



This section of the USACI rulebook was written by the USACI Rules & Ethics committee in order to retain the basic ideas that have always made auto sound competition fun and fair. Through our National SQ Director, our Technical Director, an industry panel of experts, and input from our competitors we have tried to make the contests fun, fair, and challenging. This rule Book and any subsequent refinements are the result of a lot of thought and hard work. It is our hope that these rules will be received as an example of the organization's continuing efforts to promote the auto sound industry.

The rules set forth in this section of the rule Book shall be used by the USACI official(s) and/or judging staff at all USACI Sanctioned events. It is the responsibility of event officials and staff to adhere to these rules to the best of their ability. In consideration of that, each competitor should read this manual and have a thorough understanding of its contents when designing or improving a competition mobile audio system. Ultimately, it is the competitor's responsibility to know and adhere to the rules contained herein.

USACI reserves the right to make written amendments to this rule Book without prior written notification to its members. USACI will however, make every effort to notify active members via the Internet and/or by distributing any written changes during the registration process of a sanctioned USACI contest. All competitors and enthusiasts are encouraged to visit our web site at www.usaci.org for rules updates, event schedules, and event results.

© **Copyright 1986 - 2018** United States Autosound Competition International, Inc. All rights reserved. No part of this publication may be reproduced, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of United States Autosound Competition International, Inc.

Overview

The intent of car audio competition is to judge the ability of a permanently installed audio system in a vehicle to accurately reproduce musical reference material. The intent of the following classifications are to allow closely matched competitors and vehicles to compete against each other. Any competitor who competes in USACI will be required to compete in the equivalent or higher classification or Division as they are competing in at other legitimate sanctioning bodies. The term Competitor normally applies to the vehicle's owner, an employee of its owner, or an immediate family member thereof. The competitor shall be responsible for his or her vehicle and audio system and any damage resulting from their use or misuse.

The vehicle classification criteria are based on the Intro class and exclusions are included as the competitor advances to higher classes. It is up to the competitor to enter themselves in the correct class. A competitor reclassified by a head judge or USACi staff will be forced to compete in the class assigned for the remainder of the competition year and will require an appeal to the Rules and Ethics committee to change classes for the following year. Additionally, competitors will be required to compete in the class/division they qualified for World Finals unless WRITTEN authorization allowing another Division is presented while the competitor is registering for the event. Once the competitor receives and accepts his or her score sheet, that is the class that competitor will compete in at that event. The Head Judge of the event is the ONLY individual that can reclass a competitor at an event and reclassification by the head judge is final for that event.

The competitor can request a review of his or her classification by the USACi Rules and Ethics Committee or by sending an email to the National SQ Director at usacirules@gmail.com.

Note: USACi reserves the right to amend or change this rule book at any time for any reason. A ruling "in the field" will be made by a head judge and will stand until such time as a review by the Rules and Ethics committee can be completed. Any modification not specifically addressed in these classifications will be considered prohibited. Competitors wishing to compete at an event with an unsanctioned modification may be forced to compete in the Expert 1SQ+ Class until such time as USACi Rules and Ethics can make a determination on that modification and an exclusion or addition can be added to the rule book in a specific class. Rules, clarifications and classifications resulting in electronic messages and/or conversations with USACi staff not included in the most current rule book will be considered prohibited and will result in the competitor being allowed to compete in the Expert 1SQ+ class only. It is the responsibility of the competitor to read and understand these classifications and rules and follow them.

USACI GENERAL RULES

Event Registration

Event registration will generally begin approximately one hour prior to the stated beginning time of the contest. After the contest has begun, the event director, at his or her discretion may accept late registrations and opt to add a surcharge to the stated event registration fee for late registrants if he or she so desires. Each vehicle can be entered and judged in only one SQ Division but multiple *classes within that Division are allowed*, if desired, OR anyone is allowed to enter the Expert 1SQ+ in addition or by choice.

Event Judging Order

At USACI sanctioned events all vehicles will be judged for:

- 1.Verification**
- 2.Installation**
- 3.Sound Quality**
- 4.Sound Pressure Level Testing (SPL)**

For detailed descriptions of each judging station, please refer to the sections following General Rules. The head judge reserves the right to omit or reorganize any judging stations before the event due to extenuating circumstances.

Except for USACI Regional and World Finals events, there will be no specific order in which competitors must be judged. A registered competitor may enter the vehicle in the judging line whenever he or she wishes, so long as there are other vehicles being judged. Judging will end when all vehicles are judged. It is the competitor's responsibility to have the vehicle in the judging line before the judging ends. No score and no refund will be given to a competitor who fails to have their vehicle in the judging line before judging has ended. Any competitor who allows more than a 5-minute "gap" between cars at the first judging station will have 5 points deducted off their score sheet. This 5-point deduction will apply to all vehicles in line after this competitor. If a competitor allows a 10-minute gap there will be a 10-point deduction and so on, until a maximum of 20 points is deducted. This will be referred to the "5 minute rule".

USACI Finals will have in place judging. There will be a specific order in which competitors must be judged. Once a competitor is placed in the judging area, he or she will be expected to stay in the spot in which they were placed. No "line jockeying" will be permitted to try to gain a more favorable line or floor position. Competitors who fail to remain in their assigned position may be disqualified from the event and no refund will be given. Also, at World Finals there will be a specific "cut off" time when competitors are no

longer allowed to be placed in the judging line. If a competitor misses this cut off, that competitor will be disqualified from the event and no refund given. This cut off time will typically be advertised on the event flyer or at the event in or near the USACI registration booth.

Competitor Conduct

It is the competitor's responsibility to have fun. A competitor does not have the right to infringe on someone else's rights, especially not on those who have the burden of keeping an event running smoothly. While being in a bad mood or discourteous will generally reflect in the scores a competitor receives, being rude or disruptive in a Judge's opinion shall be just cause to disqualify the competitor. If the root cause of the disruption is suspected to be alcohol or any other controlled substance, the competitor will be banned from all USACI events for a minimum of one year.

A competitor will also be held responsible for any person(s) accompanying him or her to the event. The event sponsor also has every authority to press charges according to local law. Absolutely no weapons are allowed in the possession of any competitor or any person(s) with the competitor, or in the competitor's vehicle. If a competitor does not comply with this rule, this person shall be immediately disqualified. Also, the competitor shall be banned from ALL future USACI events if, in the Head Judge's opinion, there is even a casual threat involving a weapon made toward a competitor, judge, sponsor, or USACI official for any reason. No refunds will be given for being disqualified.

Judging Specifics

All vehicles must move under their own power during the event. This means that pushing, towing, etc., will not be allowed after the vehicle has entered the judging line under its own power. Emergency situations will be evaluated on the spot by the head judge.

An equipment or vehicle malfunction is the competitor's responsibility. A competitor shall be allowed a maximum of five minutes to correct or repair any malfunction. After five minutes have expired, the vehicle must be judged if possible or given a no score. Repeated repairs will not be allowed. Also, no repairs will be allowed after SPL testing has started. No refunds will be given.

A competitor is not allowed to enter the same vehicle in more than one **SQ Division** *except* the Expert 1SQ+ Class, IN ADDITION TO, or by choice of, if desired. Each vehicle will be judged only once, unless the head judge deems it necessary to re-judge the vehicle to preserve the integrity of the event. All Intro, Rookie, Amateur, and Pro Division vehicles must be licensed and "Street Legal" as per Federal Regulations. Any vehicle that does not comply will be judged in the Expert Division.

Qualifying for Finals / Finals Requirements

SQ is a open invite in the USA. Other countries may require you to obtain points, please check with your director in your country.

In Case of a Tie

In the rare event that two or more competitors in the same class receive the same total score, the following procedures will be conducted. In any "Q" class (sound only), the highest Definition and Clarity score, will be used to declare the winner. If a tie still exists, Staging will be used next, then followed by Imaging. Overall Sound Quality portion is to be used lastly as a tie breaker. In all other SQ+ classes, the highest Sound Quality score will be used followed next by the highest Installation score to determine the winner. If a tie still exists the highest SPL score will be used.

Appealing a Decision

If a competitor feels that he or she has been misjudged or wishes to seek clarification of a decision, only the competitor may appeal to the judge that judged that section. If the judge is unable to resolve the matter, the appeal will be turned over to the Head Judge (only the competitor may appeal to the Head Judge).

The Head Judge's decision shall be final. Appeals should be of a substantial nature and not based on score comparisons. Repeated or insubstantial appeals will only be considered disruptive to the event. Any competitor, or group representing the competitor, that is deemed unruly or disruptive to the event, may result in the competitor being penalized or asked to leave the event premises.

A competitor may write the USACI office to appeal a Head Judge's decision or a rule. If the appeal is justified, the USACI Board will send the appropriate reply to the competitor and any persons involved. Neither USACI nor an event sponsor assumes responsibility for any awards or prizes previously awarded to another competitor.

Disobeying the Rules

The rules and guidelines in this section of the rulebook apply to all USACI SQ competitors. If a competitor feels that another competitor or judge is disobeying or disregarding any of these rules and guidelines, they may bring the situation to the Judge or Head Judge's attention in a very polite manner. If the concerned competitor is discourteous, disruptive, or the complaint is without value, the competitor may be subject to penalization for being disruptive to the event. It is the competitor's responsibility to know the rules contained in this book and follow them.

If a competitor has made a plausible complaint, involving any unfair or illegal item which may be hidden in another competitor's vehicle in the same power class and division, and would require disassembly of that vehicle or audio system to verify its existence, then the complaint must be accompanied by a cash security deposit. (No checks) Such complaints may only be made after the vehicle in question has been judged at that event and before any prizes are awarded. The security deposit required to file a protest at a Regular or Double Points event will be \$500. Regional, Triple, and finals events will be \$1000.

