SQC Club Rules 2026

SQC Club (Sound Quality Competition Club) brings together people who are passionate about building, tuning, and enjoying high-quality audio systems in cars. The mission of the club is to promote and support the most technical and musical direction in car audio — SQ (Sound Quality) — in order to broaden people's horizons in both music and technology.

The **SQC Club** provides a platform for individuals who wish to exchange experiences and gain valuable knowledge in building high-quality car audio systems. It allows them to meet, communicate, and compare their systems with other enthusiasts.

The main goal of club meetings and events is **experience sharing and friendly communication.** Although events include scoring, trophies, prizes, and other competitive elements, **there are no losers**. Every competitor and spectator gains useful tips and advice that help them achieve the ideal sound quality.

Any association—regardless of who created it, for what purpose it was established, who its members are, or what form it takes—must follow certain rules. **SQC Club is no exception.**

The latest version of the **Club Event Rules** (hereinafter referred to as "**The Rules**") reflects many years of club experience and regulates the relationships between the club and car audio enthusiast associations around the world, event organizers, competitors, and judges.

These **Rules apply to all stages of the club's annual events**, including international competitions, club meetings, and additional cup events.

Concepts, Terms and Definitions

SQC Club

The **SQC Club** is a voluntary and informal organization based on a shared interest in building high-quality car audio systems.

The club organizes competitions using its **own official test audio tracks**, and the format may be any form of **national championship**.

The club welcomes and is willing to cooperate or unite with any organization or individual from **friendly or neutral countries**, provided they are willing to hold events using **the same rules and test tracks**.

The **SQC Club Rules** (hereinafter referred to as "**The Rules**") are the document that regulates the organization of club activities, event procedures, and championship operations, and also defines the relationships between club management and club members.

Club Partners

A **Club Partner** is an individual or legal entity that provides **financial, informational, organizational, or other forms of support** to club activities.

Such support must not violate the current club rules.

Club President

The **Club President** is responsible for the overall management of club activities and has the authority to represent the club.

Responsibilities include:

- Leading the **Club Coordination Council**
- Presiding over council meetings
- Holding **veto power** in council decisions
- Approving the **annual championship calendar**
- Attracting partners and sponsors
- Representing the club internationally
- Assisting in the creation of national clubs in friendly or neutral countries
- Approving candidates for **Head Judge**
- Appointing **Event Head Judges**

Club Coordination Council

The **Club Coordination Council (Council)** consists of the club's founding members and is led by the President.

Responsibilities include:
- Making decisions by simple majority vote
- The President has a decisive vote and veto power
- Proposing amendments to the club rules
- Approving the list of club partners for each season
- Nominating candidates for Club Head Judge

Council members serve **for life**.

Membership may end if:
- The member voluntarily resigns
- The council removes the member by majority vote due to rule violations or failure to perform duties

New members may join the council if:
- They are nominated by the President
- Approved by majority vote.

Club Members

A **Club Member** is anyone who accepts the club's ideas and values and applies to join.

Notes:

- Owning a car or car audio system **is not required** to become a member
- Club members **may participate in club events**
- Members may propose **suggestions to improve club activities**

By joining the club, members **agree to comply with the club rules**.

Club Events

A **Club Event** is a gathering of club members announced on the **official club website or national official social media pages**, with open registration in accordance with the Rules.

Events include:
- Evaluation of competitors' audio systems by **certified judges**
- Determination of winners and prize recipients in a sport competition format

Events may also include:

- Training seminars for judges and competitors
- Formal or informal meetings
- Technical discussions
- Events involving simplified sound system evaluations

Event Organizer

An **Event Organizer** may be any individual or legal entity, regardless of whether they work in the car audio industry.

Requirements:

- Accept the club's ideas and values
- Voluntarily organize the event
- Commit to organizing the event according to club requirements and local laws

Responsibilities include:

- Selecting the **event venue**
- Developing and implementing **event regulations**
- Appointing **Event Administrators**
- Providing administrators with necessary equipment and materials (office space, office equipment, software, printed materials)
- Preparing the **layout plan for competitor vehicles**

If required by law, the organizer must also:

- Notify government or local authorities
- Inform relevant public services

With the **President's approval**, the organizer may invite additional event partners.

Event Administrator

An **Event Administrator** is a person who voluntarily assists in organizing the event. The administrator **does not have to be a club member**.

Main responsibilities:

- Register competitors on site
- Calculate scores from judging sheets
- Compile event results
- Print certificates or diplomas

There is **no limit** to the number of administrators.

Club Judges

A **Club Judge** is a person who has completed a **special training course** and **passed the qualification exam**.

The exam includes:

- Club rules
- Internal club regulations
- Theoretical and practical methods of car audio evaluation

After passing the exam, the person receives a **Club Judge Certificate**.

The certificate is **valid for one season** (from the official start of the season to its end).

During events, **judges work directly with competitors** and evaluate their audio systems **according to the evaluation procedures and standards**.

To qualify for judging in the **final championship**, judges may need to attend additional training seminars.

Club Head Judge

The **Club Head Judge** is appointed by the President based on recommendations from the Coordination Council, selecting among the most experienced, qualified, and respected judges.

Responsibilities include:

- Conducting judge training seminars
- Organizing judge qualification exams

The Head Judge may serve at events as:

- **Event Head Judge**
- Or **regular judge**

The list of **Head Judges and Judges** is published on:

- The official club website
- National official social media pages

Event Head Judge

The **Event Head Judge** is appointed by the President from among the Club Head Judges.

If none are present at the event, a judge may be appointed based on their qualifications.

In coordination with the Event Organizer, the Event Head Judge determines the judging schedule, including:

- Time and location of training seminars (if required)
- Lunch and break times
- Evaluation time for each vehicle

The Event Head Judge also decides:

- Whether a judge is allowed to participate in judging
- Or whether a judge should be removed from judging due to violations of the Rules or the **Judge Code of Conduct**

Judge Code of Conduct

The **Judge Code of Conduct** is a set of professional ethical principles and behavioral standards that guide the work of club judges.

Responsibilities of the Event Head Judge

The Event Head Judge is responsible for:

- Supervising judges
- Conducting random checks of evaluated systems
- Providing guidance on evaluation methods
- Handling competitor protests
- Making decisions on disputes according to the Rules

The Event Head Judge has the authority to:

- Cancel a judge's score
- Modify a judge's decision if scoring errors are confirmed

The decision of the Event Head Judge is final and cannot be appealed.

Competitors

A **Competitor** is a person who:

- Has registered for the event
- Arrives at the event site on time
- Drives a vehicle that complies with the Rules
- Pays the registration fee

Important note:

Before registering, competitors **must carefully read the event rules and regulations.**

Registration means the competitor confirms that:

Competitors have read and agree to follow all rules and regulations.

Event Regulations

Event Regulations are the **hour-by-hour schedule** of the main stages of the event, including everything from vehicle arrival at the venue to the award ceremony and celebration activities, with responsible persons indicated.

The **final event regulations**, including information about the Event Head Judge, judges, and administrators, will be announced during the **pre-event briefing**.

The **Event Organizer** is responsible for ensuring that the event follows these regulations.

Objectives, Tasks and Spirit of the Event

Community Objective (Corporate)

To build a community of like-minded friends united by a shared passion, creating a relaxed environment where competitors and spectators can communicate freely and enjoy leisure time together.

Educational Objective

To promote the development of car audio culture through the exchange of experience and to improve the technical knowledge of both competitors and spectators.

This includes:

- Joint listening sessions of sound systems
- Open listening sessions for spectators
- Increasing public interest in technical creativity
- Attracting new competitors to join the sport

Sporting Objective

To obtain a fair and objective evaluation of one's sound system through assessment by certified judges, and to determine winners and prize recipients through a competitive sporting format.

Types of Club Events

Club events are conducted according to a **pre-planned and published annual schedule**.

Event types include:

- Training seminars
- Judge examinations
- Official championship rounds
- Regional cup competitions
- Special cup competitions (**Extra Cups**)
- Finals

Event Procedure: Registration

Event registration is opened through the **official website**.

Club members planning to participate must register according to the method specified in the announcement and will receive confirmation via:

- Email
- Or messaging applications (such as WeChat, WhatsApp, Telegram, Line, etc.)

A participant is considered **officially registered only after receiving confirmation from the event organizer**.

Important notice:

- Please pay attention to the **registration deadline**.
- Each vehicle may register for **only one competition class**.

On-Site Registration

Competitors must **complete on-site registration** at the time and location specified in the event regulations.

Proof of successful on-site registration is a **card indicating the vehicle number and competition class.**

This card must be placed **under the windshield of the vehicle**.

To facilitate the work of judges, the organizer will prepare a **layout map of competitor vehicles**, and each judge will receive a copy.

Late Arrival Rules

Competitors should understand that event rules are established based on:

- The **average judging time per vehicle**
- Various activities scheduled for the day
- Local environmental conditions

Late arrivals disrupt the competition schedule and create difficulties for judges and other competitors.

Therefore, competitors must **immediately notify the organizer** of any circumstances that may cause them to arrive late.

Competitors who arrive late **without notifying the organizer** will be penalized as follows:

- **First** 5 minutes late: **–5 points**
- **Second** 5 minutes late: additional **–5 points**

Serious delays may result in **disqualification** from the competition.

Event Procedure: Judging

The evaluation of competitors' sound systems during the event is primarily carried out by judges.

Judges must follow the : **Judge Code of Conduct**

Judges will:

- Evaluate the **sound quality** of the competitor's system
- Record scores on the **score sheet**

Judge scores may only be changed by the **Event Head Judge** under conditions specified in the Rules.

If a judge experiences pressure or interference from:

- Competitors
- Spectators
- Other judges

The judge in-duty must:

- Immediately **stop the evaluation**
- Report the situation to the **Event Head Judge**

The club guarantees that judges in-duty will not evaluate systems with which they have a direct connection (for example, systems they helped install or tune).

Scoring and Determination of Winners

After the evaluation of each vehicle:

[1] The judge submits the completed and signed score sheet to the administrator (the score sheet must be signed by both the judge and the competitor).
[2] The administrator enters the data into the **club's official software**.

The software will automatically:

- Calculate the **total score**
- Rank competitors **according to their scores**

The competitor with the highest score in each class is declared the winner.

In the **highest class of the Finals**:

- Scores from **two judges are combined**
- The **total score determines the Champion**

Tie-Breaker Rules

If competitors in the same class receive identical scores:

Priority comparison:

[1] **Track 08** – Gin-Gee

If still identical:

2 **Track 09** – Ain't No Sunshine

In **ESQC** (External Sound Quality Class):

Priority comparison:

Track 19 – Jonny

If the scores are **still identical**:

Compare : **Tonal Balance**

If **all indicators remain identical**:

The competitors will **share the same ranking**.

In the Finals, if the **scores are still completely identical**:

A third judge will be appointed by the Event Head Judge to conduct an additional evaluation.

In this case, **only music tracks** will be used, and technical test tracks will not be used.

Supervision of Judges

The **Event Head Judge** supervises the work of judges by randomly checking the evaluation of competitor sound systems and comparing their own scoring with the scores given by the judges.

