the team gets 5 points toward the Team Participation Award.
8. If a MECA team member is not properly recognized in the Event Results, then the team captain or team member can notify the Event Director, or Commissioner if necessary, of the mistake, or omission, and have it corrected. MECA strives to accurately report all event results and facts at all times.



Discipline & Protest Procedures

I. Rules & Ethics Committee Membership Status Review Procedure

- A. A MECA member's actions and/or behavior may be reviewed for the following reasons:
 1. Cheating or association with cheaters.
 2. Disrespect or threat to judges or competitors during the contests/events.
 3. Disrespect or threat to judges or competitors on web site forum.
 4. Direct accusations of misconduct by judges or officials on public forums.
 5. Disorderly conduct, including use of foul language, at the contests/events.
 6. Writing bad checks to the club; misrepresenting the business interests of the club.
 7. Written protest within 24 hours of a contest.
- B. Complaints or protests can only be filed by MECA members.
 1. A formal complaint must be filed with the Commissioner. Also, the Commissioner, a Judge, or any R&E Committee member may file a complaint, when necessary.
 2. A description of the infraction should be thorough and verifiable. When possible, a list of witnesses should be included in the complaint.
- C. The Commissioner will forward the complaint, via e-mail, to all members of the R&E Committee for review and feedback.
 1. The Commissioner may recommend a specific action or punishment to suit the case.
 2. R&E Committee members will have 48 hours to respond to the complaint.
 3. The Commissioner, or his appointed agent, will assess opinions of the R&E Committee members, determine the majority opinion, and present a ruling.
- D. Upon verification of the infraction and presentation to the R&E Committee members, the following sanctions are possible:
 1. Loss of points and qualified scores at a specific event.
 2. Loss of membership status, privileges, and benefits.
 3. Suspension - a period of time will be specified that suits the case.
 4. State Championships and eligibility for Finals Soundfest may be negated.
 5. In the most severe cases, the R&E Committee may ban a person from further association with the club.

II. Filing a Protest at a Contest

- A. **Only a competitor in the class may protest another competitor in that class.**
 1. The Head Judge must be advised of the protest.
 2. Protests must be filed before the awards are presented.
 3. The Head Judge will give the protester an official form that must be filled out and returned to the Head Judge with the protest fee (all protests must be clearly put forth in writing).
 4. The protester must be specific about the nature of the protest. The judge(s) will only inspect or authenticate the system, vehicle, install, or score based on the specifics of the protest.
 5. The protest fee will be \$150 cash for 1X-3X events, \$400 for 4X and World Finals.
 6. For SPL: When the score is protested, the protestee will have 5 minutes to prepare the system/vehicle for the retest.
 7. For SPL: When the score is protested, the protestee must back up the score within 1 dB.
 8. When the protest is determined to be valid, the Head Judge returns the protest fee to the protester.
 9. When the protest is determined to be invalid, the protestee and the club split the protest fee.



SPL Rules Overview

I. Purpose and Intent

MECA is a sanctioning body for Competitors involved with car audio sports. MECA is a membership association formed to encourage, support, and reward Competitors involved in car audio sports. This Rule Book is intended to outline the specifics of competition in the Sound Pressure League (SPL). It is the responsibility of each Competitor to review, comply, and honor the rules in cooperation with event officials. MECA strives to present each Competitor with a fair and unbiased forum in which competition is regarded as worthwhile and enjoyable.

II. Objective

The **SPL - Sound Pressure League** - working with criteria established in the Rule Book, will objectively evaluate each Competitor's vehicle to identify the loudest car/truck audio systems in the **Sound Pressure (SP)** Format in these 5 Divisions: 2 Trunk (T) classes, 5 Street (S) classes, 4 Modified Street (MS) classes, 5 Modified (M) classes, 2 "X" classes (XTC, X), and 5 **Park & Pound** format classes (DB). Systems/vehicles are categorized by complexity of design and potential as indicated by MECA's "Pressure Class" Formula.

III. Format and Division Definitions

"Sound Pressure" Format - 18 "Pressure Classes" in 5 Divisions

Trunk (T1, T2)

The Trunk Division, with 2 "Pressure Classes", is intended for vehicles with systems installed in the Trunk.

Street (S1, S2, S3, S4, S5)

The Street Division, with 5 "Pressure Classes", is intended for competitors with some vehicle and system modifications allowed. Vehicles are still intended to be daily drivers, must have a functional OEM backseat, and not SPL specific.

Modified Street (MS1, MS2, MS3, MS4)

Modified Street has 4 "Pressure Classes" and is intended for vehicles which do not have back seats, have no-wall builds, or other installations which are done to the B-pillars. System and/or box height is no more than 12" measured from the ceiling to the tallest point of the box behind the B-pillars. Anything attached to the enclosure is considered part of the enclosure, including speaker surrounds, electronics including amplifiers, speaker pods, etc.

Modified (M1, M2, M3, M4, M5)

The Modified Division with 5 "Pressure Classes" is intended for vehicles and systems that are designed to maximize sound pressure level, including woofer walls and pickup truck cut-through/blow-through installations, but are still capable of being daily drivers. M1, M2, M3, are restricted to vehicles that have modifications behind the B-pillars, within the original 4 planes of the vehicle, (Roof, Floor, and all side panels, must be intact and not be punctured via cutting). M4 and M5 allow for limited modifications in front of the B-pillars as well as structural, chassis, and/or body modifications behind the B-pillars and although they may be able to be driven daily, are designed strictly with SPL competition in mind.

Radical X (XTC, X)

The "Radical X" Division, has 2 classes (one clamped class with maximum of 4000 pressure rating and one unlimited) for extremely modified exhibition systems/vehicles, is intended for hard-core SPL Competitors with unusual or concept vehicles. Any combination of open/closed doors or hatches is acceptable, and sensor may be placed at either kickpanel or on a mic stand 20" from the glass, and not within 12" of any port.

"Park & Pound" (DB1, DB2, DB3, DB4, DB5) Format - 5 "Pressure Classes"

The "Park & Pound" Format, with 5 "Pressure Classes", is intended to measure sound pressure levels outside the vehicle, while playing full-range music.



IV. Best of the Best of Show (BOBOS) Award

The winner of this award will be the Competitor with the best overall audio system performance at an event based on their competition results, determined by the following scoring system:

- BOBOS Competitors must enter SP (non-X class) and SQ to qualify for the award. Park & Pound, Install, and RTA Freq Out points will be added to get the overall BOBOS score.
- Using the Competitor's score in SP measured at the headrest, Park & Pound, SQ, RTA, and Install, those scores will be totaled to get an overall score, with the highest overall score winning BOBOS.
- SP offers a maximum score of 150 dB, Park & Pound offers a maximum score of 130 dB, SQ is a maximum of 100 points, RTA Freq Out is a maximum of 100 points, and Install has a maximum of 100 points.
- For example, if a Competitor has a 152.5 dB in SP at the headrest, 126.1 dB in Park & Pound, a 78 in SQ, a 64 in RTA, and 81 in Install, then it would be calculated as: SP is capped at 150 dB and the RTA Freq out score is doubled. So, $150 + 126.1 + 78 + 64 + 81 = 499$.
- Tie-breakers: 1st SQ Score; 2nd SP Score; 3rd Install Score; 4th Park & Pound Score; 5th RTA Freq Out Score.
- Even if they are offered, SQ2, Show & Shine, Ride the Light, Boom & Zoom, or Dueling Demos are not factored into the BOBOS scoring.
- Phat awards and Best of Show awards are not factored into the BOBOS scoring.

V. Judge Points

A competitor or event promoter may earn no more than 25 "Judge Points", per class, during the season. These are first place points taken when a competitor is part of a Judge Team at an event and approved by the Commissioner as necessary. "Judge Points" count toward qualifying for State and National Titles as well as World Finals invitation just as points earned from competition.



2020 Pressure Class Rating System

Pressure Class Formula

Watts + Woofer Cone Surface Area = Pressure Class #

Please consult Division Rules for complete definitions.

Examples:

500 watts + 2-12 = 726	800 watts + 1-12 = 913	1800 watts + 1-15 = 1977	1700 watts + 1-18 = 1954
600 watts + 1-12 ² = 744	1200 watts + 2-12 = 1426	1600 watts + 2-15 = 1953	4300 watts + 2-21 = 4992
500 watts + 2-10 ² = 700	1500 watts + 2-12 = 1726	2600 watts + 2-15 = 2953	3900 watts + 6-15 = 4960
500 watts + 3-10 = 736	2000 watts + 2-12 = 2226	4000 watts + 4-15 = 4707	3500 watts + 8-15 = 4914

SP - Sound Pressure Format

Measures dB inside the vehicle. 16 "Pressure Classes" in 4 Divisions, 2 Exhibition Classes

T - Trunk - Intended for daily driven trunk vehicles

T1 0 - 2500

T2 2501 - 5000

5001 - 7500 competes in **S4**

7501+ competes in **S5**

S - Street - Intended for daily driven vehicles with fully functional back seat(s)

S1 0 - 750

S2 751 - 2000

S3 2001 - 4000

S4 4001 - 7500

S5 7501+

MS - Modified Street - Intended for vehicles that do not have a fully functional back seat(s): 2 seat hatchbacks, extended cab pick-ups, pick-ups with equipment in the bed, and builds to the B-pillars

MS1 0 - 2500

MS2 2501 - 5000

MS3 5001 - 10000

MS4 10001+

M - Modified - Intended for vehicles and systems that are designed to maximize Sound Pressure level, including woofer walls and pick-up truck cut-throughs, but are still capable of being daily drivers

M1 0 - 1500

M2 1501 - 3000

M3 3001 - 6000

M4 6001 - 10000

M5 10001+

X - Extreme Exhibition - Vehicles with major modifications. Sensor placement in front of B-pillars, under dash, in either driver or passenger kick panel area location or on a mic stand 20" from the glass.