The Head Judge must have the security deposit in hand before any action may be taken. The Head Judge would then appoint two qualified persons to disassemble the vehicle for inspection. The competitor whose vehicle is in question may elect not to have their vehicle inspected by disqualifying themselves from the event with no refund. If, in the Head Judge's opinion, the vehicle in question is found to be inconsistent with this rule book, the cash security deposit will be returned to the competitor making the complaint and the competitor in question may be disqualified from that event and all future USACI events for a period of two years. If an inconsistency is ruled to be unintentional, then the competitor in question may only be disqualified from that event. If in the Head Judge's opinion, no inconsistency is found in the vehicle in question, then the cash security deposit will be awarded to the competitor whose vehicle was inspected and it will be the responsibility of the competitor who was protested to reassemble the vehicle or audio system.

Competition Classifications

INTRO 1SQ+ Beginners or first time competitors, first year only- *max of 5 events*

Basic installation (50 pts), sound quality (90 pts), and capped SPL (140dB max) 1 seat sound evaluation from driver's seat

Intro Class Criteria

The Intro Class is designed for the true "new" or first time competitor. For vehicles with the most basic installations that utilize OEM speaker locations. Amount and type of equipment used is limited. While we do not want to penalize a consumer for opting to use a "high end" video head unit, some of them have processing built-in that is NOT ALLOWED in this class ONLY. There are also NO WOW/Creativity points awarded in this class. In other words, no extra points for any "flashy" installs. This class is judged on its own specialized scoresheet. Limited to one season beginning at competitor's first event and ending at the same year's Finals. A maximum of (5) events may be attended throughout one season and then competitor must move up into Rookie Division for the remainder of the same year BUT will be ALLOWED to compete in Intro SQ+ class at Finals the same year. The following season, the competitor must compete in the Rookie Division (or higher depending on modifications).

*Vehicle must be able to be operated as originally designed on public roads

*All items originally provided from the manufacturer within the vehicle must keep their original location and functional ability. This will include but is not limited to center console, all seats, airbags (if equipped), seatbelts, controls (gas, brake, steering, etc), and spare tire. A point deduction MAY be taken if any of these items are removed. The Head Judge will make the appropriate call at the event, if required.

INTRO 1SQ+

MODS ALLOWED- *no exceptions*

Stock or aftermarket headunit (limited to 9 bands of EQ unless OEM) Aftermarket equalizer (9 bands maximum) MAY be separately mounted Aftermarket speakers in stock OEM locations and stock OEM sizes

(1) Additional pair of tweeters in A-pillars or doors (1.5" max outer diameter including frame/mount) Prefab, generic, or basic custom sub enclosure behind B-pillar- (no requirement or limitation) Single UPGRADED or aftermarket battery in stock location only- NO ADDITIONAL BATTERIES Capacitors (20 Farad maximum)

Max 14.4vdc measured at amplifier(s) with engine off (HYBRID cars exempt)

NOT ALLOWED-

No headunit with built-in DSP or time alignment or more than 9 bands of EQ (unless OEM) No processor with time alignment or custom EQ functions with any headunit

No kick panels or any floor pan modification

No door panel modifications or "build outs"- aftermarket "grills" are allowed

A "build out" is considered to be anything thicker than 2" over the factory door panel

No dash pods containing mids and/or tweeters in separate housings No subwoofer "walls" obstructing rear view

No seat track modifications whatsoever No removal of rear seat, if equipped

No subwoofers forward of the B-pillar (unless OEM equipped) No additional batteries allowed or any relocation

No remotely located faceplates (headunit or EQ)

No "line of sight" obstructions of view from either front seat

* Factory Premium Systems are exempt and allowed if OEM equipped- meaning all high end vehicles with DSP/EQ/Time Alignment functions- examples: JBL Synthesis, BOSE, Infinity, Mark Levinson, Boston Acoustics, etc.

ROOKIE DIVISION-

LEVEL 1

1Q = Sound quality only

1SQ+ = Sound quality, Installation, & SPL (uncapped)- Comprehensive Sound (with 3 categories omitted) Comprehensive Install with NO CREATIVITY POINTS AWARDED 1 seat sound evaluation from driver' seat

Rookie Class Criteria

A beginner or first year division intended for competitors beginning the sport and wanting a full evaluation of their audio system including all safety requirements and an *introduction* to the "full" scoresheet. For basic or highlighted installations. This class is also considered to be the next step up from the Intro class. While there are a few limitations for this class, ONLY flashy upgrades or creative additions are omitted from judging. Otherwise, this class includes full installation, sound quality (with a few omissions), and unlimited SPL evaluation. A competitor may compete in this class for a maximum of 2 years OR until 1 Championship win at Finals (or any other Beginner, Rookie, or Level 1 Division in ANY other Autosound Sanctioned Organization recognized by USACI). Competitor is then required to move up into the Amateur Division (*Level 2*) the next season.

Requirements for Rookie are that competitor does NOT qualify for ANY other class (based on modifications allowed OR affiliation with the 12v industry) OR is NOT a former National SQ Champion in USACI or any other Sanctioned Autosound Organization recognized by USACI. This begins with the current year due to class restructuring. USACI reserves the right to reclassify ANY competitor into the appropriate class at any event based on any prior Championship.

ROOKIE (1Q / 1SQ+)-

MODS ALLOWED-

Stock or aftermarket 12 volt headunit- all video heads acceptable. NO in-car Pc's

Any 12 volt aftermarket DSP (digital processor), EQ, Crossover, etc designed for automobile use (NO Pro Audio, Home gear, or other modified equipment converted from 120vac)

Aftermarket speakers in any location (kick panels, dash pods, door panels, etc)

Seat track modifications provided OEM safety and strength are met or exceeded- *no exceptions* Original or automotive style seats ONLY- NO custom built seats

Vehicle must be able to drive and operate safely from the driver's seat

Custom subwoofer enclosures mounted behind B-pillar. Subwoofer "walls" (obstructing view) or bed "cuts" are also allowed. No subs forward of B-pillar unless OEM equipped

Additional batteries- *no limit* (full fusing per Rulebook for max points) Capacitor banks (limited to 20 Farad total)

Max 14.4vdc measured at amplifier with engine off (HYBRID cars exempt)

NOT ALLOWED-

No cutting or modification to any part of floorpan- *no exceptions* No venting to the exterior of the vehicle

No 120vac converted equipment or processors

No in-car Pc's (iPads and tablets are okay with presence of a functioning headunit) No equipment or batteries may be visibly mounted to the exterior of the vehicle

No custom dashboards or rebuilds (only added "pods" are allowed) No subs forward of B-pillar unless OEM equipped

No custom seats (non automotive style)

No "remote" SPL podiums allowed for SPL purposes- remote controls, buttons or knobs are ok

AMATEUR DIVISION-

LEVEL 2

1Q = Sound quality only

1SQ+ = Sound quality, Installation, & SPL (uncapped)- Full scoresheet with no exemptions

1 seat sound evaluation from driver's seat

Amateur Class Criteria

A second year or higher division for seasoned competitors with basic or highlighted installations judged on the "full" scoresheet. Any competitor that does NOT qualify for ANY other class OR is NOT a former National SQ Champion in USACI in PRO Division or higher OR in any other Sanctioned Autosound Competition Organization in "PRO" or higher, or the equivalent of, in that Organization. NO "Experts" or Manufacturer "Reps". Any retail shop owner, installer, or employee of store is allowed to enter this class. There are a few limitations in this class as far as modifications allowed but these are mainly restricted to seat relocation and custom dash builds not being allowed. Any headunit or equipment may be used (*see mods allowed*). This is the "mid" level for "one seat" sound judging in the "Q" class. This is the lowest "SQ+" class that is judged on the entire scoresheet. While vehicles with "high SPL's" may seem to be an unfair advantage, there are more than enough points available on the scoresheet for the better sounding and better built cars to still win. The vehicles that can do all three are considered to be at the "Top" of this Division. A competitor may compete in this class as long as they like OR until 2 Championships at ANY Finals (*USACI or any other professional Organization that USACI recognizes*). The competitor is then required to move up into the PRO Division (Level 3- highest single seat or lowest two seat judged class) the next season. .

CLARIFICATION- ANY (2) Championships in ANY Autosound Competition Organization recognized by USACI means ANY (2) SOUND QUALITY wins (*not just Installation Category as some others offer*) in ANY and ALL Organizations that competitor has competed in COMBINED BEGINNING WITH THE YEAR. Any Championships or wins acquired before the current year do not apply to this requirement, however, specific cases may be reviewed by USACI and the appropriate action taken and the competitor will be reclassified into a higher Division. The intent of these requirements is to make it the fairest, most level playing field for all competitors and "force" everyone progressively "up" in Division or Class as they do well in competition and allow other new competitors an equal opportunity. .