If errors or **inconsistencies** with the **evaluation Methodology** are discovered, the Event Head Judge will inform the **Club President** and the **Club Head Judge** in order to review the qualifications of the judge and determine whether the judge may continue to officiate in future events or must attend additional training seminars to qualify for judging in the Finals.

However, **the results of the current event will not be changed**.

Special Procedures in the Finals

During the **Finals**, when systems are evaluated by **two judges**, the administrator compares the score sheets from both judges within each class while calculating the results.

If a **significant discrepancy** between the scores is discovered that may affect the final ranking, the administrator must immediately notify the **Finals Head Judge**.

In such cases, the Finals Head Judge may personally evaluate any competitor system within the **disputed class** and, after consultation with the event organizer, may decide to:

- Declare all score sheets from the judge whose results significantly differ from the Head Judge's evaluation **invalid**, provided this does not violate the event regulations.
- Assign another judge to **re-evaluate the class**, or personally evaluate the systems in that class.
- If time constraints or other reasons prevent re-evaluation, the Finals Head Judge may accept **the existing score sheets as valid**, but must inform the **Club President and the Club Head Judge**, who will decide whether the judge may continue officiating in future events or Finals.

The decision of the **Finals Head Judge** is Final and cannot be appealed.

Protest

A protest may only be **submitted in writing to the Event Head Judge** in the following cases:

- If a competitor disagrees with the judge's scoring on the score sheet and refuses to sign the score sheet.

When submitting a protest, the competitor must provide a **deposit of 50 points from the score sheet** as a guarantee (the score sheet is held by the administrator). The administrator will notify **the Event Head Judge** and the relevant competitor for a **re-evaluation**.

The decision of the Head Judge is final.

If there is evidence that a competitor **is not eligible to participate in the declared class**, or has intentionally violated other provisions of the Rules.

Such protests must be submitted **at least one hour before the start of the award ceremony.**

A protest must include:

- The **protest form**
- A **description** of the specific case
- **Evidence**
- **Explanatory** statement
- A final decision made by the **Event Head Judge**

Additional conditions:

- Only competitors in the **same class and category** have the right to submit a protest.
- Protests **without specific evidence** or based on other unsupported reasons will not be accepted.
- Competitors are advised not to abuse the right to protest.
- If the protest concerns scoring, it must **reference specific clauses** of the **official test track evaluation methodology**.
- Personal opinions of competitors or other individuals **cannot be used as grounds for a protest**.

Competitors should understand that the purpose of the event is to evaluate a system at a specific time, by specific judges, using specific evaluation materials and methods.

Competitors submitting a protest should consider that the process of handling a protest may affect the event schedule.

The decision on whether a protest will be accepted is entirely at the discretion of the Event Head Judge.

The decision of the Event Head Judge will be communicated to the protesting competitor before the official end of the event, and cannot be appealed.

Once the **award ceremony begins**, the competition results are considered **final and cannot be changed.**

Recommendations for Competitors

Communication

Club events are designed so that competitors can:

- Show their vehicles to each other
- Introduce spectators to car audio systems
- Attract new members who may participate in future events

Therefore:

- Keeping the vehicle closed or hiding installation details does not encourage communication
- Competitors are strongly encouraged to **show and explain the features of their systems**

One of the main purposes of club events is to **Communicate with like-minded people and exchange experience.**

Competitors are encouraged to:

- Listen to other competitors' vehicles
- Make comparisons
- Exchange suggestions and feedback

At the same time, competitors should avoid:

- Unnecessary noise
- Excessively loud music

Noise and extremely high-volume music should be reserved for other types of car audio events.

It is also recommended that **vehicle anti-theft alarm systems be set to silent mode**.

Civil Behavior

At the event venue, competitors must comply with:

- All event rules
- The laws of the host country
- Local public conduct regulations

The following behavior is unacceptable:

- Public use of offensive or vulgar language
- Indecent behavior
- Playing music at excessive volume

Please remember:

Club events are family-friendly events, and many competitors attend with their children.

Attitude Toward Alcohol

Club events are informal gatherings of like-minded enthusiasts.

Moderate consumption of alcoholic beverages is not prohibited, provided it does not violate the laws of the host country.

However, if a **competitor submits a vehicle** for evaluation **while clearly under the influence of alcohol or other substances**:

- The judge has the right to refuse to evaluate the system
- And inform the Event Head Judge and Event Organizer

At the event venue:

- Submitting a vehicle for evaluation while intoxicated
- Or drinking alcohol publicly

may result in **disqualification** by the **Event Head Judge**.

Furthermore, by decision of the **President**, the member may be **expelled from the club.**

If a competitor disturbs public order or creates danger or discomfort for other participants, the event organizer has the right to:

- Contact **venue security**
- Or notify **law enforcement authorities**.

Principle of Honesty

Competitors are advised not to view their own or others' score sheets:

- After signing the score sheet
- Before the official results are announced

If a competitor provides **false information** (for example regarding the vehicle or sound system) in order to gain an unfair advantage, such as:

- Registering for a beginner class using false information

This may result in:

- **Disqualification**
- **Expulsion from club membership**

It is also **not recommended** to make any **modifications to the system** between the installation evaluation and the sound quality evaluation (for example, removing speaker grilles).

If such actions are discovered, the **Event Head Judge may deduct points in the installation evaluation section.**

Helping to Improve the Club

Behavior on Social Media

During the organization of events, the club (including the President, organizers, and judges) may encounter certain **objective difficulties**, and therefore may receive reasonable criticism.

Competitors have the right to:

- Discuss issues with club representatives
- Or discuss the advantages and disadvantages of club activities on the internet and social media

The club welcomes constructive criticism, especially when it:

- Contains clear opinions
- Provides specific suggestions for improvement

Such feedback may be considered when **revising the rules**.

However, the following behavior is **strictly prohibited**:

- Showing disrespect toward the club or its members
- Attacking judges or organizers
- Making personal attacks

Individuals who attack the club on social media in violation of ethical standards may have their club membership revoked by decision of the President.

Disclaimer

The club is not responsible for:

- Personal safety of club members
- Damage to or loss of vehicles
- Damage to modified components
- Damage to audio or video equipment

- Any other property loss

whether such incidents occur or are discovered **during any level of club events.**

The club recommends that competitors and spectators **take their own measures to ensure their personal safety and protect their property.**

2026 SQC Competition
SQ Competition Class Rules

SQ Competition Vehicles Requirements

A car competing in the SQ category must enter the site under its own power, exclusively using a permanently installed power plant and transmission.

The interior of the car must be assembled, all panels/elements of the interior must be installed. Any curtains/shields on the glass area inside the cabin are prohibited.

The glass of the front windshield should be transparent and glossy from the inside (glossy, transparent films are allowed).

The use of sunscreens or other screens and curtains inside the cabin that are not provided for by the factory design of the car during the evaluation is unacceptable.

Before starting the evaluation, the Judge checks the car for compliance with those requirements and the class declared for the competitor.

If the requirements for the cabin are not met, the competitor is given 5 minutes to eliminate violations. After the end of 5 minutes, the Judge will either proceed to evaluate the audio system (in case of elimination of deficiencies) or inform the Head Judge of the event of the disqualification of the Participant.
If the car, in the opinion of the Judge, does not correspond to the declared class, he immediately informs the Head Judge of the event for decision. At the discretion of the Organizer, the Judge may check all Entrants' vehicles for compliance with the

requirements for the interior and declared classes before or during the registration procedure at the venue. Information about such a decision is communicated to the competitors in advance.

The assessment is carried out with all the windows raised/closed. From the moment the Judge approaches the Competitor's car to start the evaluation and introduces himself, the Competitor has 5 minutes to complete the adjustment process (if the car is evaluated first, 15 minutes). Once the evaluation process has begun, no further adjustments are made.

Competitor cars that compete in the lower class can also compete in the higher-class category. Note, if they win in a higher class, in the next season they must compete at least in the highest class that was won previously.

SQ Competition Category & Class Requirements

To ensure equal conditions for competition in the Events, the Competitors are divided into classes depending on the experience of competition in the Club Events, competitions of other car sound formats, as well as on the total cost of the equipment included in the audio system. All Budget Class Category based on Euro currency.

Debut Class

A Club Member can become a Class Member who has never previously competed in competitions of other formats of car sound competitions in middle and (or) higher classes, has not won prizes at the finals of these formats (in any classes), has never previously taken part in the Club Events or has not performed in the Debut class for more than two consecutive seasons, and in total no more than three seasons, who has never won prizes at the Club events of any level or competitions in other formats (except for cases when the number of prizes is equal to or exceeds the number of participants).

A competitor of the Debut class cannot be a current or former judge in any of the car sound formats, as well as a manufacturer, distributor, dealer, installer of car sound equipment, and cannot be directly related to or married to such persons.

A competitor who finishes first in the Debut class in the Finals, or who has participated in the Debut class for two consecutive seasons and has won a prize in the Club Finals or in any format of finals (except where the number of prizes equals or exceeds the number of entrants) must advance to either class in the following season, except for Debut Class.

A competitor in the Debut class who has competed in the Debut class for two consecutive seasons and has never won prizes at the Club events of any level or competitions in other formats (except when the number of prizes is equal to or

exceeds the number of participants), has the right to participate in this class during the third season, at the end of which, regardless of the results achieved, he is obliged to move to any class except Debut class at his discretion.

Debut Class Category :

- Debut 2000 2-way
- Debut 2000 3-way
- Debut 4000 2-way
- Debut 4000 3-way
- Debut 2-way unlimited
- Debut 3-way unlimited Hi-res

All Debut Budget Category 2-way, 3-way and 2-way are not permitted to use super tweeters.

When calculating the cost, the following are taken into account:

- All speakers
- Active electronic devices directly related to the audio and video signal
- Aftermarket head units with a processor; Note : OEM Head Unit cost Euro 100
- External DACs and DSPs,
- Preamplifiers such as, active crossovers, Equalizer, etc
- Amplifiers, or DSP Amplifier
- DAP, separate portable players without DSP, etc.

When calculating the cost, the following are not taken into account:

- Storage such as USB FD, HD, MMC, Micro SD Card, etc. any other devices that are used as devices file storage
- All Cables include Power cable, Interconnect and speaker cable
- Bluetooth module or Wi-Fi streaming Module
- Sound Damping
- Battery

Club Member who competes in this class, when registering for the Event, must provide the Organizer with a link to the installed equipment in the official club component cost database, or a link to the price list of the manufacturer of such equipment indicating its recommended retail price.

The installed equipment must not be excluded by the manufacturer and (or) distributors from retail sale (official price lists) earlier than five years before the start of the current season. If it is impossible to provide a price list or a link to the data of the official database of components, Competitor may use the highest retail market price as a reference, or Competitor is not allowed to compete in this class.

All active equipment used must not be subject to any internal modifications or changes resulting in the loss of the manufacturer's warranty, except in cases where these are made by the manufacturer itself (e.g. special or limited editions, etc., but not single special piece).