Radical XC - 0 - 4000

Radical X 4001+

DB - Park & Pound Format

Measures dB outside the vehicle, in 5 "Pressure Classes", while playing full-range music

DB1 0 - 1500

DB2 1501 - 3000

DB3 3001 - 6000

DB4 6001 - 10000

DB5 10001+



General Rules

A. Vehicle Requirements

- a. Except for Radical X, XC, M4, M5 and Park & Pound DB5, all vehicles must be street legal. Vehicles that will compete at the World Finals Soundfest must compete in at least one (1) 2X or 3X event as part of the qualification for the contests.
- b. Commercial vehicles are prohibited in Street, Trunk, and Modified Street classes. Commercial vehicles are defined in several ways. A vehicle that has no passenger seat, from the factory, is a commercial vehicle, for examples, bread truck or a delivery truck. Commercial vehicles can be regarded as such, by vehicle weight, and federal and state laws, for examples, a bus or a limousine.
- c. Factory Seatbelts, mounted in the factory locations, utilizing the factory hardware are required in all classes except "Radical X", XC, MS4, M4, M5 and Park & Pound DB4, DB5. See individual division rules for specific requirements per division.
- d. For M4, M5, Double Layered Windshields, Plexi-Glass Windshields (max 1 inch), and/or a single internal roof to floor brace (i.e. Stripper Pole) will be allowed. Sunroof can be removed and sealed with a metal plate in M4/M5.
- e. Vehicle interior must be clear of trash and/or clutter in any area, other than automotive-type floor mats.
- f. Drilling Holes and cutting metal to run wires, or for the mounting of aftermarket equipment such as, door speakers and head units, is permitted. Metal may not be cut to increase size of your given ICA except in Modified 1 - 5 and X classes. No cutting or replacing floorboards to make deeper or to house more gear except M4 M5 and radical x divisions. No Chopping tops to reduce interior space.
- g. Except for "Radical X", dash modifications are limited to mounting of automotive gauges (e.g., tachometer or voltage gauge), for video system components or screens, DVD player, game console, relocation of source unit, and/or mounting front stage speakers for SQL applications.
- h. Except for "Radical X", the dash may only be recovered with a cloth type material. Painting to match a color scheme of the vehicle will also be allowed.
- i. Only the Owner/Member or Support Team member is allowed to be in the vehicle during the pass and must properly wear hearing protection.
- j. Bracing Teams are permitted in all SP Divisions but are not permitted in "Park & Pound".
- k. Except for "Radical X", XC, M4, M5 and Park & Pound DB4, DB5, Sun visors must be properly installed in all vehicles. Sun Visors must be in the up position during the pass and may not be weighed down by CD's or other items.
- l. Maximum engine idle 2,000 RPM. Competitor must be able to prove RPM level by an installed tachometer or accept Judge's ruling. RPM level will be verified with the Competitor out of the vehicle.
- m. No engine revving, regardless of RPM level - pass will be disqualified. Competitors may not "throttle" the gas pedal to increase the engine's RPM level during their pass.
- n. Duct Tape, or similar material, may be used on the exterior of the vehicles so long as no doors are sealed, nor any glass is blocked from being able to view through (i.e. a leaking 3rd brake light or window wing may be sealed with tape). A loose front windshield may also be framed in tape.

B. Owner Requirements

- a. Competitors must own the vehicle(s) that they use in competition. Driver's license & vehicle registration required to verify eligibility for State Championships, Points Championships, and World Finals Soundfest eligibility. Regardless of registration, a vehicle may not be used by more than one Competitor at a show. Additionally, a Competitor may not use another Competitor's vehicle.
- b. For qualifying score, only 1 person, either the Owner/Member or Support Team member, is allowed to operate the system and/or vehicle during the pass.
- c. Only the Owner/Member or Support Team member is allowed to be in the vehicle during the pass.
- d. No one is allowed in the vehicle when sound pressure level equals or exceeds 150.0 dB - pass will be disqualified, but an immediate retest will be offered. No one is allowed in the vehicle in "Park & Pound" regardless of sound pressure level.
- e. Competitors who are not able to operate their system from outside the vehicle may reach into the vehicle to adjust volume, change, or pause tracks but may not manipulate any other equipment. In this situation, the Competitor must properly wear hearing protection and keep his/her head out of the vehicle.
- f. Competitors may only compete in one (1) "Pressure Class" per Format (i.e. SP, Radical X, and "Park & Pound") at an event, for example, M5, X, and DB5 would be allowed for 1 vehicle at an event.
- g. Competitors may use multiple vehicles at an event, but must purchase separate score sheets for each vehicle and may not enter multiple vehicles in the same format (i.e. SP, Radical X, or Park & Pound).
- h. MECA members using multiple vehicles must have separate membership numbers to qualify each vehicle for State Championships, Points Championships, and/or World Finals Soundfest eligibility.
- i. MECA Members must earn 25 points in a "Pressure Class" to be eligible for the State Title at their State or Regional Soundfest.
- j. World Champions are determined at World Finals. State Champions will be determined at the State or Regional Soundfest. If no State or Regional Soundfest is offered, the highest qualifying score in each class will earn the State Championship for that "Pressure Class".
- k. Competitors and teams must provide all Judges proper courtesy and respect. Any unsportsmanlike conduct may result in disqualification and/or suspension from MECA.



C. Judging Criteria

- a. MECA "Pressure Class" Formula will be used to determine "Pressure Class" Ratings: Square Inches of Subwoofer Cone Area + Measured Wattage = Pressure Class #
- b. Wattage measurement will be done utilizing the TermLab Magnum metering system on the combine speaker output of the subwoofer amplifier(s).
- c. The TermLab Magnum's clamp and probes are measuring the AC Current and AC Voltage being supplied to the subwoofers in real time and their multiplied total should be displayed as the true actual wattage along with the real time SPL score.
- d. Competitors must provide access to all speaker wires for inspection and measurement. Clamp measurements should be taken no closer than 12" from the amplifier(s) to minimize interference from stray electrical fields from the amplifier's output stage.
- e. In situations where multiple output channels are being driven, a single channel may be metered only in special circumstances (i.e. a new competitor or non member should). That channel shall be chosen by the judge, then that total multiplied by the total number of output channels being used. However, this option will only be allowed in special circumstances and C.d. should be followed and this option will definitely not be available at State Finals or World Finals - all metering will be done per C.d.
- f. The Wattage total recorded by the TermLab Magnum during the official pass will be the wattage used in the "Pressure Class" formula to determine the "Pressure Class".
- g. In the event that the Class is already determined (i.e. 2nd Pass, 2nd Day Qualifying Event, World Finals), then a competitor who exceeds their wattage limit will receive a 0 for their pass.
- h. Competitor selects and supplies source material. (i.e., CD, Tape, Radio, MP3's, iPod's, digital jukeboxes, or any other electronic media source).
- i. Peak frequency must not be above 100 Hz, as determined by the TermLab Magnum system.
- j. Once vehicle has entered lane, meters installed, & Judge is ready to begin, Competitor has 2 minutes to begin pass or pass will be disqualified. At the conclusion of the pass, once the Judge has removed the sensor, clamp, and probes from the vehicle, the Competitor has 2 minutes to drive the vehicle out of the lanes or the pass will be disqualified.
- k. Pass is timed for 30 seconds with TermLab scoring system set to "Peak Hold", except for "Park & Pound" which is set to "Average".
- l. Retry will be allowed if system fails and score does not exceed 130 dB (110 dB for "Park & Pound"). Competitor will have 5 minutes to fix problem and be ready for retest. Under no circumstances will a Competitor be allowed more than one retest under this rule.
- m. Ties will be settled with a formal tiebreaker. The highest score wins place in the class in which tie happened. i.e., if there is a tie for 2nd place, the winner of the tie breaker gets 2nd place and the loser gets 3rd place. Scores set in a tie breaker do not affect any other standings.
- n. The "Sound Pressure Best of Show" (SP BOS) award will be presented to the competitor who posts the highest score in the Sound Pressure level contest. The "Park & Pound Best of Show" will be presented to the Competitor who posts the highest score among those competitors. The "Sound Pressure League Best of Show" (SPL BOS) will be presented to the Competitor who posts the highest combined scores in Sound Pressure and Park & Pound contests.
- o. Boom & Zoom scores earn 1X Single Points for Sound Pressure score in appropriate class.
- p. Official Meter and Metering –
 - i. The TermLab Magnum metering system is the official MECA meter, and must be used for all Triple Point events.
 - ii. For 2X Events, the Magnum is the preferred system; however, if it is not available, then a Term Lab meter may be used for SPL, supplemented by a AC Amperage Clamp Meter and AC Voltage Meter which both have Peak Hold functionality. The competitor's wattage will have to be hand calculated based on those readings (Voltage x Amperage = Wattage).
 - iii. For 1X Events, if neither of the aforementioned methods are able to be used, then any SPL Meter can be used for score and wattage may be determined by taking one-half of the Manufacturer's highest rated RMS power of the subwoofer amplifier(s).
- q. State Records may only be set at a State Finals or designated Regional Triple Point event, using the TermLab Magnum metering system.
- r. World Records may only be set at the World Finals Soundfest, using the TermLab Magnum metering system.
- s. MECA World Finals Soundfest Sound Pressure and Park & Pound contests will each be a "Qualifying Event". A "Qualifying Event" is a 2 day Soundfest where the first day "Top 3" scorers in each class qualify and compete on the second day to determine 1st, 2nd, and 3rd place winners. Page 18 presents criteria and procedures for 2 Day Events with Qualification testing on 1st day, and Finals on 2nd day.
- t. Any discretionary rulings at a show will be documented by the Head Judge and forwarded to the Commissioner and the MECA Rules & Ethics Committee for an official ruling, and possible rule clarification or amendment.