AMATEUR (1Q / 1SQ+)-

MODS ALLOWED-

Any headunit, in-car PC, etc

Any aftermarket DSP (digital processor), EQ, Crossover, etc. EITHER designed for automobile use OR any Pro Audio equipment converted from 120vac is allowed

Aftermarket speakers in any location (kick panels, dash pods, door panels, etc)

Seat track modifications provided OEM safety and strength are met or exceeded- no exceptions Vehicle must be able to drive and operate safely from the driver's seat

Custom subwoofer enclosures mounted anywhere as long as safe to driver and passengers Subwoofer "walls" (obstructing view) or bed "cuts" are allowed

Additional batteries and/or capacitor banks- no limit (full fusing per Rulebook for max points) Max 14.4vdc measured at amplifier(s) with engine off (HYBRID CARS exempt)

Cutting or modifying of floorpan to facilitate larger speakers, batteries, or equipment allowed

Venting to the exterior (kick panels, etc)- NO INTENTIONAL VENTING FOR SPL GAIN PURPOSES- If caught with an infraction, competitor will be moved up into PRO DIVISION

Custom or replacement seats are allowed

Removal of rear seat (if equipped) for additional equipment is allowed

NOT ALLOWED-

No custom dashboards or rebuilds

No seat relocation- ONLY extending tracks or MOUNTS are allowed- Vehicle must be able to operate safely from the driver's seat

No "rear seating" or center drive vehicles designed to give an unfair advantage over standard seating If caught with an infraction, competitor will be moved up into PRO DIVISION

No removable steering wheels- if equipped, steering wheel must be in place for judging

No "remote" SPL podiums allowed for SPL purposes- remote controls, buttons or knobs are ok

PRO DIVISION-

LEVEL 3

Pro Class Criteria

1Q = Sound quality only (1 seat sound judging)

2Q = Sound quality only (2 seat sound judging)

2SQ+ = Sound quality, Installation, & SPL (uncapped)- Full scoresheet with no exemptions

A more challenging class for seasoned competitors wanting a higher level of competition. This is a combined "crossover" class that offers BOTH **one seat (1Q)** and **two seat (2Q)** sound judging. This is the highest single seat (sound only) class offered but the more challenging 2Q and/or 2SQ+ (*the lowest two seat sound class offered*) is also an option. On two seat judging, sound quality scores are an average taken from both front seats at the same time. While some events may only have one sound judge available, all 3x or higher events will require two judges to be present for sound. Full installation scoring and unlimited SPL are also judged for the combined total score in the 2SQ+ class. The PRO Division is open to ANY competitor that does NOT qualify for the *Expert Division* OR is open to anyone to compete in by choice, if vehicle mods allowed. Any Manufacturer "Rep" is allowed to compete in this Division. However, once PRO, you are not allowed to enter a lower Division until one full year has passed without competing in ANY Sanctioned Autosound Competition Organization. ANY (2) Championship wins at Finals in the AMATEUR Division forces competitor into PRO Division.

Please see CLARIFICATION listed under AMATEUR Section for more details and time limits.

After (3) Championship wins in PRO (any class), competitor is required to move up into the Expert Division (either class).

PRO (1Q / 2Q / 2SQ+)-

MODS ALLOWED-

Any headunit, in-car PC, etc

Any sound processor (either 12vdc or modified 120vac)

Any speaker arrangement provided OEM safety and strength are met or exceeded

Vehicle must maintain two front seats in a driver/pass arrangement- meaning side by side Vehicle must be able to drive and operate safely from the driver's seat

Custom subwoofer enclosures mounted anywhere as long as safe to driver and passengers Subwoofer "walls" (obstructing view) or bed cuts are also allowed

Additional batteries and/or capacitor banks- no limit (full fusing required per Rulebook for max pts) Max 16.0vdc measured at amplifier(s) with engine off

Cutting or modifying of floorpan to facilitate larger speakers, batteries, or equipment allowed Venting to the exterior to facilitate larger speakers or kick panels, etc is allowed

Custom dashboards or rebuilds are allowed

Removal of rear seat (if equipped) for additional equipment is allowed Removal of "quick release" type steering wheel if equipped

Remote SPL podiums OR outside controls used solely for SPL purposes are allowed

NOT ALLOWED-

No normally located "front" seats relocated to the rear of vehicle in an "undriveable" scenario

No motorized driving controls (vehicle must have steering wheel but can be removed for judging)

EXPERT DIVISION-

LEVEL 4

Expert Class Criteria

1SQ+ = 1 seat sound judging by 2 judges averaged, independently

2SQ+ = 2 seat sound judging by 2 judged averaged, simultaneously Full scoresheet- Sound quality, Installation, & SPL (uncapped)

The *pinnacle* and most challenging Division for competitors wanting the *highest* level of competition. Expert 2SQ+ is considered the highest level in USACI. Unlimited modifications to the vehicle allowed.

ONLY vehicles with TWO SEATS LOCATED SIDE BY SIDE all allowed in Expert 2SQ+. Any single seat, center drive, or other specialty vehicle or installation that does NOT have two seats side by side will be placed in Expert 1SQ+. Any other lower class infringement to any part of this Rulebook places competitor in Expert 1SQ+. The event Head Judge has the final decision on vehicle placement into the appropriate class. Either class is open to ANY competitor by choice. Anyone competing in the "Expert" or "Manufacturer" class in ANY other Sanctioned Autosound Competition Organization recognized by USACI. ANY AND ALL MANUFACTURER VEHICLES. Any Manufacturer "Rep" is allowed to enter any class in the PRO Division with proof that vehicle is NOT OWNED by Manufacturer. No limit on how long a competitor is required to stay in this division. Expert Division is only required to be offered at 3x or higher events due to participation and turnout for the class. NO required Finals "qualifying" points in either class (1SQ+ or 2SQ+). Open invitation.

MODS ALLOWED-

UNLIMITED

NOT ALLOWED-

SEE CLASS CRITERIA ABOVE

SEAT CLARIFICATION: 2 seat classes will have 2 judges seated side by side in the vehicle scoring it at the same time (*simultaneously*). Judges will be seated facing the front of the vehicle. Competitors will allow at least 11" in distance (*measured shoulder to shoulder*) between the judges. Bench seats will also be required to provide the 11" shoulder to shoulder *minimum* distance between the judges. Any vehicle not meeting this criteria, UNLESS specified, will be automatically moved to EXPERT 1SQ+ single seat class.

DIVISION/CLASS SUMMARY-

INTRO 1SQ+	=	1 seat Sound, Install, & SPL (capped at 140dB max) BEGINNER OR FIRST YEAR CLASS ONLY- MAX 5 EVENTS
ROOKIE 1Q	=	1 seat Sound only
ROOKIE 1SQ+	=	1 seat Sound, Install, & SPL- <u>NO creativity pts</u> LEVEL 1- FIRST YEAR- LIMIT 2 YEARS OR 1 CHAMPIONSHIP
AMATEUR 1Q	=	1 seat Sound only
AMATEUR 1SQ+	=	1 seat Sound, Install, & SPL LEVEL 2- NO LIMIT UNTIL 2 CHAMPIONSHIPS
PRO 1Q	=	1 seat Sound only
PRO 2Q	=	2 seat Sound only
PRO 2SQ+	=	2 seat Sound, Install, & SPL LEVEL 3- NO LIMIT UNTIL 3 CHAMPIONSHIPS
EXPERT 1SQ+	=	1 seat Sound, Install, & SPL
EXPERT 2SQ+	=	2 seat Sound, Install, & SPL LEVEL 4- UNLIMITED- MFG VEHICLES, ETC

VERIFICATION JUDGING CRITERIA

A USACI competitor's vehicle shall be inspected by the Verification judge, or other official judge, to ensure that the vehicle and audio system meets the Basic Requirements as outlined in this section. If, in the judge's opinion, the vehicle or system does not meet all of these Basic Requirements, the judge may bring it to the Head Judge's attention, and by the Head Judge's decision, the competitor may be disqualified from the event. The competitor's entry fee may be refunded if it is not a Regional or Final event. It is up to the competitor to make sure that all Basic Requirements are met to avoid any issues or problems prior to entering the event. .

Safety Equipment Present (0 or 10): USACI strongly discourages the removal of OEM (or equivalent) safety equipment to facilitate the sound system. To receive maximum points in this category, all factory equipped OEM airbags, seat belts (or SFI, SA, FIA, FMVSS#209 approved replacements), parking brake, front and rear turn signals, headlights, and taillights must be present and functional in the vehicle to achieve maximum points in this category. Aftermarket lighting as-semblies are allowed as well as aftermarket parking brake devices and assemblies as long as their original function is not compromised. Expert Division competitors will automatically receive full points in this category. .

NOTE: While USACI also encourages innovative and unique ideas in any installation, the removal of ANY airbag (aftermarket steering wheel replacement or passenger front glovebox area for video screens, etc) will result in a 0 in this category, except those in the Expert Division. Same applies to custom built dashboards. Airbags may be relocated but must remain fully functional as intended.

INSTALLATION EVALUATION (225 POINTS POSSIBLE)

POWER SOURCE DESIGN (20 POINTS)

Battery(ies) Properly Secured (0 - 3) - Every battery in the vehicle should be secured. A battery that is mounted securely should not allow the base of the battery freedom of movement in any plane of motion. A battery that will not move at all will warrant a 3. A battery that moves slightly but less than one inch in any direction will warrant a 2. A battery moves more than one inch but is secured as to not be deemed hazardous will warrant 1. All other will be awarded 0.

Battery(ies) Properly Vented (0 or 3) - Every battery in the vehicle should be properly vented to outside air. The buildup of poisonous and explosive gases given off while a lead acid battery is charging can be very dangerous. If a battery is mounted in an open engine compartment or ventilated by a forced air ventilation system with the output completely capable of moving the gases to the outside of the vehicle it will be awarded full points. Totally enclosing batteries in an open engine compartment defeats the purpose for ventilation therefore not allowing maximum points to be awarded to the competitor. The alarm battery backup will NOT be scored in this section. "Bat Cap" and other slow discharge type devices will be considered batteries and must be vented like a battery.

Upgraded Battery System (0 or 3) - Any aftermarket battery upgrade over the OEM rating will be considered sufficient and be awarded full points. USACI recommends the battery system be improved to exceed the peak current demands of the audio system but this is not required. This can be accomplished by simply upgrading the factory battery and retaining a single battery system for a low wattage audio system. One or more auxiliary batteries are suggested for a higher wattage audio system. Multiple batteries will always be considered upgraded even if factory batteries are used. The minimum amount of suggested battery current (measured in amperes according to a battery's cranking amps rating) would be detailed in Appendix B.