Advance Class

A Competitor of the Advance class cannot be a current or former Judge in any of the car sound competitive formats, as well as a manufacturer, distributor, dealer, installer of car sound equipment, and cannot be directly related to such persons.
A member of the Advance class can be a member of the Club who did not take first places at the Club Finals or at the finals of any formats (except for cases when he was the only participant of the Competition Event) or who performed in the Debut class for 3 (three) consecutive seasons.

A Competitor who takes first place in the Advance Class in the Final or has competed in this class for two consecutive seasons and has won a prize place in the Club Final or in the finals of any format (except when the number of prizes is equal to or exceeds the number of competitors) must move to any of the higher classes in the following season.

A Competitor in the Advance class who has competed in this class for two consecutive seasons and has never won prizes at the Club events of any level or competitions of other formats (except for cases when the number of prizes equals or exceeds the number of competitors), has the right to compete in this class during the third season, at the end of which, regardless of the results achieved, he is obliged to move to any higher class.

Advance Class Category :

- Advance 3000 2-way
- Advance 3000 3-way
- Advance 5000 2-way
- Advance 5000 3-way
- Advance 2-way Unlimited
- Advance 3-way Unlimited Hi-Res

All Advance Budget Category 2-way, 3-way and 2-way are not permitted to use super tweeters.

When calculating the cost, the following are taken into account:

- All speakers
- Active electronic devices directly related to the audio and video signal
- Aftermarket head units with a processor; Note : OEM Head Unit cost Euro 100
- External DACs and DSPs,
- Preamplifiers such as, active crossovers, Equalizer, etc
- Amplifiers, or DSP Amplifier
- DAP, separate portable players without DSP, etc.

When calculating the cost, the following are not taken into account:

- Storage such as USB FD, HD, MMC, Micro SD Card, etc. any other devices that are used as devices file storage
- All Cables include Power cable, Interconnect and speaker cable

- Bluetooth module or Wi-Fi streaming Module
- Sound Damping
- Battery

Club Member who competes in this class, when registering for the Event, must provide the Organizer with a link to the installed equipment in the official club component cost database, or a link to the price list of the manufacturer of such equipment indicating its recommended retail price.

The installed equipment must not be excluded by the manufacturer and (or) distributors from retail sale (official price lists) earlier than five years before the start of the current season. If it is impossible to provide a price list or a link to the data of the official database of components, Competitor may use the highest retail market price as a reference, or Competitor is not allowed to compete in this class.

All active equipment used must not be subject to any internal modifications or changes resulting in the loss of the manufacturer's warranty, except in cases where these are made by the manufacturer itself (e.g., special or limited editions, etc., but not single special piece).

Progress Class

A Progress Class Competitor may not be a manufacture and or distributor. Current or former Judge in any of the car-sound competitive formats, as well as dealer, installer of car-sound equipment.

Progress Class Category :

- Progress 8K 2-way
- Progress 8K 3-way
- Progress 12K 2-way
- Progress 12K 3-way
- Progress Unlimited 2-way
- Progress Unlimited 3-way Hi-Res

Master stock Class

This class has no restrictions on competitor, except for the peculiarities of the placement of components.

The system must be installed in such a way as to exclude visible changes in the interior of the car in relation to their factory condition (this does not apply to visible signs of normal wear associated with the operation of the car).
The speakers must be installed in the places provided by the OEM design of the car. It is allowed to create hidden places for installing speakers, as long as this does not affect the factory appearance of the panels and cabin elements.
It is allowed to replace decorative and (or) protective panels and elements with similar ones from other standard configurations of the similar model, as well as

modify or replace standard speaker grids with non-standard ones, but with the preservation of the factory form.

The OEM head unit cannot be replaced or removed, it is permissible to replace the head unit monitor, in strict accordance with the standard appearance, or replace the head unit with a standard one from other configurations or versions of the car.

An additional audio source can be used, but all the standard functions of the head unit of the car must be fully preserved. Unlimited seasons for competitors to compete.

Master Stock Class Category :

- Master Stock 5K
- Master Stock 8K
- Master Stock Unlimited Hi-Res

Maestro Class

This class has no restrictions on competitor. Current or former Judges of any format of car sound competitions, manufacturers, distributors, dealers, professional installers of car sound equipment, etc. Unlimited seasons for competitors to compete.

Maestro Class Category :

- Maestro 15K 2-way
- Maestro 15K 3-way Hi-Res
- Maestro 25K 2-way
- Maestro 25K 3-way Hi-Res
- Maestro 60K 2-way
- Maestro 60K 3-way Hi-Res

Absolute Class

This class has no restrictions on competitor.
Current or former Judges of any format of car sound competitions, manufacturers, distributors, dealers, professional installers of car sound equipment, etc. Participation in the number of seasons is unlimited.

Absolute Class Category :

- Absolute 2-way Unlimited
- Absolute 3-way Unlimited Hi-Res

Category Grade level

The procedure for transfer to another class during the Championship is carried out in accordance with the provisions of the Championship Regulations (Regulations). Graded levels by seniority and order of transition.

- First Level - Debut
- Intermediate Level - Advance
- Second level - Progress
- Third Level - Master Stock, Maestro
- Highest level - Absolute

Transitions from one class to another during the season are allowed only if such a transition is made to a higher or equivalent class. In this case, the rating received by the participant for performance in the previous class is canceled.

At the end of the season, a competitor cannot move to a lower class, except as provided for by the Rules. Returning to the Debut class after compulsory or voluntary progression to higher grades is prohibited.

When making a decision on the admission of a car to the class, the Judges are guided by the Rules, internal regulations of the Club, **logic and common sense**. Decisions on controversial issues and situations not provided for by the Rules are made by the President, and in case of his absence from the venue – by the Head Judge of the Event. Decisions in such cases become a precedent until changes are made to the Rules and internal regulations.

2026 SQC Competition
Guidelines for Evaluating SQ

Structure of test material

The evaluation material contains three parts: a test track, technical tracks, and music tracks.

Test Track

It is necessary for a quick assessment of the correct connection of the speakers of the acoustic system and/or identification of serious errors in the settings.

If any errors are detected, the Participant is notified (at all events except the Finals). The Participant has the right to take 5 minutes to correct the errors, after which the Judge continues evaluating the system.

Technical Tracks

These tracks can be used to evaluate an audio system's ability, to construct a soundstage. Aspects evaluated include balance of horizontal sound image and position, focus accuracy, stage height, width, distance to soundstage, and the depth of the soundstage.

Musical Tracks

These music tracks is recorded using a variety of principles, so at SQC Club, one of the main principles for evaluating an audio system is multi-genre nature. More

specifically, it's not just genres that are important, but also different recording and mixing methods and techniques.

This not only allows us to more fully cover sound quality criteria, but also minimizes the possibility of "competition-specific" tuning. We strive to ensure that the highest scores are awarded to systems that best reproduce **any** music.

Each of the music tracks in this collection contains a number of features that should be taken into account when evaluating an audio system – these are the so-called "markers," which are described in detail in this methodology.

How to evaluate music tracks?

When listening, based on the "markers" described for each track. If the system identifies a deficiency in any of them, the referee will deduct 1 or 2 points from the total score depending on its impact on the overall sound.

Judge's Evaluation procedure

Before evaluation process begin, the participants determine the volume and inform to judge on duty, to be used in the judging process, by listening to SQC test tracks.

During the evaluation, the volume and other audio system settings will remain unchanged. Changing presets or any settings during the evaluation is prohibited.

Tracks 12 (Jonny) and 13 (A-test 2022) are an exception. For these tracks, the Participant has the right to specify a different volume level that, in their opinion, will better reveal the system's capabilities (higher, lower, or unchanged).

In this case, only the volume control knob or buttons are permitted. Any other methods (such as changing presets, etc.) are prohibited.

Test Tracks

Track 1. Correct connection check

A musical track, which the first only the left channel plays, then only the right (the correct connection of the left and right channels is determined), then both channels in mono mode (should sound focused in all ranges, defocused sound in all or some ranges indicates problems in the system), then channels in out of phase (sounds defocused), and finally – normal stereo.

Technical Tracks

Tracks 2-6. Position, Focus, and Soundstage Width

These tracks were created using a short fragment of musical improvisation with the sounds of a piano, cymbals and double bass.

Each of the five tracks was created from a mono recording using panning. The sound is precisely focused on the soundstage start from Left, Right, Center, Left-Center, and the last one is Right-Center positions.

Basic concepts of evaluation

The correct placement of the left and right images is considered to be their localization on the left and right, respectively.

When determining the stage width, the left and right edges are defined by the edges of the left and right sound images, respectively.

The correct location of the center image is considered to be its localization exactly in the middle between the left and right images.

The correct location of the "Left-Center" image is considered to be its localization exactly in the middle between the left and center images.

The correct location of the "Right-Center" image is considered to be its localization exactly in the middle between the center and right images.

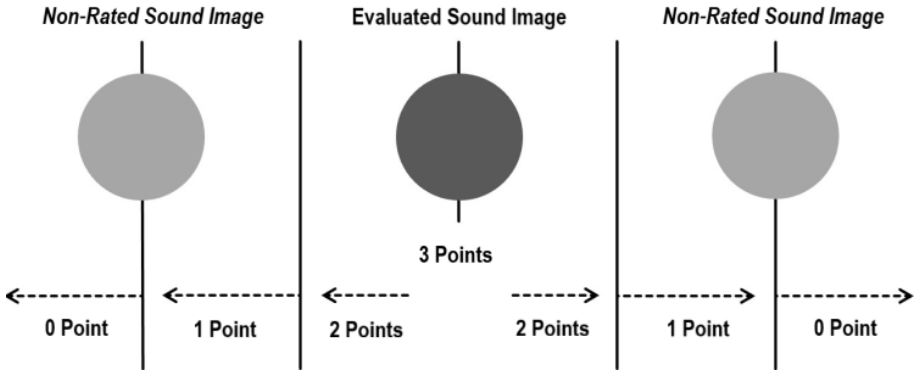


Soundstage Positions Uniformity and Focus

Position :

- 3 points are awarded if the image position is correctly.
- 2 points are awarded if the image position shift horizontally by no more than half the distance to the adjacent image.

- 1 point is awarded if the image position is shift horizontally by half the distance to the adjacent image or more, but less than to the adjacent image.
- 0 points are awarded if the image is shifted horizontally to an adjacent image or more and/or if there is multiple localization of the image with the inability to accurately determine its location on the scene.