D. Sensor Placement

- a. Competitor cannot touch or move sensor or stand at any time. Competitor may not sit on the same side of the vehicle where the sensor is placed.
- b. Sensor placed on MECA approved stand or holder, provided by Judge, 26" High in the Driver's Seat. The seat and seat back of the seat that the sensor stand is placed in must be in a factory locked position and must allow the stand to sit flat on the seat bottom. The stand may not be leaned forward.
- c. Sensor faces front of vehicle at all times in horizontal position, except for "Park & Pound".
- d. With the seat in a factory latched position, the sensor stand will be placed in the center of the seat with the rear of stand touching the seat-back, or be as close as possible.
- e. With the sensor and stand placed, the seat must be moved to place the sensor a distance of 20" from the windshield as measured on the horizontal plane, except for "Radical X" and "Park & Pound".
- f. If the Competitor's seat is not able to move forward enough for the sensor to reach 20", then with the seat in the forward most latched position, the stand will be moved forward to allow the sensor to reach 20", and may weighted down with sandbags or equivalent. However, the base of the sensor stand must still be completely on the seat.
- g. Except for "Radical X" and "Park & Pound", Competitors may choose to have sensor placed in the front passenger's seat following the same guidelines as the driver's seat. Competitors must inform the judge of this choice prior to sensor being placed in the vehicle.

E. System Requirements

- a. Sound pressure must be created by car audio equipment system sources, and not by any other physical, chemical, or mechanical means.
- b. The enclosure is defined as not only the sub box, but also any equipment attached to the sub box, i.e., amps, speakers, subwoofers, caps, batteries, etc.
- c. ICA - Interior Cargo Area is defined as the area within the vehicle which can be used for the purposes of an SPL system, i.e. subwoofer(s), subwoofer amplifier(s), enclosure(s), battery(ies), etc. The ICA is different for different types of vehicles and classes. For example, for a trunk car in Street Division, the ICA is easily defined as inside the trunk. A vehicle like a Chevy Avalanche in Street Division is more complex, as it can be utilized like a trunk vehicle or a crew cab truck. The specific Division rules help to identify the ICA for specific vehicle types.
- d. All equipment, including but not limited to amps, speakers, enclosures, and batteries, must be securely mounted within the vehicle and visible/accessible for verification, except as permitted by specific Division rules.
- e. No externally mounted batteries permitted, except as provided by specific Division rules.
- f. Modifications, changes, and/or additions to audio or electrical system must be approved by the Judge after initial verification. Amplifiers and woofers may be replaced, with Judge's approval, after the first pass with identical equipment only: brand name and model number
- g. Once the Competitor has made the 1st pass he/she may not change Divisions or Pressure Classes within a Division.
- h. With the move to the TermLab Magnum metering system and the measurement of actual output wattage MECA's previous restrictions on Alternators, Batteries, Capacitors, Ultra Capacitors, and overall system voltage are no longer a concern; however, they must still be located either under the hood, in the factory location, or in the designated ICA, and/or per specific division rules.

Intentional cheating and/or manipulation of the rules will result in permanent suspension from MECA competitions and events.

Alcohol, drugs, weapons, and violence of any nature prohibited at MECA events.

Hearing protection required at all events.



Trunk Division Rules

Trunk – Intended to test a Sound Pressure League vehicle's sound pressure level. Vehicles are intended to be daily drivers (no commercial vehicles) and not SPL specific. Vehicle must be equipped with a conventional trunk, located behind the back seat, and separated from the passenger area by the back seat and rear deck lid.

2 Trunk "Pressure Classes"

T1 0 - 2500

T2 2501 - 5000

5001 - 7500 competes in **S4**

7501+ competes in **S5**

A. Vehicle Requirements

- i. No modifications to the vehicle, except for the limited modifications outlined in A.ii through A.xiii.
- ii. Sound deadening materials may be used throughout the vehicle. Their application may not alter the placement of the headliner, carpet, or any panel in the passenger area of the vehicle.
- iii. Spray foam, resins, duct tape, or any similar materials used to increase sound pressure score may only be used in the vehicle's trunk.
- iv. OEM headliner or functional equivalent must be installed throughout the vehicle and may be reupholstered, but not built with fiberglass or any other hard rigid material. Headliners must be able to be removed, if necessary, to verify sound deadening on the roof of the vehicle. Equipment may not be mounted on the headliner.
- v. OEM Door panels may only be modified and/or rebuilt to accommodate front stage speakers. Modifications and/or rebuilds are limited to the area required for mounting of said speakers and must be finished and/or upholstered. Raw metal, wood, or fiberglass build-outs commonly used to increase sound pressure level are prohibited.
- vi. Except for the vehicle's trunk OEM floor covering or functional equivalent must be installed throughout the vehicle and may not be built with fiberglass or any other hard rigid material. Floor Covering must be able to be removed, if necessary, to verify sound deadening on the floor of the vehicle.
- vii. Center consoles must remain as OEM and may not be removed, rebuilt, or replaced.
- viii. Front and rear seats must be installed and properly mounted, however, rear seats may be folded down provided they are factory designed to do so, and can be returned to a latched position after pass without moving the enclosure or any equipment.
- ix. If the vehicle is not equipped with factory-folding rear seats, then the rear seat back may be unbolted and laid down on the rear seat bottom as to approximate the design of factory folding seats. Rear seat back must be able to latch or be placed back in the original factory position at the conclusion of pass without moving the enclosure or equipment.
- x. Headrests may be placed in any factory position, may be turned backwards, or may be removed.
- xi. Rear deck must maintain factory appearance, have no holes and must have some type of upholstery/covering.
- xii. Modifications to the vehicle's trunk are limited to Non-Permanent Modifications.
- xiii. See General rules for anything that may not be covered in this section if you have questions or concerns please contact your local judge.

B. Owner Requirements per the General Rules

C. Judging Criteria per the General Rules

D. Sensor Placement per the General Rules

E. System Requirements

- i. Enclosure, Subwoofer(s), Subwoofer Amplifier(s), and spare battery(ies) must be located in the trunk. No portion of the enclosure may rest on the rear seat while in the fold down position. Any other equipment mounted in areas other than the trunk must be installed in such a way as to not interfere with the normal operation, function, seating, seating capacity, or leg room of the vehicle.
- ii. No podiums allowed; however, head unit may be held outside the vehicle.



Street Division Rules

Street – Vehicles are intended to be daily drivers (no commercial vehicles), not SPL specific, and must have a fully functioning OEM backseat. Vehicles that do not have a backseat fall into our Modified Street Division. The ICA for all Street class vehicles is defined as behind the 2nd row of seats (generally referred to as the backseat) and below the top edge of the backseat.