Additional Batteries (0 - 3)- This category awards extra points for any number of additional battery(ies) that have been added to the system in addition to the single OEM or upgraded battery. There is no minimum or maximum number of points awarded but this is rather a bonus section.

Upgraded Charging System (0 or 3) - Any aftermarket alternator upgrade over the OEM rating will be considered sufficient provided the charging lead has been upgraded to match the alternators output. A high output rewind of the stock alternator will also be considered sufficient for full points. A valid receipt is required to show proof of such a rewind. USACI recommends the charging system be improved to exceed the peak current demands of the audio system. More than one aftermarket high output alternator would be suggested for a high wattage audio system. (See Appendix C.) Example: If a vehicle with a 250 watt system were equipped from the factory with a 60 amp alternator, a 70 amp alternator would be considered adequate for points but a larger upgrade would be suggested for optimum system performance. It is the competitor's responsibility to supply the proof of stock alternator value and upgrade in order to receive full points in this category.

WOW/Creativity of Power Source (0 - 5) - Points will be awarded for a power source and wiring design that exhibits creativity or "WOW". Creativity or the "WOW" factor are techniques and/or simply the overall appeal of this portion of the vehicle. This allows the judge to award competitors points for making their vehicles more appealing to spectators and other competitors. Because the overall caliber of competitors may vary, the number of points awarded to the same design may also vary to some extent. Maximum points will only be awarded to the most appealing and creative installations at any given event.

WIRING (30 POINTS)

Power Source Properly Fused (0 - 5) - Each power wire, which is connected to the positive terminal of a battery, must be fused within 18 wire inches (including all connectors, wire and protection devices) of the battery and before the wire passes through any metal. This measurement will be taken from the center of the positive battery post and terminate at the output of the fuse or a manual reset circuit breaker. Being properly fused consists of using a manual reset circuit breaker or a fuse of the proper rating. Either should have a current rating less than that of the components, including connecting wire, to which it is supplying power, to include at the positive post of multiple batteries connected together. Automatic reset circuit breakers are not acceptable. Also each fuse must maintain moderate accessibility. These rules normally apply to any circuit that supplies power to the audio system, but may also apply to a stock power lead that is deemed to be unsafe. Note: The gauge of wire being protected will decide proper fuse rating. System values will not be used to determine proper fusing values on batteries.

Power Wires Properly Protected (0 - 5) - The wires that connect the power source components to one another and to the audio system should be protected from their environment. In a non-hostile environment, such as in an interior compartment or in the engine compartment away from all heat sources (at least a few inches), wire loom will be considered sufficient protection and awarded maximum points. However, in high heat areas or underneath the vehicle, better protection will be required. In these cases, metal or rigid plastic conduit will be considered sufficient and full points awarded. A grommet must be used at any point where a power wire passes through metal or any conductive material. Loom, or other suitable material, will be required when the wire passes through any abrasive material. All wires should be secured at regular intervals so as to prevent irregular movement. (Every eight inches or less to achieve maximum points.) Techflex or other wire coverings are awarded full points.

Power Wires Properly Terminated (0 - 5) - Good wire termination techniques should be used, especially to connect the power source components. Each termination should be very solid and free of any fraying strands or corrosion. A termination should have some form of protection, such as heat shrink tubing, to protect it from corrosion. Also, each termination along the twelve-volt positive lead must have adequate protection to prevent accidental shorting to ground.

Power Wires Run Neatly, Safely, and Securely (0 - 10) - All wires which connect the power source components to one another and the audio system must be routed in an orderly fashion away from all potentially damaging parts of the vehicle. Any separately moving portion of the vehicle should be avoided as well as excessive heat sources (such as the engine's exhaust system) All wiring should be secured at regular intervals (every eight inches or less to achieve maximum points.) as necessary to prevent it from irregular movement. Other engine compartment wiring which is especially dangerous or unappealing may also be included in this category.

WOW/Creativity of Power Source Wiring (0 - 5) - Points will be awarded for a power source and wiring design that exhibits creativity or "WOW". Creativity or the "WOW" factor are techniques and/or simply the overall appeal of this portion of the vehicle. This allows the judge to award competitors points for making their vehicles more appealing to spectators and other competitors. Because the overall caliber of competitors may vary, the number of points awarded to the same design may also vary to some extent. Maximum points will only be awarded to the most appealing and creative installations at any given event.

SIGNAL SOURCE & PROCESSORS (40 POINTS)

Equipment Properly Mounted (0 - 5) - The signal source components and any additional processors, such as equalizers, crossovers, and enhancement devices, must be firmly mounted to the vehicle. The component's mounting should not allow irregular movement of the component or the surface the component is mounted on in any plane of motion. If a component is mounted to a normally moving portion of the vehicle, then that particular portion of the vehicle will be inspected for irregular movement. Normally moving portions of the components, such as motorized faces or detachable faces, should be examined with slight force. Additionally, any source unit or processors mounted using a drywall type screw will be considered improperly mounted and will be awarded minimum points in this category.

Signal Source and Processor(s) Properly Fused (0 - 5) - All power wires extending to or from the signal source and processors must be properly fused. It is the responsibility of the competitor to ensure that all fuse ratings for all installed electronics are documented for the judge's reference. Competitors will receive maximum points in this category if in the judges opinion ALL of the signal source and processors are properly fused and these fuses do not require extensive disassembly of the audio system to service.

Equipment Maintains Theme of Installation (0 - 5) - Each signal source or processor component should be mounted in an orderly fashion that is consistent with its surroundings. Great care should be taken to ensure that each component's mounting is free of visual imperfections. There is no set guideline stating that the component should appear to be either stock or highlighted. A competitor may choose to highlight one portion of the vehicle while another remains stealth. Consideration will be given in this matter and points may not be deducted. This division will be defined as front of vehicle ("B" pillar forward) and rear of vehicle ("B" pillar toward the rear). In cases of vehicle with a trunk, the interior will be considered one theme area and the trunk another.

Normally Used Equipment Easily Accessible (0 - 5) - Any components that require adjustment or access during the normal operation of the system should be within comfortable reach when seated in the driver's position. This does not include components that are normally adjusted only when installed or inspected. Components with visual displays should also be within comfortable driver's view at or near dash level. Compact Disc changers, which by design are intended for trunk mount, need not be within reach of the driver but should be easily accessible otherwise. Also, extensive unlabeled operating components should also be avoided.

Signal Source and/or Processor Wires Run Neatly, Safely, and Securely (0 - 10) - All power wires and signal wires extending to or from the signal source and processors must be routed and terminated in an orderly fashion. All wires should be secured at regular intervals (every eight inches or less to achieve maximum points) so as to prevent irregular movement. Wire protection should follow the same theme (Techflex, loom, etc) as other interior wiring in the audio system. Each power connection should be solid, free of fraying strands, and protected from accidental shorting. A crimped or mechanical termination that has also been soldered and then protected by a sheath that completely covers the termination may be awarded maximum points! Signal wires should be routed away from power wires to prevent radiated noise. All wires should be routed away from separately moving parts of the vehicle. Photos may be necessary for maximum points. Maximum points will be awarded if all wiring is completely protected end to end (including connections), securely mounted and completely documented.

WOW/Creativity of Signal Source and Processors (0 - 10) - Points will be awarded for signal source and processor installation that exhibits creativity or "WOW". Creativity or the "WOW" factor are techniques and/or simply the overall appeal of this portion of the vehicle. This allows the judge to award competitors points for making their vehicles more appealing to spectators and other competitors. Because the overall caliber of competitors may vary, the number of points awarded to the same design may also vary to some extent. Maximum points will only be awarded to the most appealing and creative installations at any given event.

SPEAKERS (30 POINTS)

Speakers Properly Mounted (0 - 5) - All speakers in the vehicle should be securely mounted so that no irregular movement is allowed. This will include the actual driver and/or panel that the driver is mounted to. Any speaker mounted with a drywall type screw will be considered improperly mounted and will be awarded minimum points in this category. Pan head or equivalent considered to be sufficient but a security-type fastener is required to obtain maximum points.

Speakers Properly Protected (0 - 5) - All speakers in passenger areas of the vehicle must be properly protected from damage during the normal use of the vehicle. If a judge can touch the cone or surround of a speaker with the blunt end of a ballpoint pen then that speaker it may considered only partially protected. No grill will be considered zero points. Such protection may include, but is not limited to, an expanded mesh grill, waffle grills and so on. Speakers located in a trunk or hatch area (in vehicles with no rear seat, the area behind the "B" pillar will be considered hatch area) must be protected from damage. All speakers in these areas should have grills with no more than 2 inched gap at any one point. Inverted sub woofers will be considered properly protected behind the "B" pillar.

Speaker Wires Run Neatly, Safely, and Securely (0 - 5) - All wires extending to the speakers should be routed in an orderly fashion away from separately moving portions of the vehicle. The speaker wires should be secured at regular intervals (every eight inches or less to achieve maximum points) to prevent irregular movement. Wire protection should follow the same theme (Techflex, loom, etc) as other interior wiring in the audio system. A grommet should be securely installed at any point where a speaker wire must pass through metal or other abrasive material. All speaker wires should be hidden from view in a normal seated position. Any speaker wires that must pass outside the vehicle, such as those extending into the doors, must be encased in a protective material, such as split loom or a rubber boot to achieve maximum points. Each speaker wire should be terminated solidly without fraying stands. A crimped or mechanical termination that has also been soldered and then protected by a sheath that completely covers the termination may be awarded maximum points provided other areas in this section achieve maximum points. Photos may be necessary for maximum points. Maximum points will be awarded if all wiring is completely protected end to end (including connections), securely mounted and completely documented.

Speakers Maintain Theme of Installation (0 - 5) - Each speaker should be mounted in an orderly fashion that is consistent with its surroundings. Great care should be taken to ensure that each speaker's mounting is free of visual imperfections. There is no set guideline stating that the speaker should appear to be either stock or highlighted, but it should be cosmetically integrated.