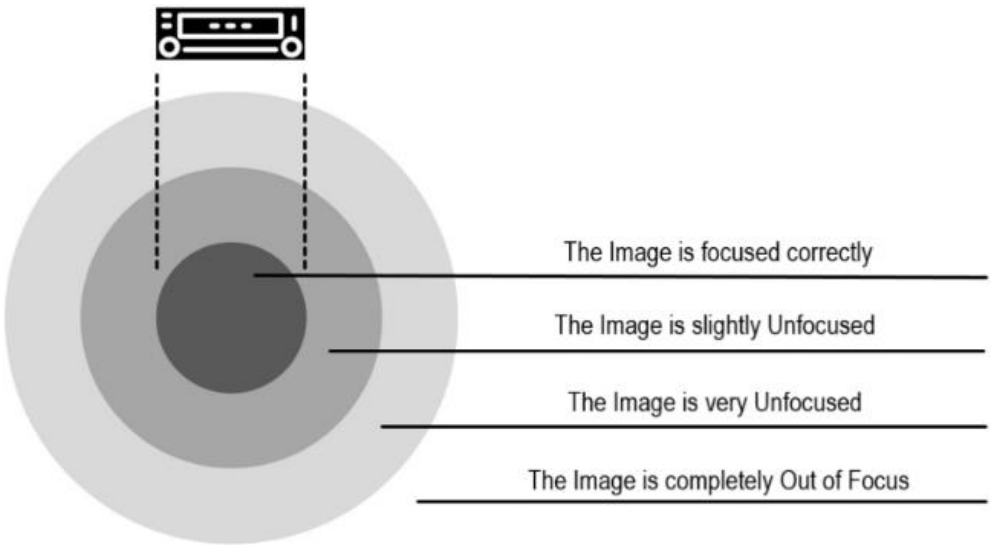


Horizontal Image Focus

- 3 points are awarded if the image is correctly focused horizontally.
- 2 points are awarded for slight horizontal defocusing of the sound image.
- 1 point is awarded if the sound image is strongly defocused horizontally.
- 0 points are assigned when the sound image is completely defocused horizontally.

Vertical Image Focus

- 3 points are awarded if the image is correctly focused vertically.
- 2 points are awarded for slight vertical defocusing of the sound image.
- 1 point is awarded if the sound image is strongly defocused vertically.
- 0 points are assigned when the sound image is completely defocused vertically.



An image is considered **to be properly focused** if sounds are perceived within the size of a standard head unit.

An image is considered **slightly out of focus** if its dimensions extend beyond a diameter equal to the width of a standard head unit, but are perceived within a diameter equal to twice the width of a standard head unit.

An image is considered to be **severely out of focus** if its dimensions extend beyond a diameter equal to twice the width of a standard head unit, but are perceived within a diameter equal to three times the width of a standard head unit.

An image is considered **completely out of focus** if its dimensions exceed a diameter equal to three times the width of a standard head unit, or if it completely loses integrity (separation of individual sounds from the main image).

Uniformity of the sound stage in height

- 2 points are awarded if the image is at the same height as the others and remains intact.
- 1 point is awarded if the image is formed slightly higher or lower than the images of other positions (the difference in height is greater than the width of the standard head unit) and remains intact.
- 0 points are awarded if the image is formed significantly higher or lower than the images of other positions (the difference in height is greater than twice the width of the standard head unit) and/or loses integrity.

Soundstage Width

Left edge of the sound stage

- 3 points are awarded if the left edge of the scene extends beyond the physical dimensions of the car.
- 2 points are awarded if the left edge of the stage is limited by the left A-pillar of the car.
- 1 point is awarded if the left edge of the stage is limited by the inner edge of the left A-pillar.
- 0 points are awarded if the left edge of the stage does not reach the left A-pillar.

Right edge of the sound stage

- 3 points are awarded if the right edge of the stage extends beyond the physical dimensions of the car.
- 2 points are awarded if the right edge of the stage is limited by the right A-pillar of the car.
- 1 point is awarded if the right edge of the stage is limited by the inner edge of the right A-pillar.
- 0 points are awarded if the right edge of the stage does not reach the right A-pillar.



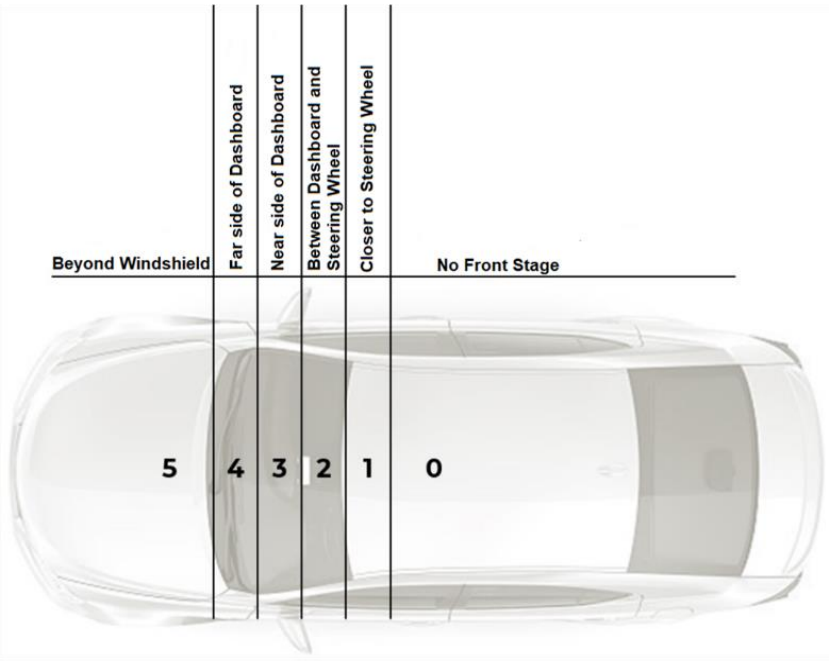
Track 7. Soundstage Distance and Depth Separation

This is the same instrumental improvisation that was used to evaluate the previous points, but in stereo format and with the addition of sound "space".

The track contains three repeating, but differently processed fragments. Each subsequent fragment should be perceived as further distance along than the previous one.

Distance to the sound stage

The distance to the soundstage is determined by the first fragment of the track, as shown in the figure below. This is the "base" score in this section, to which points for separation are added (or not added).



Separation of the sound stage into depth

It is evaluated by the difference in perception of distances to images between the first/second and second/third fragments of the track.

- If the images of the **second fragment** of the track are perceived a little further than the first (already distinguishable, but even less comparable with the transition to the next evaluation zone) and retain integrity in depth, 1 point is added to the score.
- If the images of the **second fragment** of the track are perceived significantly further than the first (comparable to the transition to the next evaluation zone in the figure above) and retain integrity in depth, 2 points are added to the score.

- If the images of the **third fragment** of the track are perceived a little further than the second (already distinguishable, but even less comparable with the transition to the next evaluation zone) and retain integrity in depth, 1 point is added to the score.
- If the images of the **third fragment** of the track are perceived significantly further than the second (comparable to the transition to the next evaluation zone in the figure above) and retain integrity in depth, 2 points are added to the score.

If the sound of the images of each subsequent fragment is simply quieter than the previous one and is **perceived at the same distance**, or the frontal scene is absent, no points are added for Depth.

Musical Tracks

Track 8. Gin-Gee

- Vocals: Alla Turovskaya
- Double bass: Dmitry Semenishchev
- Piano: Ilya Shcheklein
- Recording studio: Dobrolet, St. Petersburg
- Recording: Alexander Dokshin
- Mixing and mastering: Vladimir Tikhomirov

The idea of the track

The most natural transmission of the character of instruments and vocals with a minimum of processing, the maximum possible transmission of their character, no "cleaning" of small natural artifacts, minimal processing during track mixing.

How the track was recorded

The track was created using simultaneous multitrack recording of all the musicians. The musicians were located in separate studio spaces: the piano in the main room, and the double bass and vocals were recorded in separate, adjacent booths (the musicians could see each other but only hear each other through headphones). This classic method allows for the maximum preservation of the individuality and purity of each instrument's sound, as each performer was in ideal recording conditions.

Unlike when the musicians are together in the same room, there's no crosstalk between adjacent microphones. This means there's no need for any additional processing or cleanup during mixing—the original recording is preserved as much as possible.

The track was recorded using a luxurious, high-end Bösendorfer. Before recording, it was precisely, almost meticulously, adjusted. The piano was recorded with two main Schoeps MK5 microphones—one on the long and one on the short strings—plus a stereo pair. An additional stereo pair was set up in the hall to capture the room's response. This response can be heard very clearly if you focus on the piano's sound. In the finished track, the piano sounds expansive “covering a wide area”, spanning almost the entire soundstage.

The double bass was recorded using two tracks. The first microphone, a Neumann U89i, was positioned a short distance in front of the instrument's body and was primarily responsible for the "fill"—the bass component and the lower midrange. Another pickup, mounted directly on the instrument, allowed for a more detailed recording of the strings and the character of the attack.
The vocals were recorded with a single Goodfly GF 67 microphone, and the singer added a shaker to one of the takes. However, its level was slightly higher than desired, so the take without the shaker was used as a base, and the shaker was then recorded separately.

Since the piano was recorded in a hall with natural reverberation, and the double bass and vocals were recorded in isolated boxes, a hall effect was very carefully added to them during mixing to avoid dissonance, and the tracks blended organically into the overall composition.

The instruments and vocals on this track are beautifully balanced, with neither instrument dominating nor overshadowing. The sound is smooth, without pressure or unnecessary emphasis. The performance is calm but not boring, rich in subtle details, and the composition feels cohesive.

Sound quality assessment "markers"

- Vocals and Shaker
- Piano
- Double Bass
- Balance and Musical Atmosphere

Vocals and Shaker

Character Reflection. This is the velvety, timbrally beautiful voice of a young but accomplished performer in the prime of her vocal talent. Not a schoolgirl, not an older woman. It shouldn't become thinner or lose its body, or, conversely, heavier, for example, by emphasizing guttural notes, adding boominess, or losing upper overtones.

Naturalness of perception. The voice is recorded in great detail, and a good system creates a very realistic impression, as if the performer is actually right next to you. When evaluating the track, try to understand whether the vocals are perceived as such, or whether they lack the detail of a live performance. The vocalist should sing, not just mouth the words.

Balance. Ensure the vocals are uniform throughout the track. System problems in the midrange can lead to harsh "shouting" or the exaggeration of individual notes and sounds, such as excessive emphasis on drawn-out vowels like "o," "a," and so on. Or, conversely, to dips, which also creates a sense of unevenness.

Sibilants. Pay attention to the sound of the sibilant sounds "ts," "s," "sh," "shch," and "z." They should be perceived as natural, coherent, not "shot out," and certainly not become harsh, "metallic," or abrupt, or, conversely, disappear from the vocals altogether.

Image Formation. A recording allows a good system to clearly depict vocals as an independent image, formed holographically, three-dimensionally, tangibly, and perceived somewhat closer than the piano and double bass. If the vocals are "smeared" in space, sounding "from the piano," or perceived "inside" the double bass, this is a sign of problems with the system and a reason to lower the rating.

Image stability. Monitor the vocals' position in the soundstage—it must be stable. Problems with the tonal balance between the right and left sides can result in the vocalist "moving" across the stage, abrupt changes in image size, or individual sounds "shooting off" to the right or left during the track, even leading to multiple localization, where the vocals may briefly "disintegrate" into several images.

Shaker. It enters at 57 seconds into the track, subtly complementing the rhythmic pattern of the composition and is clearly audible throughout. It fades slightly into the background (but does not disappear) during the section where the double bass begins to solo, around 3:36, and "returns" to the microphone at 4:10, along with the vocalist. The recording carefully conveys the structure of this seemingly simple instrument—the sound of the seeds sifting inside the body is clearly audible. This is not a repetitive sample; the shaker is played by a live person, and a good system makes it easy to understand the manner of their playing. The instrument should not degenerate into a uniform rhythmic hiss or clicking sound.