5 Street “Pressure Classes”

S1 0 - 750

S2 751 - 2000

S3 2001 - 4000

S4 4001 - 7500

S5 7501+

A. Vehicle Requirements

- i. No modifications to the vehicle, except for the limited modifications outlined in A.ii through A.xiii.
- ii. Sound deadening materials may be used throughout the vehicle. Their application may not alter the placement of the headliner, carpet, or any panel in the passenger area of the vehicle.
- iii. Spray foam, resins, duct tape, or any similar materials used to increase sound pressure score may only be used in the vehicle’s ICA.
- iv. OEM headliner or functional equivalent must be installed throughout the vehicle and may be reupholstered, but not built with fiberglass or any other hard rigid material. Headliners must be able to be removed, if necessary, to verify sound deadening on the roof of the vehicle. Equipment may not be mounted on the headliner.
- v. OEM Door panels may only be modified and/or rebuilt to accommodate front stage speakers. Modifications and/or rebuilds are limited to the immediate area required for mounting of said speakers and must be finished and/or upholstered. Raw metal, wood, or fiberglass build-outs commonly used to increase sound pressure level are prohibited.
- vi. Except for the vehicle’s ICA OEM floor covering or functional equivalent must be installed throughout the vehicle and may not be built with fiberglass or any other hard rigid material. Floor Covering must be able to be removed, if necessary, to verify sound deadening on the floor of the vehicle.
- vii. Center consoles must remain as OEM and may not be removed, rebuilt, or replaced.
- viii. Front and rear seats must be installed and properly mounted, however, rear seats may be folded down provided they are factory designed to do so, and can be returned to a latched position after pass without moving the enclosure or any equipment. 3rd Row seats are considered part of the ICA and may be removed.
- ix. If the vehicle is not equipped with factory-folding rear seats, then the rear seat back may be unbolted and laid down on the rear seat bottom as to approximate the design of factory folding seats.
- x. Headrests may be placed in any factory position, may be turned backwards, or may be removed.
- xi. Rear deck must maintain factory appearance, have no holes, and must have some type of upholstery/covering.
- xii. Modifications to the vehicle’s ICA are limited to Non-Permanent Modifications.
- xiii. See General rules for anything that may not be covered in this section if you have questions or concerns please contact your local judge.

B. Owner Requirements per the General Rules

C. Judging Criteria per the General Rules

D. Sensor Placement per the General Rules

E. System Requirements

- i. Enclosure, Subwoofer(s), and Subwoofer Amplifier(s) must be located within the vehicle’s ICA. Any other equipment mounted in areas other than the ICA must be installed in such a way as to not interfere with the normal operation, function, seating, seating capacity, or leg room of the vehicle.
- ii. Rear vision must not be obscured in any way by any part of the system. The top of the enclosure must be no higher than the top of the backseat when it is in the factory upright and latched position. Headrests are not considered part of the seat. If the headrest is molded into the seat, the top of the seat is considered the highest spot on the seat where there is a visible difference between the seat and headrest.
- iii. Rear 2-way viewable glass cannot be blocked by any part of the system.
- iv. In order for a Truck to compete in Street, it must have a fully functioning backseat (or Jump Seats). The introduction of Modified Street into the 2016 Rules creates a class for vehicles which are built to the B-Pillar; like trucks and domestic CRXs. It is conceivable that an Avalanche or Ridgeline could still meet the backseat requirement with all their equipment mounted in the bed due to the special design of those vehicles.
- v. No podiums allowed, however, head unit may be held outside the vehicle.



Modified Street Division Rules

Modified Street – Introduced in 2016, MS is intended to be an advanced street class, allowing system installs and builds to the B-Pillar. Vehicles must still be street legal, functional as a daily driver (no commercial vehicles), may have no permanent modifications, and be able to be returned to stock without replacing parts.

The ICA for all Modified Street class vehicles is defined as behind the B-Pillar and lower than 12” from the headliner. Sub enclosure maximum height is measured from the ceiling to the tallest point of the box behind the B-pillars. Anything attached to the enclosure is considered part of the enclosure, including speaker surrounds, electronics including amplifiers, speaker pods, etc. No aspect of the installation may be closer than 12” to the ceiling of the vehicle. Trucks are allowed to use the bed as part of the ICA only for amplifiers and/or batteries.

4 Modified Street “Pressure Classes”

MS1 0 - 2500	MS3 5001 - 10000
MS2 2501 - 5000	MS4 10001+

A. Vehicle Requirements

- i. No modifications to the vehicle, except for the limited modifications outlined in A.ii through A.xi.
- ii. Sound deadening materials may be used throughout the vehicle. Their application may not alter the placement of the headliner, carpet, or any panel in the passenger area of the vehicle.
- iii. Spray foam, resins, duct tape, or any similar materials used to increase sound pressure score may only be used in the vehicle’s ICA.
- iv. OEM headliner or functional equivalent must be installed throughout the vehicle and may be reupholstered, but not built with fiberglass or any other hard rigid material. Headliners must be able to be removed, if necessary, to verify sound deadening on the roof of the vehicle. Equipment may not be mounted on the headliner.
- v. OEM Door panels may only be modified and/or rebuilt to accommodate front stage speakers. Modifications and/or rebuilds are limited to the immediate area required for mounting of said speakers and must be finished and/or upholstered. Raw metal, wood, or fiberglass build-outs commonly used to increase sound pressure level are prohibited.
- vi. Except for the vehicle’s ICA OEM floor covering or functional equivalent must be installed throughout the vehicle and may not be built with fiberglass or any other hard rigid material. Floor Covering must be able to be removed, if necessary, to verify sound deadening on the floor of the vehicle.
- vii. Center consoles must remain as OEM and may not be removed, rebuilt, or replaced.
- viii. Seats and seat belts located within the ICA may be removed.
- ix. Headrests may be placed in any factory position, may be turned backwards, or may be removed.
- x. Modifications to the vehicle’s ICA are limited to Non-Permanent Modifications.
- xi. Any brackets, backseats, and/or non-structural supports within the ICA that can be unbolted or unscrewed may be removed, provided they can be reinstalled using factory fasteners and do not violate any other rules in section E.
- xii. Any trim panel/plastic, or portion of a panel/plastic, within the ICA may be removed; unbolted, unscrewed, or cut out.
- xiii. See General rules for anything that may not be covered in this section if you have questions or concerns please contact your local judge.

B. Owner Requirements per the General Rules

C. Judging Criteria per the General Rules

D. Sensor Placement per the General Rules

E. System Requirements

- i. The ICA will be defined as behind the B-Pillar and lower than 12” from the headliner. As such; Rear Seats do not have to return to an upright position or may be removed entirely and the 26” Rule does not apply.
- ii. The ICA for Trucks is defined as behind the B-Pillar and lower than 12” from the headliner. Trucks may use their bed as part of the ICA for mounting of amplifiers and/or batteries, so long as the amplifiers/batteries and/or bed is covered and protected.
- iii. Enclosure, Subwoofer(s), Subwoofer Amplifier(s), System Batteries, and/or Capacitors must be located within the vehicle’s ICA. Any other equipment mounted in areas other than the ICA must be installed in such a way as to not interfere with the normal operation, function, seating, seating capacity, or leg room of the vehicle.
- iv. An exception stands for a standard cab pick-up truck and their ICA is behind the driver’s seat in the most forward position. If aftermarket seats or factory replacement seats are added, and the factory brackets aren’t used, then the brackets to hold said seats down must be made to line up with the rear factory bolts as to not increase the area behind said seats.
- v. Head units may be held outside the vehicle and podiums are permitted.



Modified Division Rules

Modified – Intended for vehicles that have modifications behind the B-pillars that are designed to maximize sound pressure level. This includes vehicles with woofer walls and pick up trucks with cut-through/blow-through installations. Vehicles are still capable of being daily drivers M1-M3. Floor cuts limited to M4 and M5.