WOW/Creativity of Speaker Installation (0 - 10)- Points will be awarded for a speaker installation that exhibits creativity or "WOW". Creativity or the "WOW" factor are techniques and/or simply the overall appeal of this portion of the vehicle. This allows the judge to award competitors points for making their vehicles more appealing to spectators and other competitors. Because the overall caliber of competitors may vary, the number of points awarded to the same design may also vary to some extent. Maximum points will only be awarded to the most appealing and creative installations at any given event.

AMPLIFIERS (35 POINTS)

Note: If an audio system does not use any external amplifiers, but instead uses only a signal source or processor with a built-in amplifier, then the signal source or processor shall be considered an amplifier and will be evaluated accordingly.

Amplifier(s) Properly Mounted (0 - 5) - All amplifiers in the vehicle must be firmly mounted to the vehicle. The amplifier's mounting should not allow irregular movement in any plane of motion (up, down or side to side). If an amplifier is mounted to a normally moving portion of the vehicle or installation (fold

down seats, motorized amplifier racks, and etc.), then that particular portion shall be inspected for irregular movement. Additionally, any amplification device mounted using a "drywall" type screw will be considered improperly mounted and will receive minimum points in this category. Security type or tamperproof fasteners are required for maximum points.

Amplifier(s) Properly Fused (0 - 5) - All power wires extending to or from the amplifier(s) must be properly fused. It is the responsibility of the competitor to ensure that all fuse ratings for all installed amplifiers are documented for the judge's reference. Competitors will receive maximum points in this category if in the judges opinion ALL of the amplifiers are properly fused and these fuses do not require extensive disassembly of the audio system to service.

Effectiveness of Amplifier Cooling (0 - 5) - This section will evaluate the effectiveness of the cooling system. The amp(s) should remain cool at all times (not too hot to touch), even during peak demand. Each amplifier in the vehicle must have adequate cooling or ventilation according to it's size and location. All amplifiers, except those mounted in large open areas, will require a forced air cooling system, or better, to obtain maximum points in this category. Any amplifier(s) with functioning forced air cooling that move adequate air and are mounted in adequate space will receive full points. Creativity is not part of this category.

Amplifier Wires Run Neatly, Safely, and Securely (0 - 10) - All power wires and signal wires extending to or from the amplifiers must be routed and terminated in an orderly fashion. All wires should be secured at regular intervals (every eight inches or less to achieve maximum points) to prevent irregular movement. Each power connection should be solid, free of fraying strands, and protected from accidental shorting. A crimped or mechanical termination that has also been soldered and then protected by a sheath that completely covers the termination may be awarded maximum points provided other areas in this section achieve maximum points All wires should be routed so as not to interfere with the normal use of any surrounding areas. Lastly, each amplifier must retain all manufacturer input or output protection, including speaker lead fusing. If an amplifier is protected internally, an owner's manual may be required to show proof of such protection. Photo's maybe necessary for maximum points. Common sense will be used when evaluating and scoring this category.

WOW/Creativity of Amplifier Installation (0 - 10)- Points will be awarded for a amplifier installation that exhibits creativity or "WOW". Creativity or the "WOW" factor are techniques and/or simply the overall appeal of this portion of the vehicle. This allows the judge to award competitors points for making their vehicles more appealing to spectators and other competitors. Because the overall caliber of competitors may vary, the number of points awarded to the same design may also vary to some extent. Maximum points will only be awarded to the most appealing and creative installations at any given event.

ATTENTION TO DETAIL (15 POINTS)

In this section the Installation judge will evaluate the system on its overall appearance - little things may count a lot. Each compartment should be clean and free of imperfections. Fabric should be turned so that all grains will match, screw heads may be aligned, panels should fit snugly, color and texture of materials should blend, contours should flow smoothly, and etc.

Equipment detail (0 - 5) - Special attention is paid to consistency of product colors, trim, light, lettering, texture, and alignments.

Material detail (0 - 5) - Special attention is paid to the detail of materials, security, safety, or adaptability.

Application detail (0 - 5) - Special attention should be paid to the panel fit and finish, equipment should be mounted so that it is not inconsistent (mounted straight, level, flush) with the surrounding equipment. Additionally, speakers with logos may be aligned and/or facing the same direction to score maximum points in this category.

OVERALL INSTALLATION CREATIVITY (30 *BONUS* POINTS)

This category will be used to award additional points for creative installation techniques that directly affect the system's audio performance. Judges will award a maximum of 3 points for each listed creative item in a vehicle. Higher complexity of each idea will result in maximum points. Judges may not award points for items that were *already considered* for creativity points in the other sections OR award "general" points without listing what the creativity points are awarded for. Additionally, **no points will be awarded for items that are not directly installation related** (i.e custom wheels, custom paint, air bags, water falls, etc...) A maximum of 10 additional ideas & their complexity is available.

OVERALL SYSTEM (15 POINTS)

Overall cleanliness of vehicle (0 - 5) - A clean vehicle shows both respect for the judges and the competitor's pride in the vehicle. Only a very clean vehicle will receive maximum points. Some allowances may be made for lack of cleanliness if the event is held during bad weather or with less than appropriate judging area conditions.

Overall security of system (0 - 5) - An audio system should be designed to deter and prevent theft. Components should be able to be disguised or hidden from a thief's view from outside of the vehicle. Speaker grills, fake radio covers, and etc. may be used for disguises. Especially solid component mounting or tamper proof fasteners may also be considered as some theft prevention.

Ease of system maintenance (0 - 5) - A well-designed audio system should take into account the inevitable fact that each component will require repair or replacement, sooner or later. Each audio system component must be reasonably accessible for this reason. It should not require extended periods of time, in the judge's opinion, to simply remove a component or reinstall it.

PRESENTATION (10 POINTS)

The competitor will have 10 minutes to completely present the vehicle to the installation judge. The competitor will have **2 points deducted** from the presentation score after 10 minutes has expired. At this point, the competitor will be "cut off" and judging will begin. Expert Division competitors will have 15 minutes to present their vehicles with a **2 point deduction** if going over time limit. During this time period, the judge(s) will not be scoring the system, but will be very attentive to the competitor. The competitor should explain all parts of the audio system while showing their existence and function, if necessary. Photographs (*or other forms of media*) of components and/or installation techniques which are not readily apparent, an audio system layout, and other diagrams, etc may help the competitor to more effectively present the audio system and vehicle. Additional materials pertaining to the audio system may be available to the judges after the presentation period has expired. It is the competitor's responsibility to point out or explain anything that they may think is pertinent to their audio system or installation that is not seen. .

A competitor must "present" the vehicle to the judges during the event. ONE "co-pilot" or assistant will be permitted to assist while the vehicle is being judged but **ONLY** to pull panels, open doors, etc. Any "co-pilot" presenting the vehicle (pointing out installation points during presentation, prompting the presenter, answering questions, etc) will result in registered competitor receiving a 0 (zero) on their presentation score. The average score in this category shall be three points. Points may also be deducted, if in the judge's opinion, the competitor lacks a general knowledge or understanding of the audio system. Those with the highest knowledge of their system, presentation media, etc will receive the most points. .

If a competitor is unable to attend an event, the competitor may petition USACI Rules and Ethics to designate someone else to show the vehicle. The designated person will be considered a competitor and will assume all responsibilities of such. If a competitor is unable to present the vehicle due to handicap or other extenuating circumstances, that competitor may appeal to the USACI Rules and Ethics board for a presentation exemption. If an exemption is awarded, the competitor who owns the vehicle **MUST** be with the vehicle while it is being judged. Official written exemption will be required by the Head Judge and/or

event director at every event. Additionally, the competitor is responsible for the conduct of his or her assistant. If assistant is found to be disruptive, disrespectful, or unruly during the event, the competitor will be penalized.

SOUND QUALITY EVALUATION (240 POINTS POSSIBLE)

SOUND QUALITY JUDGING CRITERIA

A USACI competitor's audio system's sound quality will be judged according to the rules and guidelines in this section. Only minimum points shall be awarded in a category if the system fails to meet the judging criteria for that category. Partial points may be given if the system is nearly consistent with judging criteria for that category. Maximum points shall be awarded if the system meets or exceeds the criteria for that category. .

The general rule for Sound Quality judging is to evaluate how well the audio system duplicates or recreates the original music performance. All musical information, including direct and reflected sound, must be recreated with accurate tonal balance (Definition and Clarity). The musical information should also seem to come from the same direction and distance from the listener as in the original performance. When evaluating a very accurate system, the listener should be able to close his or her eyes and feel that they are actually experiencing a live performance. .

A competitor will not be allowed any extra time to adjust the audio system for Sound Quality judging or borrow official judging software being used at that event from a judge. A Sound Quality judge will only adjust the system's volume and use such signal source playback functions such as fast-forward and rewind or tracking. All other settings will be left untouched and should be preset by the competitor PRIOR to the judging time. .

Sound Quality software (Compact Disc) will be provided by USACI and should not be substituted during the event. It is the competitor's responsibility to ensure that the judging software is returned to the judging staff after Sound Quality judging is completed. If the software is not returned, the competitor will be considered disruptive to the event and the appropriate action will be taken. Alternative software (MP3, MP4, DVD, cassette tape, etc) may NOT be available during the event. The competitor must specify and special source requirements (other than Compact Disc) PRIOR to registration to ensure that the official software in that format is available and supported at the event. .