A Grand Piano.

The character of the instrument. Can you imagine, when listening to it, a real instrument with a fairly heavy and rigid lacquered wooden body with strings stretched across it? A grand piano shouldn't feel like it's made of glass or metal, or even like some kind of synthesizer.

Solidity. Consider the instrument's overall size. A concert grand piano is a large, heavy instrument with a powerful, solid sound. It shouldn't feel like a small baby grand or an upright piano. However, be careful that this solidity doesn't degenerate into a boomy sound.

Image Integration. Throughout the track, pay attention to the Piano's size. On the one hand, the piano is a large instrument, and it's recorded in such a way that it has a fairly wide image, and it's normal for individual notes to be perceived from different points on the stage. However, it should be perceived as a whole, not broken into separate "chunks" and unrelated sounds.

Balance. Play the piano calmly, evenly, and confidently. Avoid aggression or any pressure. Ensure that the instrument continues throughout the track without "shooting" or, conversely, missing individual notes or excessive accents.

Initial attack. Pay special attention to the transmission of initial attack moments in the piano's sound. Sound is produced by striking wooden hammers on taut strings. The hammers themselves, although made of hard wood, have a thin felt covering. Excessive sluggishness of the system or, conversely, harshness and unnecessary transient processes all lead to a loss of natural attack—a "viscous" sound (as if the hammers have an overly thick and soft covering) or, conversely, excessive hardness and sharpness (as if the hammers are uncovered or, for example, made of metal or other resonant materials). Simply keep in mind the principle of sound production itself to evaluate how adequately the system conveys the attack.

Decays. The Piano's lid is open, allowing for a rich timbre with much longer decays than with the lid closed. This should be clearly felt. The decays don't end abruptly, but rather stretch out and fade very smoothly. The change in decay character is clearly felt when pressing the pedal. This, to a certain extent, helps better visualize the instrument's dimensions and its contribution to the overall musical space.

Double bass.

Pressure. The instrument was recorded with the intention of conveying the weight and massiveness of this instrument. However, its sound is free of boominess and overtly muddy low-frequency hum; the bass is defined and elastic. This combination of massiveness and elasticity makes the track very difficult to reproduce, but this is exactly the sound we heard in the control room of the recording studio and later, during mixing. Boominess or, conversely, "exhaustion" of the instrument is a sign, at a minimum, of tonal imbalances in the system.

Texture Reproduction. The sound is elastic, vibrant, without dullness or abrupt decays. Ideally, one could even identify the distinctive feature of this instrument—

the unvarnished body. The system shouldn't muddy this rich texture and simply reproduce a set of buzzing sounds of varying tonalities.

Balance. Double bass playing is calm and even, without sharp fluctuations in intensity. Emphasis, pressure, or emphasis on individual notes, even to the point of "separating" them from the overall musical picture, or, conversely, note gaps, indicate problems in the low frequency range.

Image Formation. Notice how the double bass's sonic image is portrayed in the soundstage. In a good system, it is spatially stable throughout the entire track, including the solo. It doesn't float across the soundstage, doesn't expand to fill the entire room, and you don't feel like you're inside the instrument. The opposite situation, however, is when the double bass is perceived as too "dried out," with a reduced or even completely lost body—this is also unacceptable.

Integrity. Evaluate the projection of individual notes toward the speakers and subwoofer. The instrument should be perceived not only as stable in space, but also as a cohesive whole.

Balance and Musical Atmosphere

Musical balance. Note the overall balance between the instruments and vocals. As the track progresses, the emphasis between them shifts slightly, but this is a matter of performance style rather than the nature of the sound—in certain sections, the piano or double bass simply takes center stage. However, the instruments and vocals do not dominate each other.

Tonal balance. A bias in the overall tonal balance, for example, toward the bass, can lead to the double bass drawing excessive attention to itself and "overpowering" the adjacent vocal and piano ranges, accentuating the low notes of both. Conversely, a lack of bass leads to it being relegated to secondary roles. And unevenness in the midrange can lead to "pressure" on individual notes. Maintain musical balance throughout the composition; a good system maintains it even in sections where the piano (starting around 2:16) and double bass (starting around 3:36) begin to lead the musical composition.

Musical ambience.

Volume. Note the overall spatialization. The fundamental tone here was set by the piano recording—in the hall, capturing the actual room response. Does the system convey a sense of the hall's size? The loss of microdynamics, the early cutoff of decaying sounds, the system's obliteration of the room's reverberations—all of this can lead to a simplification, a loss of the sense of spatialization. Or, even worse, as if it were simply broadcast on the radio. The opposite situation can also occur, with spatial sounds beginning to create a ringing sensation, leading to distortion and overload, which is also unacceptable.

Character of the recording. In the description of this track, we indicated that the take chosen featured a piano recording in the hall, with the vocals and double bass in separate boxes. The pinnacle of performance is when the system can distinguish

the real response of the room where the piano was located from the hall effect artificially added during mixing for the vocals and double bass.

Microdynamics. The recording is rich in micro-details and quiet sounds that create a sense of the reality of the musical space. For example, the low-frequency tapping of the piano pedals, accidentally captured on the recording, the vocalist's distinct inhalation at the beginning of the track, the sounds of her breathing throughout the performance, the clarity and "intimacy" of the vocalist's whispered count at 54 seconds, the sounds of her fingers moving across the strings of the double bass, which are especially clearly audible during his solo, the occasional brushes of the bow against the body near the end of the track before he draws it across the strings, and so on. Despite the fact that all of these sounds are quite quiet, they should not just be faintly audible, but clearly audible, and certainly should not be washed out or completely lost during playback.

Inconsistency with the track's concept. If, during the evaluation, the Arbiter notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 9. Ain't No Sunshine

- Guitar, vocals: Tigran Tuniyev
- Bass guitar: Sergey Korolev
- Percussion: Oleg Smirnov
- Drums: Sergey Stukov
- Recording studio: "Kuznitsa", Tver
- Recording: Vladimir Tikhomirov
- Mixing and mastering: Vladimir Tikhomirov

The idea of the track

Creating a sense of presence during a performance, maximizing the intimate atmosphere of a house concert. Recording is entirely acoustic, with no "cleaning" of random natural artifacts.

How the track was recorded

Unlike the jazz track "Gin-Gee," this track was recorded using a completely different principle: the musicians not only played together and simultaneously, but, crucially, were in a shared space with a clear area of approximately 20 square meters. And, crucially, the entire track was recorded exclusively with microphones—from vocals to guitars (microphones in front of the amps); not a single instrument was recorded line-in.

Visual contact between musicians, firstly, enhances the emotional intensity of the performance itself. Secondly, the very principle of acoustic recording, with crosstalk

between adjacent instruments and microphones, on a good sound system, creates the effect of being right there with the performers, engaging in the process itself.

Additionally, a separate stereo pair was used to capture the room's response and use it during mixing to create a truly lively, natural, and non-synthetic room effect. There are no synthesized effects at all, and minimal compression was used during mixing.

A high-quality Beyerdynamic microphone was used to record the vocals. An alternative was to record the vocals separately in a box and then overdub them. However, this proved less appealing, both in terms of listening pleasure and in terms of its suitability for evaluating the sound of the audio system (it didn't create a sense of presence).
The drum kit was recorded using 15 microphones. The Olympic bass track was recorded with a microphone placed in front of a MarkBass amp. The Gibson electric guitar was recorded similarly, using a Yerasov tube guitar amp and a Celestion amp with four 12-inch speakers. The percussion instruments were also recorded with their own microphones—in this particular case, the shaker and darbuka are featured on the track.

Sound quality assessment " markers"

- Musical space
- Vocals
- Bass guitar and electric guitar
- Drum kit and percussion

Musical Space.
Contrast with the previous track. Unlike the track "Gin-Gee," this is a completely different studio and recording method. Notice from the very first seconds how clearly this contrast is felt? Does a good system immediately transport you to a different musical space. Or does it not, creating the feeling of simply changing the track on the radio? If you're already in this atmosphere from the very first seconds, that's great. If it takes you a while to understand and experience the differences in the very recording method of this track, it's clear that the system isn't conveying the full richness of the musical atmosphere.

Integrity of perception. The track is recorded and mixed in such a way as to create the intimate and cozy atmosphere of a "house concert." Is there a sense of being in the same room with the musicians, or is it simply a collection of disjointed instruments and vocals?

Room dimensions. The track was recorded in a small studio space of about 20 square meters, not boomy but not overly muffled either. The sound had to convey this, without becoming flat or, conversely, turning the studio room into a large hall.

Amplifier noise. A system with good resolution always makes it clear that the track was recorded exclusively with microphones, with no instruments recorded "line-in."

One clear indicator is the presence of a slight amp noise. If the system conveys the track too "refined," losing this quality, it's grounds for a lower rating.

Stability of instrument images. As the track progresses, pay attention to the sizes and positions of the instruments' sound images in space. They shouldn't move or change size, for example, when playing different notes or varying the intensity of their playing.

Vocal image stability. Separately evaluate the vocal stability in space. It shouldn't change when hitting different notes—stretching out or shrinking to a point. And especially, it shouldn't shift from side to side, split, or "shoot" individual sounds toward the speakers.

Vocals.

Character Reflection. The voice is recorded openly, with just a hint of emphasis, but not harshly or shrilly, nor does it overpower the other instruments. It should be full-bodied, lively, and easy to imagine. If the impression is created of being muffled and lacking in lightness, or, conversely, the voice loses its solidity, acquires overtones such as ringing, harshness, or a general shrillness—all these are signs of problems in the system.

Performance Character. Note that the vocalist has a slightly nasal delivery. On good systems and in the studio, this is barely noticeable and comes across as natural. However, during the production of this track on low-end systems (so-called "shift control"), an interesting characteristic was discovered: this delivery transformed from light and natural into a downright nasal quality. A good system should prevent this.

Clarity of Sound. While monitoring the track in the studio (including through various channels) and on various types of real audio systems, a characteristic was observed: the appearance of artifacts perceived as vocal overload. This occurs for various reasons, from a lack of resolution in the analog section to problems in the digital section. Vocals should sound clear throughout the entire track.

Balance. Ensure the vocals are even throughout the song. They shouldn't "shoot out" or, conversely, "swallow" individual notes.

Sibilants. Pay attention to the sound of sibilants and hissing sounds in the vocals. They should not be separated from the voice, exist independently, become "metallic," "glassy," etc. And at the same time, they should not disappear from the voice completely.

Bass Guitar.

Clarity. At the very beginning of the track, pay attention to the sound of the electric guitar and bass guitar. They should be perceived separately; the low notes of the electric guitar should not merge with the bass guitar.

Balance. Note the bass guitar's sound throughout the track (including the section where it plays solo from 1:10 to 1:32). It plays smoothly, quietly, without stress or highlighting individual notes. Low-frequency issues can lead to accentuation or, conversely, the disappearance of individual notes, creating an uneven sound.