5 Modified “Pressure Classes”

M1 0 - 1500	M3 3001 - 6000	M5 10001+
M2 1501 - 3000	M4 6001 - 10000	

A. Vehicle Requirements

- i. No modifications in front of the B-pillars, except for the limited modifications outlined below.
- ii. Sound deadening materials are allowed to be used in front the B-pillars, their application may not alter the placement of the headliner, carpet, or any panel in front of the B-pillar.
- iii. For M1, M2, and M3: spray foam, resins, duct tape, or any similar materials used to increase sound pressure score are prohibited in front of the B-pillars.
- iv. For M4 and M5: spray foam, resins, duct tape, or any similar materials used to increase sound pressure score are permitted throughout the vehicle as long as they do not violate any other rules.
- v. For M1, M2, and M3: OEM headliner or functional equivalent must be in the vehicle in front of the B-pillars and may be reupholstered, but not built with fiberglass or any other hard rigid material. Headliners must be able to be removed, if necessary, to verify sound deadening on the roof of the vehicle.
- vi. For M4 and M5: OEM headliner may be removed or replaced, but may be no thicker than 3/4” in all locations. Measurements will be taken from the bottom of the roof braces.
- vii. For M1, M2, and M3: OEM door panels may only be modified and/or rebuilt to accommodate front stage speakers. Modifications and/or rebuilds are limited to the area required for mounting of said speakers and must be finished and/or upholstered. Raw metal, wood, or fiberglass build-outs commonly used to increase sound pressure level are prohibited.
- viii. For M4 and M5: door panels may be modified, rebuilt, removed, or built out with a maximum depth of 3/4”. Build-out will be measured from the original door skin forward. Modifications, in addition to the 3/4” build-out to accommodate mounting of front stage speakers are permitted, however, are limited to the area required for mounting said speaker(s).
- ix. For M4 and M5, Double Layered Windshields, Plexi-Glass Windshields (max 1” thick), and/or a single internal roof to floor brace (i.e. Stripper Pole) will be allowed. Sunroof can be removed and sealed with a metal plate in M4/M5.
- x. OEM floor covering or functional equivalent must be installed in front of the B-Pillar and may not built with fiberglass or any other hard rigid material. Floor Covering must be able to be removed, if necessary, to verify sound deadening on the floor of the vehicle.
- xi. For M4 and M5: the vehicle must have either an automotive front driver’s and/or passenger’s seats installed and properly bolted in to provide a location for the sensor placement. Seat belts may be relocated or removed. However, improper relocation or removal will result in the vehicle not being street legal, and therefore, not eligible for competition in the “Park & Pound” format.
- xii. Headrests may be placed in any factory position, may be turned backwards, or may be removed.
- xiii. Center consoles may be removed or rebuilt as long as the design does not intentionally redirect pressure which may increase sound pressure score.
- xiv. For M1, M2, and M3: modifications behind the B-pillars are limited to modifications within the original 4 planes of the vehicle (roof, floor, and side panels). No portion of the outer skin including fender wells and floorboards may be cut and/or removed. Any bracket, panel, seat, and/or support behind the B-pillars may be removed provided it is located within the original skin (cutting of metal is permitted within this area).
- xv. For M4 and M5: modifications behind the B- pillars within the original skin of the vehicle are unlimited. The cutting of metal is permitted within the original skin of the vehicle (inside the side body panels and under the original factory roof height can be cut out or removed to create extra space for equipment and special installations. Floor cuts are permitted.). This also allows for full or partial pick up truck walk through and blow through style applications.
- xvi. Modified classes 1 through 5 will have the ability to use bed liner or similar materials on the outside of the vehicles as paint or structure. Modified 1 - 5 classes may use epoxy paint, resin materials, and "enhanced paint" on the exterior of the vehicle.



xvii. See General rules for anything that may not be covered in this section if you have questions or concerns please contact your local judge.

B. Owner Requirements per the General Rules

C. Judging Criteria per the General Rules

D. Sensor Placement per the General Rules

E. System Requirements

- i. For M1, M2, and M3: Enclosure, Subwoofer(s), Subwoofer Amplifier(s), and Spare Battery(ies) cannot extend past any part of the front door jambs, except in a standard cab pick-up truck where they must fit with the driver's seat in the most forward position.
- ii. For M4 and M5: Enclosure, Subwoofer(s), Subwoofer Amplifier(s), and Spare Battery(ies) cannot extend more than one inch (1") past any part of the front door jambs, except in a standard cab pick-up truck where it must fit with the driver's seat in the most forward position.
- iii. Standard Cab Pick-ups: If aftermarket seats or factory replacement seats are added, and the factory brackets aren't used, then the brackets to hold said seats down must be made to line up with the rear factory bolts as to not increase the area behind said seats.
- iv. Head units may be held outside the vehicle and podiums are permitted.
- v. For M4 and M5 batteries may also be mounted under the vehicle in a battery box. Battery box may be a separate unit mounted under the vehicle or be installed through a hole cut in the floor. Battery box must provide protection from the outside and may not hinder the vehicle's ability to be driven safely.



X Division Rules

X – Intended as an open division with sensor placement under the dash, in either driver or passenger kick panel location.. These include two classes primarily for exhibition. X classes do not count towards SPL Best of Show or BOBOS awards.

2 X Classes

XC 0 - 4000

Radical X 4001+

A. Vehicle Requirements

- i. Vehicle must be capable of driving through the judging lanes safely.
- ii. Vehicle and system must be able to be operated safely and pose no risk to the judges or spectators.

B. Owner Requirements per the General Rules

C. Judging Criteria

- i. This is not a fair class, it is an open class, available to any competitor who wants to make an official exhibition run.
- ii. This Open Class is strictly about finding the highest score on the sensor from a car audio source.

D. Sensor Placement

- i. Competitor specifies either driver or passenger kick panel location under the dashboard. However, for the protection of the sensor, it must be facing forward. The sensor cannot be in a port, cannot be within 12” of a subwoofer or port, and must be attached to a stand or the vehicle by its suction cups.
- ii. Alternate location as in General Rules will be allowed (20” from windshield on sensor stand), and will be required for BOBOS competitors that do not fall into other classes as specified.

E. System Requirements

- i. Must be an audio system (amplifier(s) and woofers) that create the sound pressure level being scored.



Park & Pound Format

Park & Pound – Intended to be a format for all daily driven vehicles to test their ability to impress listeners as they drive by on the street, measuring sound pressure level outside the vehicle.

5 Park & Pound “Pressure Classes”

DB1 0 - 1500

DB3 3001 - 6000

DB5 10001+

DB2 1501 - 3000

DB4 6001 - 10000

A. Vehicle Requirements

- i. No one may be in the vehicle during pass. System must be operated by remote, external head unit, or podium. Prior to the start of the test or immediately following the test, a competitor may lean into vehicle to start or stop the test (with hearing protection on). Competitor must exit vehicle completely and move away from the vehicle to signal that Park & Pound test to begin.
- ii. Vehicle is to be driven into the lanes, perpendicular to the meter, and parked.
- iii. Once parked & meters set, the Competitor has two (2) minutes to get out of the vehicle, shut the door, set-up, and begin their official pass.
- iv. As long as they are properly wearing hearing protection and their head remains outside the vehicle, the Competitor may lean in the window to adjust volume, change, or pause the track but may not manipulate any other equipment.

B. Owner Requirements per the General Rules

C. Judging Criteria

- i. Windows & doors may be open. Windows in front of B-pillars may be removed. Hood must be closed. T-tops, sunroofs, or moonroofs may be open or removed (if designed to be removed without tools), convertible tops may be down. Soft top vehicles will be considered convertibles.
- ii. Competitor must play musical track(s), (i.e. songs) in which the bass notes vary and are not sustained for longer than 5 seconds each. Thus, no tones, sweeps, and/or bass only tracks. The TermLab “spectrum analyzer” will be displayed and used to determine that bass notes are not sustained.
- iii. Competitors must use commercially available music tracks. Effective in 2017, Burnt CD’s, iPods, MP3 players, etc. will be allowed at all 1X, 2X, and 3X contests as well as MECA World Finals.
- iv. Competitors may only use one source unit during pass. The Mids and Highs being played must be from the same source as the bass from the subwoofers.
- v. Mids and highs must be able to be heard outside the vehicle along with the bass.
- vi. Lyrics in song may not include any foul or offensive language.
- vii. No bracing teams allowed.
- viii. Peak frequency must not exceed 100hz, as verified by TermLab metering system.

D. Sensor Placement

- i. In addition to the General Rules, sensor will be placed 72” (6’) from the outside edge of a marker on the ground (usually a cone), on passenger side of the vehicle; 54” (4.5’) off the ground on MECA approved stand.
- ii. Competitors who hit the marker either entering or exiting the judging lane will have their pass disqualified. In the event of a minor hit (i.e. running over the base of a cone) the Competitor may be granted a retry at the Judge’s discretion.

E. System Requirements

- i. For DB1, DB2, DB3, and DB4 there are no modifications to the front of the vehicle with the intent to increase sound pressure level score, except for the modifications outlined in E.ii. through E.ix. As an unlimited class, DB5 will follow sections A&D of the “Radical X” Rules and allow “Radical X” vehicles which still meet sections A and B of the “Park & Pound” Rules to compete in “Park & Pound”.
- ii. Enclosure or anything attached to the enclosure cannot extend more than one inch (1”) past any part of the front door jambs, except in a standard cab truck where it must fit with the driver’s seat in the most forward position.



- iii. Door panels may be modified, rebuilt, removed, or built out (3/4" maximum).
- iv. Headliner may be removed or replaced, but may be no thicker than 3/4".
- v. Sound deadening materials are allowed to be used in front the B-pillars, their application may not alter the placement of the headliner, carpet, or any panel in front of the B-pillar.
- vi. Vehicle must have automotive seats in the forward only position. Both front seats must be properly mounted in the vehicle. Seats may be replaced, providing they are still a DOT approved automotive seat; no homemade, marine, or other types allowed.
- vii. Standard Cab Pick-ups: If aftermarket seats or factory replacement seats are added, and the factory brackets aren't used, then the brackets to hold said seats down must be made to line up with the rear factory bolts as to not increase the area behind said seats.
- viii. Center consoles may be removed or rebuilt as long as the design does not intentionally redirect pressure, which may increase SPL score.
- ix. Batteries must be securely mounted, and must be located either under the hood, in the factory location, and/or be mounted anywhere behind the B-pillars, within the original skin of the vehicle, or be mounted under the vehicle in a battery box. Battery box may be a separate unit mounted under the vehicle or be installed through a hole cut in the floor. Battery box must provide protection from the outside and may not hinder the vehicle's ability to be driven safely.