It shall be the Sound Quality judge's responsibility to score the competitor's audio system according to the following rules and guidelines to the best of this judge's ability. It is the competitor's responsibility to accept that the scores awarded by the judge are given in the competitor's best interest as an honest evaluation of the audio system. Prior to judging, the competitor must present the seating position to the judge that closely approximates the normal seating position while operating the vehicle. The Sound Quality judge must judge the vehicle seated in the seat placement presented by the competitor. If the judge feels that this position will not allow he or she to accurately score the vehicle or is "unrealistic", the Head Judge will determine if the seating position is "unrealistic", and make the appropriate decision. The Sound Quality judge may NOT adjust the seat or seating position to personal tastes unless he or she has competitor's permission. .

Every attempt is being made to hold several regional official Sound Quality judge's trainings and seminars throughout the year. Details are always available on the USACI website. Any serious sound quality competitor or anyone interested in becoming a judge is encouraged to attend.

STAGING (50 POINTS)

The soundstage is an area containing all of the performers. The sound stage should have proper width, depth, and height direction. For a vehicle to receive maximum points in this category, it must accurately reproduce all components of the sound stage.

Position: Front to Rear (1 - 10) – The judge will evaluate where the front of the performer's stage is located. Ideally, the front of the stage should appear to start well out in front of the listener and beyond the confines of the vehicle. An audio system that exhibits "rear stage" will appear to have most or all of the audio information originating from behind the listener with very little sound originating in front of the listener. This can be likened to listening to a live performance while sitting backwards in your chair. A vehicle that exhibits rear stage will receive minimum points.

Width (1 - 10) – The stage's left and right boundaries will be evaluated in this category. The stage should appear to extend outside of the left and right confines of the vehicle. The stage should appear seamless from left to right with no noticeable holes or gaps. If the audio system cannot accurately reproduce Left of Center or Right of Center positions, points will be deducted in this category. If the audio system lacks width, then the stage will sound as if all the performers are grouped closely near the center of the sound stage and points will be deducted.

Height (1 - 10) – This section will evaluate how accurately the sound system recreates the proper stage height across the entire sound stage. The soundstage should appear to be at or near eye level for the listener, placed between the top of the dashboard and rear view mirror when in a normal seated position. Maximum points will only be awarded if all portions of the stage are at the proper height. If a sound stage varies in height from one area of the sound stage to another, an average of the best and worst stage height will be awarded. Example: Judging from the driver's seat, the center and right placement appear to maintain the same relative vertical position but the left placement is considerably lower than the other portions of the stage. The center/right score (10) will be averaged with the left score (2) to arrive at the final score (6).

Depth (1 - 10) - When evaluating a sound field that has good depth recreation, it should be apparent that some of the performers are also closer to the listener than other performers. Using the baseline obtained in the "Position" section, the judge will evaluate how well the vehicle accurately reproduces the depth of the recording.

Balance L/R (1 - 10) – The stage should be balanced front to back, left to right, and top to bottom. It should not sound "right side heavy" or "thin on the left side" for example. It should sound consistently proportional throughout the stage area. A stage split front to rear (the left portion of the stage originating in front of the listener and the right portion originating behind the listener or visa versa) would score poorly in this category.

IMAGING (60 POINTS)

Imaging is the proper placement of the individual performers and/or instruments within the sound stage. The images on the sound stage may appear to be focused or diffused depending on the characteristics of the individual performer. These images should remain stable and not randomly change location on the sound stage during the performance. The images should remain stable at all volumes and frequencies. Example: The lead vocals in a recording may be perceived as having a "tight and focused" image while a piano located toward the rear of the stage may have a "broad or diffused" image.

Proper image separation is important to a well-balanced soundstage. Each image should originate from its own distinct location on the sound stage. No two images should appear to come from the exact same location. The sound stage should maintain seamless transitions from one image to the next and no gaps or missing musical information should be evident.

Left Position (1 - 10 pts) Instruments and/or performers on the left side of the sound stage should be placed in the correct locations.

Left Focus (1 - 10 pts) Images on the left side of the sound stage should be focused and well defined. The audio information from any given performer/instrument should come from an exact point on the sound stage.

Center Position (1 - 10 pts) Instruments and/or performers at the center of the sound stage should be placed in the correct locations.

Center Focus (1 - 10 pts) Images at the center of the sound stage should be focused and well defined. The audio information from any given performer/instrument should come from an exact point in the sound stage.

Right Position (1 - 10 pts) Instruments and/or performers on the right side of the sound stage should be placed in the correct locations.

Right Focus (1 - 10 pts) Images on the right side of the sound stage should be focused and well defined. The audio information from any given performer/instrument should come from an exact point in the sound stage.

(Note: See Width for Left of Center and Right of Center scoring)

AMBIENCE/SPATIAL REPRODUCTION (10 POINTS)

This section will score the system's ability to accurately reproduce the spatial characteristics of the room that a musical track was recorded in. The audio system should give the sensation of being in a much larger space than that allowed by the confines of the vehicle. The audio system should be able to make the physical boundaries of the listening environment transparent.

Reproduction (1 - 5 points) - This section will score the system's ability to accurately reproduce the spatial characteristics of the room that a musical track was recorded in.

Size of Space (1 - 5 points) - The audio system should give the sensation of being in a much larger space than that allowed by the confines of the vehicle.

DEFINITION CLARITY (65 POINTS)

A properly designed audio system should be capable of reproducing all audible frequency ranges with clarity, definition and authority. An audio system should not add any unnatural coloration or distortion to the original recording. Instruments or vocalists from each frequency range should appear distinct and natural. There should be no additional resonance or harmonic overtones. Unnatural or "overly processed" sound is not desirable, as the music will lose warmth and realism. The system will be evaluated at normal and slightly above normal volume and an average of both scores will be awarded.

Low Frequencies (1 - 10 points) - This frequency range should not sound exaggerated in relation to the rest of the system but should blend sonically and appear to originate in the same location as the other frequencies being reproduced. The musical notes should sound realistic and not have a noticeable rumble or unnatural sound. An audio system should also be able to reproduce the lowest frequencies accurately without distorting or "breaking up". This frequency range includes the lower harmonics of the bass drum, bass synthesizer, pipe organs, etc. The system will be evaluated at normal and slightly above normal volume.

Mid-bass Frequencies (1 - 10 points) Frequencies in this range should be realistically reproduced and balanced. The musical notes should be free of unnatural colorations or resonant sounds. The tones

should sound realistic, accurate and precise. This frequency range includes lower vocals, snare drum, bass guitar, trombone, etc.

Midrange Frequencies (1 - 10 points) Frequencies in this range should be realistically reproduced and balanced. The musical notes should be free of unnatural colorations or resonant sounds. The tones should sound realistic, accurate and precise. Voices and instruments should sound rich and natural without being harsh, dull, compressed or distorted. The frequency range includes upper vocals, piano, guitar, keyboard, trumpet, etc.

High Frequencies (1 - 10 points) Frequencies in this range should be realistically reproduced and balanced. The musical notes should be free of unnatural colorations or resonant sounds. The tones should sound realistic, accurate and precise. The frequency range includes drummer's high hat, cymbal, upper flute, etc.

Dynamics (1 - 10 points) Dynamics refer to the power of tones. The dynamic range of a recording is the extremes between loud and soft portions of the music. The audio system should be able to accurately reproduce the entire dynamic range of the recorded material without sounding harsh, compressed or distorted.

Tonal Balance (1 - 10 points) – The audio system must reproduce the recorded audio information without exaggerating or minimizing a frequency or group of frequencies. If a competitor were to look at the audio system's output on an RTA meter, there should be smooth band-to-band transitions across the entire measured frequency spectrum without any abrupt peaks or holes in the frequency response.

Environment (1 – 5) - The audio system should not add any sound that is not a part of the original sound recording. Sounds such as a buzzing or rattling should not be caused by the audio system during evaluation. These sounds can be added due to improperly mounted speakers, loose panels or components. If no foreign sounds are heard during audio playback, maximum points will be awarded.

SOUND LINEARITY (20 POINTS)

This section evaluates how well the audio system can reproduce proper tonal balance and dynamics at different volume levels. This includes all frequencies (subbass, midbass, midrange, and high). The relative level between low, mid and high frequencies should be natural and realistic, with no section overpowering another. Points should be deducted for any unnatural harshness or distortion at any volume. Subbass will naturally diminish at lower volumes and this will be taken into consideration. A "good" score will be five points in both categories. Exceptional systems will score even higher.

Low Volume (1 - 10points) - Approx 70-75dB reference level for testing.
(at or slightly below normal listening volume) .

High Volume (1 - 10points) - Approx 90-95dB reference level for testing.
(at well above normal listening volume) .

NOISE (15 POINTS)

This category will evaluate the lack of noise in the entire audio system. These noises will include both speaker generated and system generated noises. A good rule of thumb to use when evaluating noise is that when the vehicle contained the OEM sound system, no abnormal noises (relay clicks, pops on/off,

hiss, etc) were present and the installation of the aftermarket audio system introduced noises in to the listening environment.

Engine Noise (1 – 3) –The vehicle’s engine must be running and a current load must be placed on the charging system (i.e. headlights on and set to high beam, air conditioner operating, brake lights operated, etc). The judge will carefully listen for alternator whine, spark plug ticks and other noises induced by the vehicle’s electrical system. The judge should be careful to distinguish between actual alternator whine produced through the audio system and other similar noises that already exist while the engine is running. These noises may include those produced by turbo chargers, the bearings in high output alternators, and etc. By listening to the audio system both while the engine is running and while it is not, a proper evaluation of the noise source can be made. HYBRID or ELECTRIC vehicles will receive full points in this category.

Note: The engine should be OFF to properly evaluate the remaining noise categories.

Mechanical/Fans/Actuators (1 – 3) – This will evaluate noises other than those included in the recorded media while the audio system is playing and the engine is off.

Note: The ENTIRE audio system should be designed to turn off with ONE power switch within 10 seconds. If the entire audio system fails to completely turn on or off within 10 seconds, minimum points will be awarded in the turn on or turn off category.