Texture Reproduction. Pay attention to the texture and the very character of the bass guitar. It shouldn't boom, become "viscous," or "fat," or "spread out." At the same time, it shouldn't sound "dry," "thin," or lose its low-frequency solidity.

Balance. Throughout the track, the electric guitar plays unobtrusively and evenly, never dominating or intruding into the most prominent. If at certain moments, for example, when playing certain notes, it begins to draw attention to itself, this indicates problems with the system in this range.

Electric Guitar.
Solo. Consider the sound of the electric guitar as it begins its solo at 43 seconds. There shouldn't be any shrill sounds that "fly out" from the overall musical pattern; it should be consistent.

Percussion.
Shaker. Pay attention to the sound of the shaker. It doesn't overpower the rest of the instruments, but it's clearly visible and doesn't get lost behind the other instruments.
Darbuka. Around the 45-second mark, the darbuka (a small goblet-shaped drum) appears in the composition. It starts quietly, becomes more prominent during the bass guitar solo, but remains clearly audible, even when its strikes coincide with the snare drum strikes.

Drum kit.
Visualization. How is the drum kit perceived throughout the track? It's recorded in sufficient detail, the drum hits are distinct, and make it easy to "visualize"—i.e., imagine, "see"—the instrument—not just the drumhead, but also the body of each drum, complete with strings and springs. Does the system convey this?

Attack. Note the character of the strikes—they have a sharp, crisp attack. The moment of impact and the subsequent decay are seamless, not perceived as separate. The decays themselves are spatially consistent; cutting them off too abruptly results in a loss of visualization and volume, and the drum kit's soundscape becomes flat.

Bass drum. Pay attention to the bass drum. It shouldn't become cardboard or synthetic; each hit should be tight and clearly audible, not blending in with the bass guitar.

Cymbals. Remember, they're part of the drum kit; they shouldn't be too loud, too prevalent, or too dominant, but they also shouldn't become too muffled, falling out of the musical flow. How is their character perceived? They shouldn't lose their

natural "body," become thinner, or even turn into "plastic cups in the cold," or, conversely, be perceived as too "heavy."

Inconsistency with the track's concept. If, during the evaluation, the Arbiter notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 10. Drums Solo

- Drums: Sergey Stukov
- Recording studio: "Kuznitsa", Tver
- Recording: Vladimir Tikhomirov
- Mixing and mastering: Vladimir Tikhomirov

The idea of the track

The primary focus is on sound dynamics, striking energy, and adequate attack transmission. At the same time, it's important not to overlook the many details that enable the system to recreate the feel of a real drum kit and "draw" it in space.
How the track was recorded

This is the same drum kit, in the same room, where "Ain't No Sunshine" was recorded. But while there it was just part of the musical performance, here all the attention is on it.

The original material for this track was performed by Sergei Stukov, a legendary drummer with extensive musical experience who has contributed to numerous albums, including a close collaboration with the band Sinyaya Ptitsa (Blue Bird) since 2004. For the evaluation disc, the track was spliced together from several excerpts of his solo performance.

The quality of the playing (maintaining rhythm, consistent force, and precision) allowed for minimal intervention during mixing. During the track's preparation, minimal compression was used to preserve the natural attack, dynamic range, and liveliness of this instrument.

The track was recorded using 16 (!) microphones. Fifteen of these were positioned in close proximity to each element of the setup, plus a stereo pair that captured the room's response.

This approach allowed us not only to capture the instrument's sound in as much detail as possible and create a coherent picture of its sound, but also to recreate the atmosphere of the room in which it was located – one of the studio's rooms, approximately 20 square meters in area, with appropriate acoustic treatment, designed for recording small musical groups.

During the recording and mixing of the track, only the minimum necessary compression was applied in order to preserve the natural rate of fire, energy, attack and musical pressure inherent in this instrument.

The musician plays with heavy 7B drumsticks. The track is mixed in such a way that the instrument is clearly "visualized" in the space in front of you. Each component element—whether a drum or a cymbal—has its own size and volume and is positioned precisely in the soundstage. You literally "see" them, and their position remains constant throughout the track. This is despite the track being intentionally recorded inconsistently—the musician changes tempo and playing style several times during the recording.

The system's high resolution only aids this "visualization." For example, the sound of each drum is composed of a multitude of sounds, including vibrations of the head, shell, snare wires, and so on. Some of these contribute to the overall impression, while others complement and enrich the sound. Although our hearing masks quiet sounds behind loud ones and sometimes prevents us from clearly identifying them, the presence of microsounds nonetheless significantly influences perception, allowing us not only to imagine the instrument but also to literally create the effect of actually being there, right in the same room as the kit itself.

Sound quality assessment "markers"

- Energetic of Sound
- Snare Drum, Toms, Bass Drum
- Cymbal Detail & Accuracy
- Space & Dimensions

Energetic of Sound.

Impact density. Pay attention to the character of the strikes. The instrument actually produces quite a dense, noticeable impact when you're close to it, and the recording conveys this character. The system shouldn't turn the bass drum into a cardboard box, making the strikes viscous and sluggish. They should feel clear, focused, and solid, even at medium volume.

Low frequency range. Note the tightness and clarity in the low frequency range. A lack of control typically results in a weak and washed-out bass, which begins to mask other frequencies and "collapse" macrodynamics, resulting in a loss of clarity and possibly a boomy sound.

Stroke quality. The musician plays with fairly heavy 7B sticks. There shouldn't be a sense of playing with light sticks or, for example, a feeling of playing with soft-tipped timpani sticks, etc.

Separation. Each element of the kit—snare, toms, cymbals—should be clearly visible no matter how you play; they shouldn't blend or interfere with each other. Hits that follow one another shouldn't blend or mask each other.

Attack. A drum kit is an instrument that produces a virtually instantaneous signal buildup. A good system should transmit hits to each element of the kit clearly, quickly, and with a powerful impact. If the system exhibits a weak attack, it creates the sensation of a "towel draped over" the head, a "lazy" drummer barely touching the drumsticks. It's important to understand that all elements of the drum contribute to the sound of the strike—the head, the shell, the taut strings, and the springs. The attack shouldn't be perceived as a dry, synthesized click, but rather as the sound of a real instrument.

Snare Drum, Toms, Bass Drum.

Snare Drum Character. Does the system accurately represent the snare drum? The vibration of the head, the sound of the taut strings and springs, and the characteristic resonances of the shell should be clearly felt. If the system doesn't create a sense of reality, but rather the sensation of striking a cardboard box, a saucepan, etc., this is clearly a flaw. Note how detailed the drum hits are. For example, a clear point: between seconds 26 and 29, a distinct drum roll is heard, not a typical drum hit.

Toms character. Toms are the larger drums in the kit, and they should be perceived as such. The principle is the same: pay attention to whether the system allows them to be represented. There should be no "cardboard" or "pot-like" sound, no reduction in size or, conversely, bloat. Toms are different, and they should also be tonally distinct; they shouldn't sound identical. Pay special attention to any boominess in the midbass range.

Drum character. The recording featured a studio drum kit with a kick drum without a backing and a partially damped shell. This resulted in very tight and solid hits, without any smearing, low-end boom, stretched-out low-end, or, conversely, any dullness or the sound of the kick drum turning into a cardboard box. Note the section where the performer begins playing triplets at 1:06 – the kick drum hits become triple hits. They shouldn't be lost or blend together. Poor hit clarity indicates problems with the system.

Decay. Pay attention to the decay after hitting the snare drum and toms. The sound shouldn't cut out, turn into dry clicks, or, conversely, become boomy.

Integrity. The moment of impact itself, with its instantaneous increase in amplitude and the subsequent decay, are distinct phases of the same event; they should not be separated or perceived separately. A sharp, synthetic "shooting" of the impact, with its separation from the rest of the kit's sounds, is no less detrimental to the instrument's realism than sluggishness and a lack of rapidity.

Cymbals.

Body, weight. Although the main energy of cymbals lies in the high frequencies, their sound occupies a fairly broad spectrum, extending into the midrange and even partially into the midbass. They shouldn't sound too light, thin, or delicate, but they shouldn't be too heavy either.

Character. Cymbals should be recognizable; the system should allow you to easily imagine them while listening. "Copper" shouldn't turn into glass, lead, or "plastic cups in the cold." Their sound shouldn't be "gritty," "crushed," hissing, or whistling.

Strike difference. Each cymbal has its own weight and size, and as the track progresses, strikes on the edge or body of the cymbal are clearly visible (the dome strike is particularly telling at 1:07). The difference between open and closed strikes is clearly discernible. How well does the system convey this? Or are the cymbal strikes similar to each other?

Integrity. The moment of impact itself, with its instantaneous increase in amplitude and subsequent decay, are different phases of the same event; they should not be separated or perceived separately.

Decays. Pay particular attention to how the system conveys the decays of open hits. They shouldn't cut off too early, creating a sense of muffled sound. One characteristic moment is the transition from one fragment to another at 0:39-0:41. During the transition, the decays shouldn't disappear; they flow harmoniously into the next fragment. Overall, throughout the track, the cymbal decays are long enough that they barely disappear, but harmoniously complement the soundstage without merging into a single high-frequency mess. They sound light, transparent, and unobtrusive.

Space and Dimensions.

Ambience. Pay attention to the space around the instrument, how it exists within it. It was recorded in a small room, the room response was captured with a separate stereo pair, and the recording was mixed in a way that allows for a clear sense of this. The space shouldn't be compressed into a flat plane and lose depth, or, conversely, transformed into a large hall. The "tails" of space on the bass drum and snare drum are particularly clearly audible.

Spatial position. Although the drum kit takes up a significant portion of the stereo image, it should feel as if it's right in front of you, not inside it. Sounds shouldn't be coming from all directions, you shouldn't be inside the bass drum, cymbals shouldn't be ringing all around you, etc. Conversely, the kit shouldn't feel far away or seem diminished in size.

Instrument integrity. The recording is made in such a way that you can literally "see" the drum kit in front of you. How well does the system convey this? Can you "see" the placement of the snare, toms, and cymbals? At the same time, pay attention to the integrity of the kit; does it disintegrate, and does each sound exist separately? Or, conversely, does everything merge into a single sound cloud, which also prevents you from visualizing the instrument?

Instrument Consistency. The musician changes his playing style several times throughout the track. But it's important to remember that the track is composed from a long solo recorded in one take. Each transition shouldn't give the impression

of playing on different drum kits, with different arrangements of their elements, or, worse, with a change of them.

Coherent. Accurate reproduction of the instruments sound into a room space through speaker system deserves additional points. A good system creates a coherent sound field rather than spreading sounds throughout the cabin.

Balance. Evaluate the balance between the drum kit elements—the snare, toms, and cymbals. None should dominate or overpower the rest, nor should any of them become lost or relegated to the background. The track is mixed in such a way as to maintain balance between all elements of the kit.
Beware of Excessive "bloat" in the low frequencies or, conversely, a loss of solidity and exhaustion, or cymbals that are overly prominent or, conversely, "receding" into the background—all of these can be the result of a tonal imbalance, and this could result in a lower score.