“SPLite” Format Rules

“**SPLite**” – Intended as an alternative Sound Pressure contest with limited classes and awards. These contests are always 1X Single Point events, and points will count toward State and National Points Champion program and qualification for the World Finals Soundfest. Any meter may be used for testing at these contests.

2 Formats: SPLite and Park & Pound

Sound Pressure Format - 10 “Pressure Classes” - 2 Trunk, 3 Street, 2 Modified Street, 3 Modified

Park & Pound Format - 3 “Pressure Classes”

11 Phat Medals (optional, or can be trophies)

Extra classes may be added, if desired by host(s) and sponsor(s), i.e. Pick-up Truck Class, X, etc.

When special classes are added that are not part of the MECA program, competitors’ scores will not be posted and no club points are earned

Division/Pressure Class

<i>Trunk</i>	<i>Street</i>	<i>Modified Street</i>	<i>Modified</i>	<i>Park & Pound</i>
T1 0 - 2500	S1 0 - 750	MS1 0 - 5000	M1 0 - 1500	DB1 0 - 1500
T2 2501+	S2 751 - 2000	MS2 5001+	M2 1501 - 3000	DB2 1501 - 3000
	S3 2001+		M3 3001+	DB3 3001+

Phat Awards

Phat Car

Phat Truck

Phat Install

Most Improved

Phat 10

Phat 12

Phat 15

Phat 18

Phat 21

Phat I.C.E.

Best of Show

- Some unique situations may arise that disqualify vehicle, system, and/or competitor from “SPLite” Format, determined by MECA Judges.

Intentional cheating and/or manipulation of the rules will result in suspension from MECA competitions and events.

Alcohol, drugs, weapons, obscene language, and violence of any nature prohibited at MECA events.

Hearing protection required and provided at all events.



SPL Phat Awards Rules

Sound Pressure League **Phat Awards** are intended to recognize special vehicles and systems in the contest. They are picked by the Judge Team and the following criteria are used:

SPL Phat Car - The best car involved in SPL contests at the event. Judges look for best paint, aftermarket accessories including wheels and tires, audio system integrated into the vehicle, audio system performance, and overall cleanliness and appearance. This would be the car that most people would choose from all the others, if they were able to own it themselves.

SPL Phat Truck - The best truck involved in SPL contests at the event. This would include all SUV's, vans, pickups, Jeeps, Hummers, and minivans. Judges look for best paint, aftermarket accessories including wheels and tires, audio system integrated into the vehicle, audio system performance, and overall cleanliness and appearance. This would be the truck that most people would choose from all the others, if they were able to own it themselves.

SPL Phat Install - The best audio system installation in a vehicle involved in SPL contests at the event. Judges look for integration into the vehicle, cosmetic appearance, degree of difficulty, and performance of the system as criteria for selection. This would be the flashiest, most remarkable installation at the event.

SPL Most Improved - The Competitor that has raised their Sound Pressure score the most since their last MECA contest is the "SPL Most Improved".

Phat 10 - The loudest single 10" woofer system in the contest.

Phat 12 - The loudest single 12" woofer system in the contest.

Phat 15 - The loudest single 15" (or 13.5") woofer system in the contest.

Phat 18 - The loudest single 18" woofer system in the contest.

Phat 21 - The loudest single 21" woofer system in the contest.

MECA Phat ICE Award - All vehicles are eligible for this award.

The best in-car entertainment system involved in any contests at the event. This includes monitor screen(s), audio system, game system(s), and all equipment relating to a sophisticated entertainment experience. Judges look for integration into the vehicle, cosmetic appearance, degree of difficulty, and performance of the system as criteria for selection. This would be the flashiest, most remarkable entertainment system at the event.



2 Day Event Rules

1. All competitors must be in the lanes at the assigned times, or when the class is called. 5 minutes will be allowed for vehicle to pull into lanes.
2. Qualifying passes on Day #1 will determine who qualifies and competes on Day #2.
3. At World Finals Soundfest, run order for the 1st qualifying pass will be determined by overall National Points Standings where the National Points Champion in that class has the honor of running last.
4. At all other 2 Day Events where classes are called in order, run order for the 1st qualifying pass will be determined by length of membership in the club where new competitors run before veteran competitors.
5. 2nd passes will be only be offered on Day #1 to competitors who are not in the Top 3 (Qualified) after the 1st pass.
6. When classes are called in order, 2nd passes for each class will be conducted immediately after the 1st passes for each class, not after all 1st passes.
7. Run order for 2nd passes will be done starting with the lowest overall 1st pass score or 1st round DQ.
8. Any competitor who qualified in the 1st round and is bumped out by another competitor's 2nd pass will be given a 2nd pass.
9. Any competitor who gets bumped after their 2nd pass will not be offered an additional pass (i.e. 3rd passes will not be offered).
10. Ties after 2nd passes on Day #1 will be settled by a tie-breaker between the two competitors. Scores posted in a tie-breaker are used to determine who is awarded the place for which the tie occurred and cannot be used to increase the competitor's overall placement.
11. The overall Top Three (3) scores in each class on Day #1 from the 1st and 2nd qualifying passes will advance to the Finals on Day #2.
12. 4th and 5th places will be determined by the overall scores on Day #1.
13. 1st, 2nd, and 3rd places will be determined on Day #2 and will be based only on the scores posted on Day #2.
14. Run order on Day #2 will be determined by scores posted in the 1st round of the qualifying passes on Day #1 where the highest 1st pass score has the honor of running last on Day #2.
15. Based on #13, any competitor who qualified for Day #1 in their 2nd pass will automatically run first on Day #2, regardless of overall score.
16. Ties on Day #2 will be settled by a tie-breaker between the 2 competitors. Scores posted in a tie-breaker are used to determine who is awarded the place for which the tie occurred and cannot be used to increase the competitor's score.



Boom & Zoom Rules

I. Purpose and Intent

MECA, Inc. is a sanctioning body for competitors involved with car audio sports. MECA, Inc. is a membership association formed to encourage, support, and reward competitors in car audio sports. These rules are intended to outline the specifics of competition in Boom & Zoom contests. It is the responsibility of each competitor to review the rules, comply with the rules, and honor the rules in cooperation with event officials. MECA, Inc. strives to present each competitor with a fair and unbiased forum in which competition is regarded as worthwhile and enjoyable.

II. Objectives

The contest determines the loudest SPL (Boom) and fastest (Zoom) vehicles tested by professional equipment. The judges, working with criteria established here, will objectively evaluate each competitor's vehicle and assign it to the correct competition class. Four classes are based on vehicle performance potential. The loudest vehicles in each competition class will be ranked according to sound pressure level (dB = Boom) indicated by the TermLab decibel meter. The fastest vehicles in each competition class will be ranked according to reaction time plus elapsed time $[(RT + ET)10 = \text{Zoom}]$ indicated by track timing equipment. Each class is examined carefully to produce overall ranking in the Boom & Zoom contest, and the top three in each class will receive awards. The fastest vehicle in each class will receive an award. The loudest vehicle in each class will receive an award.

III. Description of Classes

- BZ1 - 4 or less cylinder motor naturally aspirated (No power adders)
- BZ2 - 4 or less cylinder motor using forced induction or 5/6 cylinder motor naturally aspirated
- BZ3 - 5/6 cylinder motor using forced induction or 8 cylinder motor naturally aspirated
- BZ4 - 8 cylinder motor using forced induction or more than 8 cylinders, any configuration

IV. Classification Guidelines

- A. For purposes of the classifications above, a vehicle using a rotary engine shall be classed as follows: single rotary - 6 cylinder, twin rotary = 8 cylinder (e.g. 1993+ Mazda RX-7 Turbo would be in BZ4 class).
- B. "Naturally Aspirated" shall be defined as using a motor with no external power adders such as Turbochargers, Superchargers, or Nitrous Oxide Injection. Some special circumstances may require a naturally aspirated vehicle to be classed in a Forced Induction class. All decisions made in this regard by the Head Judge are final.
- C. "Forced Induction" shall be defined as using a motor which has external power adders such as Turbochargers, Superchargers, or Nitrous Oxide Injection. A vehicle that uses Nitro methane, or any fuel other than gasoline or DOT approved fuel, will be classed in a Forced Induction class. All decisions made in this regard by the Head Judge are final.
- D. Vehicles must pass the technical inspection required by each specific racetrack. All rules of the host track must be followed at all times. Decisions made by the track management are final.
- E. To be eligible to compete in Boom & Zoom the vehicle must contain an audio system powered by the charging system of the vehicle. The audio system must be capable of producing an SPL score of more than 100 dB (the lower limit of test equipment).

Note: Any attempt to hide or conceal a form of forced induction will result in immediate disqualification and forfeiture of all results and fees.