Turn Off Noise (1 – 3) – All components in the system should power down silently. No click, buzzes, thumps or pops should be present when the system powers down.

Turn On Noise (1 – 3) – All components in the system should power up silently. No click, buzzes, thumps or pops should be present when the system powers up.

Noise Floor (1 – 3) –A system with an improperly set gain structure will exhibit a hiss or “static” sound at full volume playing the zero bit track. This section will be evaluated on the zero data track at full system volume.

OVERALL SOUND QUALITY (1 - 20 POINTS)

The Sound Quality judge should evaluate the overall appeal of the audio system. None of the evaluations made for previous categories should have any bearing on this section. The average score for this section is five points. An audio system that does not create an overall comfortable sound field may receive a less than average score. However, an audio system that sounds good and would be pleasurable to listen to for extended periods of time will receive an above average score.

SOUND PRESSURE LEVEL - SPL

If a competitor chooses to use an SPL “podium”, IF ALLOWED in their Division, he or she will be required to use the same brand equipment in the podium as is installed in the vehicle with the same output voltages. This will include all processors, headunits, and so on. Examples would be:

Competitor A has 2 EQT's, a PLD1 Line driver and Pioneer M900 in the vehicle. This competitor uses a Pioneer M-900 and PLD1 Line driver in the Podium. This would be allowable.

Competitor B has an EPX2, PA1 and Alpine 7919 in the vehicle. This competitor has a Alpine 7909, PLD1 and an EQX in the podium. This would not be allowed.

(All models and brand affiliations are used to clarify this rule)

The Head Judge will have the final say to allow any questionable equipment in an SPL podium.

The SPL meter should be set to display only Max SPL and adjusted to the correct SPL range before initiating the testing. All gain or loss filters should be bypassed or set to their neutral position. Windows, doors, and etc. can be either open or closed during this test. Doors may not be slammed or fanned during testing.

The competitor will have a maximum of five minutes to make any adjustments to the audio system for this test. If the competitor is not ready for the test within the five-minute period, a minimum of ten points will be deducted. After the SPL meter has been placed and the competitor has loaded the software and readied the system, the competitor should signal the judge that he or she is ready for the test. The judge should then reset the SPL meter.

After the judge signals the competitor to begin the test, the competitor will play up to 30 seconds of any Official USACI SPL software (music, tone, etc) in order to obtain a reading on the SPL meter. The music may not be restarted after judging begins. If the audio playback does not remain audible to the judge or or it is restarted (or repeated in any way) then ten points may be deducted from the competitor's SPL score. The competitor must play the SPL track for a full 30 seconds in order for the scoring attempt to be considered official. However, the competitor will NOT be required to play the audio system at maximum volume for the entire 30 seconds but SPL judge must be able to verify that the correct software is being used during testing.

The use of tone generators, doublers or any other device that externally (outside of the closed signal chain) generates or alters the frequencies that the system is playing during SPL testing is expressly prohibited and will result in disqualification with no refund. Any competitor generating sound pressure with anything other than the provided musical software or externally influencing the SPL measuring equipment will be immediately disqualified and the incident forwarded to the USACI Rules and Ethics committee for review. Competitors found to be intentionally attempting to violate the above rules may be banned from competition for a period not less than 1 year and not more than 100 years. The decision of the Rule & Ethics committee will be final.

If the competitor feels that he or she had a system malfunction during the SPL testing, he or she may elect to retest. If the competitor elects to retest, he or she will be given 2 minutes to correct any problem(s) and retest. The result of the second retest will be the competitor's final score. The competitor cannot elect to take the "better of the two" for any reason.

While personal safety is ultimately the competitor's responsibility, hearing protection is required if the competitor is inside of the vehicle during SPL testing. The competitor will be required to furnish his or her own hearing protection.

Competitors may have subwoofers installed in the front of the vehicle but may not place the microphone or sensor within 36" of the cone or port of the closest woofer during SPL testing.

The competitor's score will be based on the SPL meter's reading after the test track has been played. The competitor will receive full points for SPL. (Example: A competitor's SPL reads 143.2 so the competitor would receive the full 143.2 points in the SPL section of the score sheet).

NOTE: Any ruling by the Head Judge is only reversible by a ruling of the Rules and Ethics Board and only having been submitted by the petitioner in writing. .

VEHICLE QUALIFICATION: SPL microphone can be located anywhere in front of the B-pillar facing forward only. Microphone may not be located within 24" of any port, vent, or low frequency subwoofer designed for SPL purposes. Any full range kick panel and/or door speaker is exempt.

No intentional cheating to gain SPL will be tolerated.

Vehicle engine may be running IF ALLOWED by specific venue hosting that event.
PLEASE SEE VEHICLE REQUIREMENTS FOR EACH SPECIFIC DIVISION AND CLASS.

THERE ARE SEVERAL MODIFICATIONS THAT LIMIT EACH DIVISION. BATTERY VOLTAGE AT ANY AMPLIFIER(S) IS ALSO SUBJECT TO TESTING TO VERIFY COMPETITOR IS LEGAL IN THEIR DIVISION.

INTRO, ROOKIE, AMATEUR DIVISIONS = 14.4vdc MAX (*at amplifier with engine off*)

PRO DIVISION = 16.0vdc MAX (*at amplifier with engine off*)

EXPERT DIVISION = UNLIMITED

LEGAL WORLD RECORDS IN ALL SQ+ CLASSES (except INTRO SQ+) will be scored with all openings in the vehicle SEALED. Specific software will also be used. SEE "LEGAL WORLD RECORDS" in the back of this rulebook.

SHOWMANSHIP AND BONUS POINTS

The competitor will be encouraged to display his or her vehicle for the spectators at all sanctioned USACI events. If the competitor chooses to display the vehicle, he or she will be required to have the vehicle on display for a period that will generally start at 1:00pm and conclude at 4:00pm to receive points in this category. The vehicle must be on display during this period unless it is in the judging lane. The head judge or event sponsor reserves the right to modify or omit this category due to inclement weather, space constraints or other reasons. Only the head judge, or another person designated by the head judge, will be judging this category. Please keep in mind that there may be space constraints that will not allow elaborate display areas to be set up. You will be informed by the head judge at the competitor's meeting of the approximate amount of space allotted for each vehicle and display. If the competitor chooses not to display the vehicle, a score of zero will be awarded in this section. The location and length of time required satisfying this category would be determined by the event director and covered at the competitor's meeting.

Display (0 or 10) - A competitor will earn 10 points in this section by simply opening the vehicle up for the spectators to look at. Typically, presenting the vehicle with all locations that have audio, or other, upgrades will be required. This will include, but is not limited to, the hood, passenger compartment, trunk and/or bed. Points will not be awarded, if in the judge's opinion, the vehicle is not easily viewable by the spectators. This category will NOT always be offered or scored.

Creativity (0 - 10) - Creativity points may be awarded for display books, labeling or signs highlighting the audio system, using lighting to highlight audio components, video (or other media) detailing the vehicle and audio system and so on. You are encouraged (but not required) to stay with the vehicle, while it is on display, as the judge may award creativity points by answering simple questions about the audio system while it is on display. Competitors are encouraged to engage the crowd to receive maximum points. Maximum points will only be awarded to the most creative and original displays. Creativity is considered any ideas that are out of the ordinary when compared with other competitor's displays at that event. Because the overall caliber of competitors may vary from one event to another, the number of creativity points awarded to the same display may also vary to some extent. Maximum points will only be awarded to the most creative, informative and original displays. This category will NOT always be judged.

Note: Creativity points will NOT be awarded without the basic display guidelines being met and points awarded in that category.

Note: Expert competitors will be required to display their vehicles for an extended period of time to satisfy the display category. The head judge or event director will discuss the display category with the Expert competitors at the event.

USACI Decal Bonus (0 or 5) - A competitor will be awarded 5 bonus points for prominently displaying an official USACI sticker on his or her vehicle.

USACI Membership Bonus (0 or 5) - A competitor will be awarded 5 bonus points for being a current USACI member. Each membership is good for 1 year from the time you join.

APPENDIX A. - Proper American Gauge Wire (AWG)

Current Dem	and in		Ampe		res		Up to 30'
	Up to 4'	Up to 7'	Up to 10'	Up to 15'	Up to 20'	Up to 25'	
0-10	20	18	16	14	14	12	12
11-25	16	14	14	12	10	10	8
26-50	12	10	10	8	6	6	4
51-75	8	8	8	6	6	4	4
76-100	8	8	6	4	4	2	2
101-150	4	4	4	2	1	1	1/0
151-200	2	2	2	1	1/0	1/0	2/0
201-300	1/0	1/0	1/0	1/0	2/0	2/0	3/0
301-400	3/0	3/0	3/0	3/0	4/0	4/0	4/0

The above chart shows the minimum copper wire size acceptable for normal wire lengths used in a vehicle to meet normal current demands. If aluminum wire or tinned wire is used, the wire gauge size should be even larger to compensate. The wire size calculations are intended to allow no less than .5 voltage drop to a circuit, assuming that the wire is properly terminated.

APPENDIX B. - Upgraded Battery System

USACI does not require a competitor to upgrade their battery. In order for the competitor to receive maximum points in the “Upgraded Battery” section, any upgrade will be considered sufficient. The above chart shows the suggested total battery current for most total RMS wattage ranges of normal audio systems. A battery system’s total current is equal to the sum of each battery’s maximum amperage rating, or cold cranking amps (CCA), including all batteries connected in the battery system. The calculations assume an average stock battery rating of 650 CCA.

APPENDIX C. - Upgraded Charging System

USACi does not require a competitor to upgrade their charging system. In order for the competitor to receive maximum points in the “Upgraded Charging System” section, any upgrade will be considered sufficient. The previous chart shows the suggested amount of alternator, or charging system, upgrade over the stock charging system necessary for most total RMS wattage ranges of normal audio systems.