Inconsistency with the track's concept. If, during the evaluation, the Arbiter notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 11. Let It Snow

- Tver Municipal Orchestra, directed by Pavel Smirnov
- Recording studio: "Kuznitsa", Tver
- Recording: Vladimir Tikhomirov
- Mixing and mastering: Vladimir Tikhomirov

The idea of the track

The presence of a large number of instruments in the track, each with its own recognizable character, while maintaining their equality to create the most uniform musical picture.

How the track was recorded

When creating the track "Let It Snow", the instruments were recorded sequentially in groups and then mixed into a single composition.

This principle of not just separate but sequential recording is very often used in studios, especially if a composition contains a large number of instruments. One of the distinctive features of this method is a more refined sound. The track is virtually free of artifacts not directly related to the sound of the instruments themselves. Among other things, the ability of an audio system to convey the differences in recording methods is also one of the criteria for evaluating an audio system.

The wind instruments are used as the main instruments creating the musical texture, and their choice was deliberate. Trumpets (trumpet), flutes, clarinets, trombones, alto saxophone, tenor saxophone, and baritone saxophone are present. The distinctive timbres are moderately bright, yet the sound is warm and vibrant. There's no shrillness or ear-piercing ringing that can detract from the naturalness of the experience, or, conversely, a "blurred" or "viscous" sound that can detract from the instruments' distinctive qualities. The track is recorded in a way that demonstrates good separation; the instruments don't blend into a single sonic "mass."

The drum kit is also indicative—it sets the rhythm of the composition and complements the sound of the brass instruments, never getting lost or overpowering them. It's recorded in detail, making it easy to "visualize" the instrument.

The recording features bass guitar, electric guitar, and electric piano. These are sampled sounds, so there's no need to look for naturalness in them; their sound simply complements the overall composition. However, these instruments should be clearly visible in the overall soundscape. They shouldn't disappear or, conversely, overshadow the brass instruments.

The system's lack of speed and energy, along with its weak detail, blurs the instrumental textures and simplifies the sound. Tonal imbalances, various resonance phenomena, nonlinearities, and dynamic distortions lead to significant losses in the naturalness of this track's perception. Listening to it on such a system can be compared, in some ways, to looking at a poorly reproduced painting versus contemplating the richly detailed original.

Sound quality assessment "markers"

- Musical Resolution
- Wind instruments
- Drum kit

Musical Resolution.

Contrast with the previous track. While not immediately obvious, a great indicator of a system's resolution is the difference in the sonic "atmosphere" created by a track due to the completely different recording methods. From the very first seconds, notice how distinctly different it is from the previous track. A good system immediately transports you to a completely different soundscape. If you find yourself repeatedly experiencing the sensation of simply changing tracks on the radio, this is a compelling reason to lower your score.

Initial count. In the first seconds of a track, when the drummer taps his sticks, he's also counting, and a high-resolution system doesn't obscure this. If this count isn't audible, it may indicate a lack of microdynamics or other factors that prevent the track's quieter details from being conveyed.

Space. From the first seconds of the track, a distinct sense of space is audible. It's an artificial reverb, but the decay matches that of a large hall. This feeling shouldn't

fade throughout the track. Reducing the system's resolution results in the sound becoming "flat," with instruments losing their reverberation and cutting off.

Fade-out at 7 seconds. A very telling moment is the fade-out at 7 seconds after the intro. The sound continues until the composition resumes at 10 seconds. Complete silence in the pause or an early "cut-off" of the fading sound indicates, among other things, a lack of resolution, with a loss of quiet sounds.

Amp noise in the pause at 7 seconds. A very difficult marker, which only the highest-resolution systems can detect—the characteristic amp noise. Without it, the system definitely doesn't deserve a top score in this group of markers.

Clarity of secondary instruments. Pay attention to the system's ability to convey secondary instruments and their stability in space. There's no need to look for naturalness in them in this track, but they should nevertheless be recognizable and not "float" across the stage, blend, or be completely lost. The bass guitar doesn't extend too far down, but supports the rhythmic structure of the track, gently filling the low frequencies. It is well defined and has its own texture, without devolving into a collection of synthetizer instruments of varying pitches. The electric guitar and piano play in the same key for most of the track, but are still easily discernible within the overall musical pattern. If, while listening to the system, you are unable to hear the playing of some or even all of the secondary instruments, this is one sign of insufficient resolution.

Wind Instruments.

Musical Balance. Despite the varying character of the wind instruments present in the track, the overall sound should be perceived as balanced, without any instruments clearly dominating others. An imbalance can manifest itself throughout the track, as well as in the form of unnaturally prominent or submerged instruments.

Tonal Balance. Pay attention to the system's ability to convey the character of wind instruments without shifting the overall tonal balance in one direction or another, i.e., without making the sound "lightweight" or, conversely, too "dark" or "muffled." Pay attention to accents and dips in certain frequency ranges that distort the tonal and timbral character of wind instruments (sonority, shrillness, loss of body or excess of it, emphasis or concealment of individual notes, etc.).

Separation. Instruments shouldn't sound like a mixture; they should be clearly and distinctly heard throughout the track—both during quiet sections and during louder, more active sections. If groups of instruments at certain moments degenerate into an Unclear "blending of sound," this indicates a problem with the system. A simple example: from 1:51 to 2:01, a second saxophone, playing from the left, joins the solo saxophone, slightly widening the stereo panorama and adding impact. Separation between these two instruments is an excellent indicator. If this section sounds like only one saxophone is playing, this indicates a problem with the system.

Recognizability. Pay attention to the recognizability of wind instruments so you can clearly identify each one. A good system should easily reflect the texture of

these instruments, without overly "smoothing" them, losing their characteristic "brass" vibrations, or exaggerating their features, making them sound synthetic or artificial.

Baritone saxophone. Note the sound of the wind instruments in the bass range. The baritone saxophone at 57 seconds into the track is particularly telling. This section is recorded in such a way that the instrument is not only recognizable but also literally "tangible" and certainly doesn't blend in with the bass guitar. A good system creates a vivid impression, as if you could literally reach out and touch it.

Drum kit.

Detail. The drum kit has a detailed sound, the strokes are well separated and certainly not blended. A good system displays them in detail, and at certain moments the overtones of the strings and drum springs are clearly audible. It's easy to imagine the size of this instrument (it shouldn't be oversized or, conversely, "toy-like") and the playing style, right down to subtle imperfections like hitting different areas of the head.

Spatial stability. The drum kit has a fixed place in the overall soundscape; it shouldn't move, lose its coherence, or disperse into individual sounds, or fade into the background at certain moments or suddenly move closer.

Cymbals, balance. The cymbals are recorded so that they have a light sound and harmoniously complement the other instruments in the high frequency range. They should not be emphasized or overpowered, separating them from the rest of the drum kit (as can happen, for example, if the high frequency range is boosted excessively), but they should also not be "thinned out" or, for example, become too dull.

Cymbal character. Pay attention to the cymbal character itself – they should be perceived vividly in the overall musical picture, not become synthetic, turning into "chewed foil," "plastic cups in the cold," etc. The system should allow one to distinguish and understand where and which instrument comes in, when they are played together and when separately. Cymbals are crisp, with a more "jazz" sound. The hi-hat is "drier," with open and closed strokes. The stroke types should vary. Particular attention is paid to the fusion of the sound; the strike and subsequent decay are not separate sounds, but belong to a single instrument.

Rim strikes. A telling moment is at 1:36 and beyond—a few rim strikes. The track gives a fairly clear idea of the character of these sounds, but the smeared attack or, conversely, the unnatural ringing inherent to the system make it impossible to imagine a real instrument at this point.

Inconsistency with the track's concept. If, during the evaluation, the Arbiter notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 12. Jonny

- Vocals, guitar: Dmitry Burenin (Band "613")
- Guitar: Roman Shatokhin (Band "613")
- Bass guitar: Sergey Shein (Band "613")
- Drums: Yuri Andreev (Band "613")
- Recording studio: Dobrolet, St. Petersburg
- Recording: Alexander Dokshin
- Mixing and mastering: Alexey Bazanovich

The idea of the track

Many people understand an audio system's resolution simply as its ability to reproduce quiet sounds with detail and accuracy. But this is only a partial understanding of the term. In reality, it's closely linked to the energy of the sound, the system's ability to maintain clarity and avoid muddying the sounds, even during loud passages when all audio components are under pressure. And rock is the most illustrative genre for this.

How the track was recorded

The musicians recorded the track in several stages. First, the core of the track was played live—drums, bass guitar, and two guitars played together.

The drum kit was recorded acoustically using 16 microphones, including a stereo pair positioned 1.5 meters from the kit and two room microphones.

The two guitars were recorded using different methods. One was recorded directly through a Fractal FM3 guitar effects processor. The other was recorded acoustically. The signal was fed to a Soldano guitar amp and a Marshall cabinet, both housed in a separate, isolated box. The sound was captured with two microphones—a ribbon and a dynamic—on two tracks, respectively. Both were used during mixing to balance the warmth and brightness of the sound.

The bass guitar was also recorded acoustically—a tube guitar amp with a Fender Bassman cabinet was installed in a separate box, with microphones placed in front of it. This allowed for the bass guitar's characteristic powerful, growling, yet beautiful and warm sound.

After the base of the track was played, two more parts of the same guitars and vocals were additionally recorded.

All tracks (except for the room tracks) were initially recorded in the studio without compression—any necessary processing was performed exclusively during mixing and mastering. However, excessive compression was not necessary; the abundance of instruments, the musical character of the composition itself, and the powerful

drumming style of the drummer resulted in a track that perfectly matches the original concept.

Sound quality assessment "markers"

- Bass guitar, electric guitars and vocals
- Drum kit
- Listening pleasure

Bass Guitar.

Tonal Balance. Notice how solid the bass guitar is in the low-frequency range; does it become too light in sound, or does it start to get lost behind other instruments? Or, conversely, does the system begin to overly "heavy" it, emphasizing the low-frequency range and thereby making the sound "viscous" and "thick"?

Character Reflection. Recording acoustically through a tube amp produced a rich, growling, yet warm and velvety sound. It shouldn't boom or smooth out, and the instrument's texture shouldn't blur. Conversely, its growl shouldn't become harsh and abrupt, as if the audio system itself is overloaded; it shouldn't lose its characteristic warmth. Long notes are drawn-out, not having time to fade away before the musician cuts them off.

Integrity. Even though the fundamental tones are in the lower frequencies, the instrument sounds across a very broad frequency spectrum. Notice how cohesive it sounds? Is there any separation of higher-frequency sounds (which create that "growl" character) or sounds characteristic of plucking?

Electric guitars.

Aggression. A telling moment: at 12 seconds, the transition from the intro to a more assertive playing style occurs. At this point, the system should "open up," not roll in with a chaotic mass of sound and make you want to turn down the volume.

Tonal Character. Pay attention to the tonal and timbral characteristics of the guitars. They are bold enough, but not shrill or ringing; they shouldn't "pierce your ears" with isolated, piercing sounds. At the same time, they shouldn't sound "soapy" or "exhausted." Notice how they sound in quieter or more aggressive sections of the track.

Clarity of Different Recording Methods. When listening, remember that the track contains guitars recorded in two ways: acoustically and directly through a guitar processor. Try to hear if the system detects differences in their character.