V. Testing Procedure

- A. Vehicle must be operated by the registered contestant. Hearing protection must be used by competitor for SPL test.
- B. Competitor provides software or source for SPL test, i.e. CD, Cassette, MP3, AM/FM Radio, etc.
- C. Boom test performed in pre-stage area, or other assigned area of track.
- D. Sensor is placed in standard position: passenger side in seat, 26" in height, near the headrest.
- E. Once sensor is placed into position, judge gives start signal, and Boom test is taken for 15 seconds.
- F. Any combination of open door and/or windows on driver side and/or front passenger side may be used.
- G. Upon completion of Boom test, sensor is removed, door is closed, and vehicle moves into position for Zoom test.
- H. Competitor takes standard drag pass and brings timing slip to Judge.
- I. Judge completes Boom & Zoom score sheet using the SPL score and timing slip data to compute the SPLed score.

VI. Scoring

Rankings of competitors are established by determining the loudest SPL score measured in decibels (dB = Boom) and the fastest vehicle measured by elapsed time plus reaction time times a factor of 10 $[(RT + ET)10 = \text{Zoom}]$ to determine the SPLed score. The points from Zoom are subtracted from Boom points to determine the SPLed score. The competitors' SPLed scores are ranked from highest to lowest. The competitor with the highest SPLed score wins the class. Awards are given to the remaining competitors for 2nd and 3rd places, based on SPLed scores. Special awards are given in each class to the "Loudest" and also the "Fastest" competitors.

VII. Tie-breaker

When there is a tie in SPLed points, the Boom score (dB) will serve as the tie-breaker. If that doesn't break the tie, the speed in MPH will serve as that tie-breaker.



MECA Kids Format Rules

I. Purpose and Intent

“MECA Kids” is intended for MECA Members and their “MECA Kids” to share club activities and learn about club and sports competition interactions.

II. Description of Classes

Class	Description
MKSP	Ages 0-15: 1 Woofer and 2500 watts RMS and 1 - 80 Amp Fuse
MKX	For vehicles that do not meet the rules of MKSP, or are not operated by a MECA Kid
MKDB	All “MECA Kids” with qualifying vehicles and systems, including MKX vehicles

III. Basic Rules

- A. The vehicle must be a commercially available electric toy. In other words: no custom built rides.
- B. The vehicle must be able to pull its own weight and maintain all the factory designed functions. In other words: it must drive, turn, etc.
- C. The vehicle must be operated from a 12-volt battery source that must also power the vehicle, except for vehicles that are of some other voltage nature; i.e. 6 volt vehicles. The 12-volt source must be mounted to the vehicle in a secure fashion and must remain within the confines of the vehicle.
- D. The source unit must be powered by the vehicle. The source unit must be operated by the child, but an adult may help the younger children.
- E. The vehicle must pass a basic safety inspection.
- F. Sensor placement will be in some type of floorboard area. Vehicles required to have some form of a plexiglass plate or surface that the suction cups on the TermLab sensor can attach. Mic placement should be **no closer than 4 inches from the port or woofer**. Also **sensor must face forward**.
- G. No body modifications will be made with the intent of increasing the sound pressure level score. Body modifications include; but not exclusively, fiberglass or adding panels that were not there originally; i.e. doors, roof, etc. Rhino liner, fiberglass or other sound deadening materials are restricted to the enclosure or other 12 volt items are not to be applied to the body directly.
- H. Source material can be musical track or tones for MK1 or MK2, music for MKDB. MP3 players, iPod's and other media storage players are acceptable.
- I. Children of MECA members will be given a free “MECA Kids” membership to the club.
- J. The entry fee will be \$5 and will include 1 pass for the Sound Pressure test or 1 pass for the “Park & Pound” test.
- K. The highest score wins, measured in dB by the TermLab meter. Tie-breaker tests will be given when necessary.
- L. If a parent is caught cheating in any way, the entry will be disqualified. This is intended to teach children about competition and fun, not how to cheat.
- M. Hearing protection for children is required at all times during competition.

IV. System Requirements

MKSP

- A. The system is restricted to 1 woofer and 1 2500 watt or less RMS amplifier. 1 80 amp fuse is required.
- B. Due to space restrictions on certain electric toys, seats may be removed. Due to the weight and size of the children of this class, the vehicle doesn't have to be driven into the lanes, but the vehicle must drive by remote or outside control; i.e. push button throttle.
- C. All aspects of the system must remain within the confines of the vehicle, except the source unit. No build-outs or adding extensions on the body with the intent to increase SPL. The confines of the vehicle will be defined as all aspects of the vehicle. Width is defined from tire to the opposite tire, and length is defined from front bumper to rear bumper.



- D. The enclosure can be no taller than 20” from the tallest portion of the body. Anything mounted to the enclosure is considered part of the enclosure.
- E. All parts of the enclosure must be at least 8” from the steering wheel of the vehicle. No modifications to the steering wheel will be allowed in order to place the enclosure closer to the front end.
- F. The vehicle must have some form of full range speaker in order to verify that musical tracks are being played.

V. MKX

- A. Vehicles that do not qualify in MKSP.
- B. Does not have to be operated by a MECA Kid.

VI. MKDB

- A. All “MECA Kids” will be eligible to compete in one division known as MKDB unless the show promoter wishes to divide the class, in which case the classes will mirror standard “MECA Kids” Sound Pressure classes.
- B. All rules will mirror MECA’s” Park & Pound” rules, except sensor placement. Sensor placement will be 3’ from the vehicles right side, with standardized height that will be 26” (a “Reality SPL” or headrest sensor stand) from the ground.

Some unique situations may arise that disqualify the vehicle, system, and/or competitor from the “MECA Kids” format. These situations are determined by the MECA Judges.

Microphone & Sensor Stands

SQL "RTA Freq Out" Stand and Sound Pressure League Sensor Stand

5/8" thick wood for base and arm. Recommended base measurements 12" X 8.25". FIG 1

Arm at 10 degree angle, 26.75" long for the SPL Sensor, and 22.75" long for the RTA Mic. Some variation is allowed as long as the sensor height is 26".

Material to secure the sensor: One piece of wood or plexiglass, at right angle, has been used with Velcro to hold the sensor, which can be removed and replaced easily. FIG 2

The sensor hole on the sensor, and microphone tip is 26" high, measured from the seat's surface (bottom of the sensor stand). FIG 3 and FIG 4

Standard microphone holder accessory is secured to the top for RTA. FIG 4

Microphone tip and sensor hole always face toward the front of the vehicle. FIG 1 and FIG 5

SPL sensor placed 20" from windshield on horizontal plane FIG 7

Sand bags and weights may be used to secure SPL sensor stand at 20" from windshield FIG 6



FIG 1



FIG 2

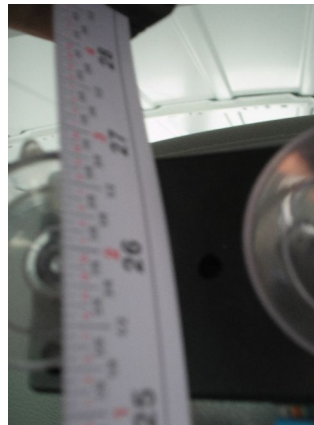


FIG 3



FIG 4



FIG 5

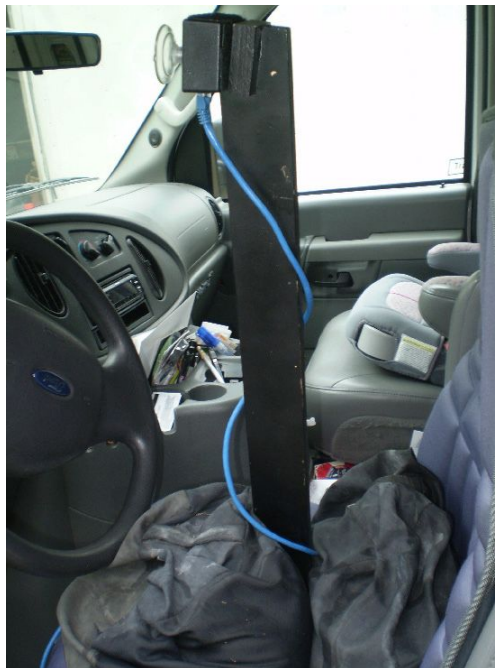


FIG 6



FIG 7



Judge's Guidelines

MECA's main goals are FAIR & FUN events for Competitors involved on the event day. These guidelines are intended to ensure that our Competitors are treated ethically and respectfully. When the events are fair the Competitors can have more fun, knowing that the Judge Team is following the Rule Book and treating everyone the same, in accordance with the Rules. Judges are at the event to evaluate and help the Competitors and to make sure that safety issues are handled properly. A copy of the Rulebook should be at every MECA event.

Judge Definitions for Sound Pressure League and Sound Quality League

Meter Operator - Training on operating the computer or meter is required. Anyone may do it, supervised by the Head Judge.

Sensor/Mic Stand Placer - Responsible for most fair and proper stand and sensor placement under direction of Head Judge.

1X - No formal Judge Training is required. This is for Retail Members, Hosts, and Promoters who judge their events.

2X - Judge Training and experience required.

3X - Judge Training and experience required.

Head Judge - SPL Head Judge is responsible for all SPL contests. SQL Head Judge is responsible for all SQL contests.