Total charging system current is equal to the sum of all alternator current ratings. Other charging devices, which are part of the charging system, should also be included in the sum.

A vehicle's total charging system current should be equal to the vehicle's stock alternator current rating (in amperes) plus the minimum amount of upgrade current required for the audio system.

APPENDIX D. - USACI Event Guidelines

This section will outline the event and judging procedures at a typical USACI sanctioned event. This is not an all inclusive guide as to how every show will progress but will give you an idea of what is expected of you and when. This section is targeted at the first time USACI competitor so that you will be prepared to progress smoothly through the judging line. This guide also assumes that you have read the rulebook and are now familiar with the basic USACI guidelines and rules. If you have any questions or issues before, during or after the event, do not hesitate to ask.

Before Entering the Lane

Make sure that your score sheet is completely filled out. All of the boxes MUST be filled in for your score to count. Simply putting "on file" will NOT be accepted. Failure to complete the entire top portion of the score sheet will result in your score sheet being discarded at the USACI office. Also, make sure you are set up and ready to go with your "Sound Quality" settings in your system. This will ensure that you are "ready to go" when the judging starts.

Station 1 - Verification

The verification judge will verify the overall safety of the vehicle and the installed audio system. Additionally this judge will verify the score sheet is filled out properly and completely. At this point, if any inconsistency is found you will be notified of any changes being made. After completion of this station, the judge will fold the score sheet and place it under the windshield wiper or on the dash. FROM THIS POINT FORWARD, YOU WILL NOT BE ALLOWED TO LOOK AT ANY PORTION OF THE SCORE SHEET. Failure to follow this directive can result in the Head Judge deducting points from your score sheet.

Station 2 - Installation

You will be required to demonstrate and detail all portions of your audio installation at this station. If applicable to your division, you will be given 10 minutes to demonstrate to the judge(s) how and why your vehicle meets or exceeds the installation guidelines outlined in this rulebook. After the 10-minute period has expired, you will be asked to step away and allow the judges to score your vehicle. After the judges have completed scoring the vehicle, you may be given a brief outline of what the judges have found and how to improve your vehicle in the future (time permitting). It is advisable to write this information down.

Station 3 - Sound Quality

This is the only station in which you will typically have very little interaction with the judge. The judge will approach you and ask if you are ready for sound quality judging (You should already be ready). The sound quality judge may then ask you to load the official judging software and give a brief demonstration of how the tracking and volume controls are operated. At this point you will be required to step away from the vehicle and let the judge(s) score the vehicle. After the judge has completed scoring the vehicle, he or she will exit the vehicle and may discuss what was found and how to improve in the future (time permitting). It is advisable to write this information down.

Station 4 - Sound Pressure Level (SPL)

At this station, you will be required to play the provided USACI software for 30 seconds at or near full volume attempting to achieve the highest sound pressure reading. In laymen's terms, you will be testing to see how loud the vehicle will actually play. Most competitors will only play their subwoofers during this test. There are many reasons for this but the most obvious reason is, the more cone area you have moving air in the vehicle, the higher the SPL reading can be. Usually, there is a big crowd around this station due to the excitement and noise. This will be your chance to show off how loud your system is for

the crowd. After you have completed this test, you will be shown your highest Sound Pressure reading and will then be required to exit the judging lane.

Station 5 - Display

This is the final station at a typical USACI event. Here, you will be required to open your vehicle and “show off” the installation and vehicle. You should NOT demonstrate how loud the vehicle would get at this station. You should also be close by your vehicle to answer any questions that are asked of you as well as possibly demonstrate the finer points of your installation. It is your best interest, as well as the sports, to answer these questions in a friendly manner as honestly and completely as possible. You need to be aware that in some cases, these people asking questions may be judges and you are being evaluated on how friendly you are and how well you display your vehicle. This station allows you to show everyone your hard work and also promotes the sport to spectators and future competitors. At some events this category will NOT be scored.

Before and After Judging

The USACI staff requests that you not be disruptive during the event before or after you have been judged. Disruptive can be considered, but is not limited to, playing your system near the judging lanes while judging is still in progress. The head judge or event director reserves the right to deduct points or ask you to leave the event if continued disruptions are experienced. If you are asked to leave, you will not receive a refund and any points or awards you earned at that event will be forfeited.

Glossary of Terms

Competitor: The competitor is typically the vehicle’s owner, an employee of its owner, or an immediate family member thereof.

Door Panel: The interior panel facing the passenger compartment is typically considered the door panel. The inner door skin is the metal under the door panel that the door release, speakers, door panel, etc attach to.

Event Director/ Event Registrar: Typically the person at the registration table will be able to answer any question about the event. If this person is unable to answer event related questions he or she can direct you to the proper person.

FIA: Fédération International de l’Automobile - a corporation that does safety ratings for racing equipment

Floor Pan: The metal under seats, driveshaft hump and floor mat area extending from the bottom of the fire wall to the rear bumper to include the area under the rear seats and trunk floor.

FMVSS#209 (§ 571.209 Standard No. 209: This file is PAGES long, you can read there for more on our Federal Standard. (http://edocket.access.gpo.gov/cfr_2008/octqtr/pdf/49cfr571.209.pdf)

Judge: The Head Judge shall appoint USACI judges. The judge must be directly related to the car audio industry, either by job position or by substantial experience as an Advanced Consumer competitor. Any USACI member may be pre-approved to act in a judging position by becoming a

USACI certified judge. Such certification should be requested by contacting the USACI headquarters. A USACI judge may not compete in sound quality at any event if he or she is on the judging staff unless arrangements have been made to avoid any conflicts of interest.

A line judge is typically responsible for a specific station at the event. Any questions about that specific station can be directed at the line judge. If the issue is out of the realm of responsibility of that judge, you may be directed to another person. Usually you will be directed to the head judge or registration table.

Head Judge: The head judge is responsible for the smooth progression of the show. In addition, this person is also responsible for any disputes, rule clarifications and so on. This person has been entrusted with the responsibility of making the show run smoothly. Additionally, this judge is usually very busy but will try to help as best he or she can. You may be referred to another person who can better deal with your issue at that time.

Proper Fusing: A properly fused piece of electronics will not contain a fuse that is higher than the manufacturer's suggested value. Automatic reset circuit breakers will not be considered proper fusing. Ideally, fusing should be as close to the source of power as possible and since this is a serviceable portion of the audio system, be easy to service with minimal system disassembly required.

SA: Safety rating for racing equipment

Senior USACI Official: Occasionally, a senior USACI official (President, Executive Director, board member) will be present at an event. This person will typically be able to answer any question you may have at that time. You may bring up an issue that this person has to research or refer to the Rules and Ethics board. If this is the case, you will be given a reply in an expedient manner.

SFI Foundation Inc.: A corporation that does safety ratings for racing equipment

"WOW": The "WOW" factor is techniques and/or overall appeal of a portion of the vehicle (i.e. trunk, interior, etc). This allows the judge to award competitors points for making their vehicles more appealing to spectators and other competitors. Competitors are encouraged to incorporate designs that "stop people in their tracks".

© **Copyright 1986 - 2018** United States Autosound Competition International, Inc.

SPL LEGAL NATIONAL / WORLD RECORDS IN SQ CLASSES

World Records (LEGAL) in ALL "+" Classes:

ROOKIE 1SQ+
AMATEUR 1SQ+
PRO 2SQ+
EXPERT 1SQ+
EXPERT 2SQ+

All vehicles must qualify for above specific class with regards to each SQ+ category in this rulebook. NO EXCEPTIONS. No "purpose" built vehicles designed to enter SPL only. A good rule of thumb for defining purpose built is "will the vehicle reproduce the entire frequency spectrum?" (i.e. 20Hz-20KHz) It is suggested that any competitor wishing to attempt a world record be entered in their respective SQ class during that event but this is not a requirement. Any vehicle attempting a World Record in any of the above classes must qualify to enter the contest for Sound & Install. Safety and fusing is first priority. All vehicles will be verified. Any vehicle deemed to be UNSAFE or UNQUALIFIED will not be allowed to compete. Competitor may choose to take "zero's" on these portions but entire score will be counted for placement in the event. Any WORLD RECORD set will be acknowledged at the event and also on the USACi website. Any other awards given will be at the sole discretion of the USACi event director.

TermLab sensor placement will be located 12" from passenger side a-pillar and 4" vertical above dashboard. The sensor will be attached to the windshield in the correct location with suction cups. Sensor placement will be verified by SPL judge. NO "Outlaw" locations (kick panels, etc).

The SPL reading will be measured using PEAK HOLD with TermLab software.

All doors, windows, hatches, etc MUST BE SEALED or CLOSED during the entirety of SPL testing.

SPL World Record software is Flashdance Soundtrack- Track 1, "What a Feeling" by Irena Cara. No test tones. Software will be provided by SPL judge in either compact disc format OR USB (.mp3). No exceptions.

Competitor will have (2) 30 seconds attempts to set a World Record. Competitor has a maximum of 1 hour in-between both runs to charge batteries or make equipment repairs. Lowest recorded SPL will be the NEW record with higher being the backup to prove a legitimate score.

World Records can only be set or attempted at a 3x Triple Point event or higher that OFFERS **World Record attempts** and only on Officially Certified USAC SPL mic with Certified Judge in attendance. Pre-registration is required to guarantee Official SPL mic and Judge are present.

Any person caught cheating will NOT be allowed to compete. Any vehicle infraction that is caught will also disqualify any score. No refund of entry fee.

This rulebook addition is an attempt to recognize the competitor who is the "loudest" with an SQ vehicle and installation, in each of the FIVE current Sound Quality "+" classes. It is as close to nostalgic "old school" rules from years ago that still exist today.