Event Director - Responsible for all contests and MECA related activities at the event.

Event Co-ordinator - Sets up events and oversees all aspects of scheduling and promotion in a specified area or state, working closely with the Commissioner. Responsible for all contests and MECA related activities at the event.

Guidelines

1. All MECA contest officials, Judges and assistants, are to conduct themselves in a professional, objective and helpful manner throughout the show. Competitors are to be treated cordially, but minimal interaction in the lanes is necessary to maintain objectivity and fairness to all. When a problem occurs and a situation becomes uncomfortable, even to the point of confrontation, the Head Judge is called in to mediate and diffuse the situation.
2. Judges will make decisions fairly, with no regard for personality, system budget, brand name of equipment, vehicle, place of business, installer, or personal biases.
3. When in a compromised position, the Judge will inform the Head Judge. A Judge will not judge family, friends, Team members, customers, or their own vehicle when another more independent Judge is available.
4. All Judges are required to print their name or initials on all score sheets for every Competitor at every event.
5. Judges do not wear apparel (shirts, hats, etc.) that advertises any brand names. MECA Judge shirts & hats are preferred.
6. Judges do not eat, drink, or smoke in Competitors' vehicles.
7. Judges will use all due care and consideration for the Competitors' vehicles, equipment, and property. For example, Judges must remove key chains before the event begins to prevent scratching a vehicle's interior or exterior.
8. Judges use all due care when placing or removing the sensor/mic stand.
9. Judges do not drive, or move, a Competitor's vehicle without permission.
10. Judges stress safety at all times, especially when driving through the lanes and event area.
11. Judges do not make any adjustments to the Competitors' equipment. Judges may assist Competitors with adjustments during Cliniques only, making recommendations but not touching the equipment.
12. Judges will have Competitors move wires, or property, when necessary. When a loose wire is noticed, the Competitor will be informed as soon as possible.
13. When a verification or rule is questioned, the Head Judge should be involved for resolution.
14. In case of a protest, it will be handled by the Head Judge, who will fill out the Protest Form and direct the investigation.
15. Judges will not promote or solicit business or side-jobs during the event. If asked, the proper response would be to pass on a business card and ask to be contacted after the event.
16. MECA's leagues, formats, contests, and events have unique names, i.e. Sound Pressure League, Sound Quality League, Boom & Zoom, Ride the Light, MECA Kids, Park & Pound, Modex, Radical X, RTA Freq Out, etc. MECA officials should only use MECA names for club contests. The use of trademarked or copywritten intellectual property names from other organizations at our club contests is not permitted.
17. SQL Judges may compete in SPL contests, and SPL Judges may compete in SQL contests, but should never be involved in verification, testing, or scoring their own vehicles.
18. Violations and concerns should be reported to the Head Judge or Event Director at the show. If necessary, please inform the Commissioner via mecacaraudio@comcast.net or 615-851-7428.



	8	10	12	13.5	15	18
1	50.2655	78.53982	113.0973	143.1388	176.7146	254.469
2	100.531	157.0796	226.1947	286.2776	353.4292	508.938
3	150.796	235.6194	339.292	429.4164	530.1438	763.407
4	201.062	314.1593	452.3893	572.5553	706.8583	1017.876
5	251.327	392.6991	565.4867	715.6941	883.5729	1272.345
6	301.593	471.2389	678.584	858.8329	1060.288	1526.814
7	351.858	549.7787	791.6813	1001.972	1237.002	1781.283
8	402.124	628.3185	904.7787	1145.111	1413.717	2035.752
9	452.389	706.8583	1017.876	1288.249	1590.431	2290.221
10	502.655	785.3982	1130.973	1431.388	1767.146	2544.69
11	552.92	863.938	1244.071	1574.527	1943.86	2799.159
12	603.186	942.4778	1357.168	1717.666	2120.575	3053.628
13	653.451	1021.018	1470.265	1860.805	2297.29	3308.097
14	703.717	1099.557	1583.363	2003.943	2474.004	3562.566
15	753.982	1178.097	1696.46	2147.082	2650.719	3817.035
16	804.248	1256.637	1809.557	2290.221	2827.433	4071.504
17	854.513	1335.177	1922.655	2433.36	3004.148	4325.973
18	904.779	1413.717	2035.752	2576.499	3180.863	4580.442
19	955.044	1492.257	2148.849	2719.637	3357.577	4834.911
20	1005.31	1570.796	2261.947	2862.776	3534.292	5089.38

round
subwoofers

	8	10	12	15	18
1	64	100	144	225	324
2	128	200	288	450	648
3	192	300	432	675	972
4	256	400	576	900	1296
5	320	500	720	1125	1620
6	384	600	864	1350	1944
7	448	700	1008	1575	2268
8	512	800	1152	1800	2592
9	576	900	1296	2025	2916
10	640	1000	1440	2250	3240
11	704	1100	1584	2475	3564
12	768	1200	1728	2700	3888
13	832	1300	1872	2925	4212
14	896	1400	2016	3150	4536
15	960	1500	2160	3375	4860
16	1024	1600	2304	3600	5184
17	1088	1700	2448	3825	5508
18	1152	1800	2592	4050	5832
19	1216	1900	2736	4275	6156
20	1280	2000	2880	4500	6480

square
subwoofers

TERM-LAB[®]

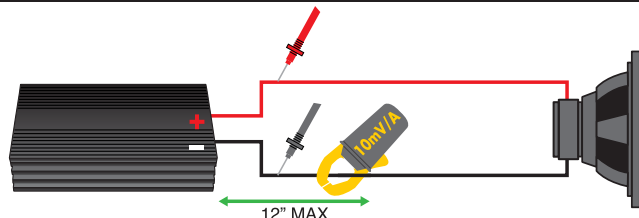
MAGNUM

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POWER PROBE MEASUREMENT RECOMMENDATIONS



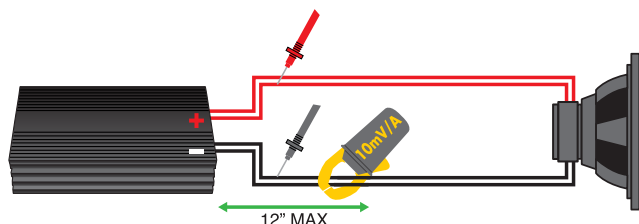
SINGLE CHANNEL SINGLE CONDUCTORS



- The probes and clamp must be located within 12 inches of the speaker terminals on the amplifier.
- You can clamp **either** the positive or negative conductor.



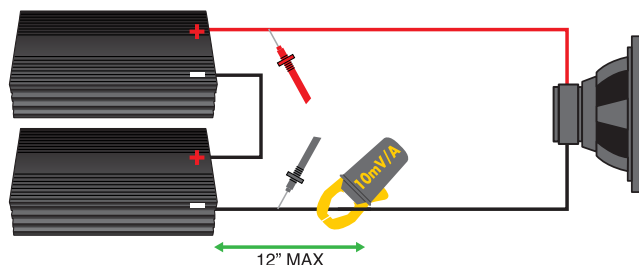
SINGLE CHANNEL MULTIPLE CONDUCTORS IN PARALLEL



- The probes and clamp must be located within 12 inches of the speaker terminals on the amplifier.
- The clamp must enclose **BOTH** conductors of the same polarity. (You can clamp either both positive or both negative conductors.)



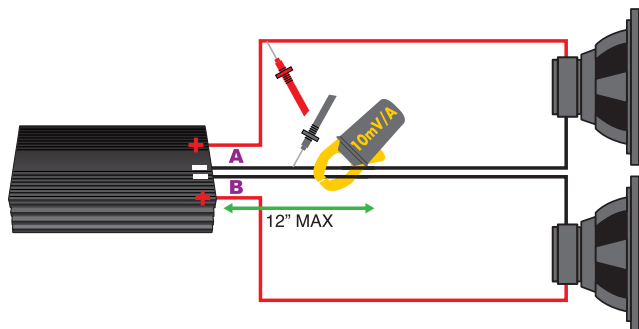
SINGLE CHANNEL, SINGLE CONDUCTORS, STRAPPED AMPS



- The probes and clamp must be located within 12 inches of the speaker terminals on the amplifier.
- You can clamp **either** the positive or negative conductor.



DUAL CHANNEL SINGLE CONDUCTORS



CAUTION: It is assumed that the output level and load impedance for BOTH channels are identical. Care should be taken to ensure the competitor is not adjusting the output levels of the amplifier in such a way as to circumvent the power measurement.

- The probes and clamp must be located within 12 inches of the speaker terminals on the amplifier.
- The clamp must enclose **BOTH** conductors of the same polarity. (You can clamp either both positive or both negative conductors.)
- The voltage probes must be connected to the SAME output channel (A or B) on the amplifier.
- An alternate method is to enclose a single conductor with the clamp and then attach the voltage probe to the same channel. This will cause the meter to read one half of the total power. You may then set the "Power Multiplier" in the Term-LAB software to "2X" to obtain the correct reading.