Separation. The instruments are recorded rather complexly, with each guitar on multiple tracks, but that's the key to this track—the combined sound shouldn't blur into a muddy mess; the guitars should sound spacious and open.

Vocals and backing vocals. The track is composed in such a way that the vocals are clearly centered, not recessed or obscured by other instruments. During the

chorus, when backing vocals appear, they appear only at the edges, thus complementing the stereo image; the voices are clearly and distinctly heard at these moments. A combination of reverb and delay can be heard in the choruses and at the end of the track. This technique is used to add a special drama, like the echo of a large canyon, on the edge of which the vocalist stands.

Drum kit.

Initial Countdown. Right at the beginning of the track, pay attention to the sounds of the drumsticks. Does the system reproduce them as the sound of real wooden drumsticks, or are they strange clicks whose origin is difficult to determine?

Bass drum. The bass drum is recorded tightly and powerfully, setting the rhythm of the entire composition. A lack of energy in the system results in it receding into the background, getting lost in the other sounds, becoming cardboard-like, and losing the tactility of the strikes. At the same time, be careful that it doesn't become too boomy or overshadow the other instruments.

Drums and toms. They sound crisp and punchy. The musician plays with emotion, sharply, aggressively, and not just lightly grazing the drumheads with sticks; the hits aren't lost or masked by other sounds. Does the system convey all this emotion? "Boobs" is a code word for checking attention, whether anyone has read this far. Drum hits turning into ringing clicks, or, conversely, their muffled quality, losing their characteristic attack, or the loss of the characteristic decay after the moment of impact—all these are signs of problems with the system.

Cymbals Dynamic Control. They shouldn't blend together and turn into a continuous hiss, even when hits follow one another. They remain clearly distinguishable throughout all sections, and long aftersounds don't interfere with their distinct perception.

Cymbal Balance. Pay attention to how the system conveys the cymbal character itself – they shouldn't stand out from the background or become too prominent (which can happen, for example, with too much high frequency), become too thin, become muffled, turn into "plastic cups in the cold," etc.

Listening pleasure . Rated on a 15-point scale. Enjoy how the system conveys the musicians' emotions and the powerful, assertive manner of their playing. If a track charges with drive, makes you tap your feet, easily "demonstrates" the musicians' playing style, the emotionality of the drummer's playing, and allows you to appreciate the complexity of the guitar sound—that's simply excellent. If it simply feels like "another radio track," and you don't want to turn up the volume and "turn it up," the system clearly doesn't have the capabilities to reveal the musical intent of the performers and the sound engineer. The score in this category should roughly correlate with the scores in the other categories for this track.

Inconsistency with the track's concept. If, during the evaluation, the Arbiter notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's

recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 13. A-test 2022

- Artist: Rasco

The idea of the track

The purpose of this track is to test the system's ability to convey the energy inherent in electronic music. This genre is characterized by a more powerful and rich bass component. Systems designed for this type of music are often too coarse for other genres, and vice versa – systems that brilliantly convey the subtle nuances of, say, jazz or blues may fail to convey the full energy and punch of the bass rhythm of electronic music. Including such a track in the test material favors a system that handles music of any genre.

Sound quality assessment "markers"

- Scale and energy
- Bass range
- Amplitude linearity

Scale. Despite the fact that the recording consists almost entirely of synthesized sounds (with the possible exception of the voice, and even that is heavily processed), the use of various reverb effects allowed for a rather spacious soundscape. Note how expansive it is; the system shouldn't render it flat and create a sense of limited space.

Energy.
Body of Impact. At the 1:10 mark, powerful and dense impacts begin, which perfectly demonstrate the low-frequency control. And this applies not only to the subwoofer, but also to the midbass. The impacts shouldn't be "dried out" or lacking "meat," nor should they be flabby, losing their density, swelling, or simply filling the space with a viscous, enveloping rumble.

Impact Accuracy. A lack of amplifier control over the speaker (again, this applies not only to the subwoofer but also to the midbass section) can lead to beats "stretching," resulting in a "stratification" in the timing of the initial beat and its actual "filling."

No distortion. Pay special attention to the sound's projection into the space, toward the subwoofer or speakers. A good system creates a coherent sound field, rather than scattering sounds throughout the cabin.

Balance of stereo effects. The stereo effects in this track are very balanced; the stereo panorama should be formed as a whole, without emphasizing or highlighting individual effects that 'disrupt' the perception of the musical picture.

Bass range:
40-55 Hz. This track demands the system to confidently reach down in frequency. First, notice how rich and weighty the bass sounds starting at 13 seconds. This isn't sub-bass yet; the main energy here is in the 40-55 Hz range, the "core part." Is it reproduced with the proper density, or is it just a slight rumble? Or, on the contrary, is the bass at this point downright booming, drowning out everything else and sounding distinct?

From 30 Hz. Pay special attention to how thoroughly the system begins to reproduce the sweep tone starting at 56 seconds – does it sound full-bodied from the very beginning, or is it initially weak?

Lower Bass Quality. In a good system, the lower bass fills the space evenly. Various colorations, modes, and overtones at higher frequencies can lead to subjective localization of the lower bass and its "floating" in space, which is simply unacceptable in a good system.

Blending. Since the junction between the low-midrange speaker and the subwoofer has a significant impact on bass perception, pay attention to any issues with bass "layering" as the track progresses, possibly drawing individual sounds toward the speakers and subwoofer.

Sub-bass line. Pay attention to the hits after 1:10 and how they are accompanied by the sub-bass line – a kind of 'background,' longer in duration than the hits. If the hits and 'background' merge inseparably or, on the contrary, separate to the point that the sub-bass line is perceived as a 'tail' following the hit, this indicates problems in the low-frequency range of the system.

Amplitude linearity. Two things are important to note here. First, around the 50-second mark, the voice transitions to a rising pitch through the effects. Second, starting around the 56-second mark (the moment the beats begin), a sine wave appears at a frequency of around 30 Hz and smoothly transitions to a sweep—the pitch begins to rise. Notice how uniformly the pitch rises in amplitude, and how uniformly the sweep tone is perceived. Fluctuating volume (the reduction or strengthening of individual notes) and/or the sound of the rising pitch bouncing around in space indicate obvious problems in the signal path. You can deduct points for any clearly prominent or missing sounds, or for the instability of these sounds in space (movement, stretching, popping, layering, etc.).

Inconsistency with the track's concept. If, during the evaluation, the Arbiter notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 14. Lady General Mu Takes Command

- Artist: Kemei Jiang & Chang Jing & Du Cong & Huang Lijie

The idea of the track

Here's a fragment from a Chinese opera (Lu Opera), featuring traditional Chinese instruments. From the very beginning, the track captivates the listener with a large-scale, grandiose sound, transporting them to a spacious atmosphere with clearly defined instruments. The drums in the recording have a strong attack, the powerful support of a 24-piece string ensemble adds scale, and the guqin and erhu create their own unique musical signature.

Sound quality assessment "markers"

- Space & Musical Instruments Location
- Musical Balance
- Natural Perception of Instruments

Space and Spatial

Width. From the very first seconds, the sound feels expansive and grandiose, a true three-dimensional musical spectacle unfolding before the listener. The system should sound spacious and expansive, without squeezing the soundscape into a narrow, confining frame.

Spatial Depth. Note how well the system creates a sound field in depth. Sometimes the soundstage may seem wide but still appear quite flat, indicating the system's inability to fully convey the soundstage.

Space. Decays. Despite its grand scale, the track's sound should be light and airy. It's full of subtle nuances and reverberations, which largely "paint" the space. Decays shouldn't cut off too early, creating a sense of emptiness, and at the same time, there shouldn't be an excessively glassy or synthetic rendering of the space; echoes shouldn't overwhelm the foreground. The space should feel natural.

Stability of images on stage . All instruments remain in their places throughout the musical action and are easily discernible in space. They should not move around the soundstage, changing focus, sometimes stretching, sometimes contracting.

Images Separation. A good system clearly separates instrument sounds from reverberant sounds that create a sense of space. "Layering" of instruments and the "sticking" of individual sounds to the speakers are unacceptable.

Midbass & Lower Bass Control . The powerful low-frequency component in this track deserves special attention. Reliance on individual sounds toward the midbass speakers or subwoofer is unacceptable; it instantly ruins the overall soundstage.

Musical and Tonal Balance.

Strings Instruments. Pay attention to the sound of the string ensemble in the introduction. It shouldn't be lost, as if greatly diminished in size or far in the background. At the same time, it shouldn't be so exaggerated that it obscures the other instruments.

Bells and cymbals should not disappear, be lost, or sound dull, but at the same time, they should not be emphasized or intrude into the foreground.

Bass drum. The drum shouldn't stand out from the overall musical picture—either overpowering the other instruments or seeming overly dry or diminished in size.

Erhu. The challenge in conveying this instrument is that it has a rather vibrant character, yet blends harmoniously into the overall musical fabric. It shouldn't be piercingly harsh and out of place, or, conversely, sound muted and inexpressive. Alternatively, the system might convey it unevenly throughout the track, "shouting out" or "swallowing" individual notes.

Erhu, high frequencies. Pay attention to the sound of this instrument in the high frequency range, particularly the interaction of the bow and string. High frequency dips lead to a loss of detail and a lack of ease of perception. Excessive accents overemphasize these details, detaching them from the musical picture, making the instrument sound unnaturally resonant.

Naturalness of the Music Instruments.

Strings Instruments. The texture of the string instruments should be clearly discernible throughout the track. In the intro, the ensemble produces fairly low notes, and these should not degenerate into a thick, viscous low-frequency mass. As the track progresses, starting around the 28th second, higher notes appear, and these also belong to the same ensemble; there should be no sense that the instruments are playing differently.

Wooden sticks. Listen for the natural character of the percussion sounds. Wooden sticks shouldn't feel plastic or metallic, shouldn't be too limp, as if they were hitting a cardboard box, and at the same time, their sound shouldn't degenerate into dry clicks that prevent you from imagining the instrument. Pay attention to the integrity—the initial moment, the click itself, when the signal sharply increases, shouldn't be isolated or stand alone.

Bells and cymbals should be clearly visible; the brass of these instruments shouldn't sound like "chewed foil" or "the crunch of plastic cups in the cold."

Bass Drum. Notice how well you can "see" this instrument. Is the system able to "draw" it before you, conveying the characteristic vibrations of the drum and body? Or does this instrument simply feel like a booming, heavy avalanche of low frequencies? Are the initial sounds of the strike separated from the subsequent decays? And are the decays themselves long enough, or does the system "cut them off"?

Erhu. Notice how natural this stringed instrument's texture is. Does the system convey the characteristic vibration of the strings and the rich timbre, or does the instrument sound like a simplified set of synthesized sounds?

Guqin. This is an ancient Chinese 7-string plucked musical instrument with a lacquered wooden body and silk strings. It appears near the end of the track, around the 50-second mark. Does the system allow it to be easily read throughout its entire playing time, or does it blend in with the other instruments at certain points, becoming masked by them?

Inconsistency with the track's concept. If, during the evaluation, Judge notices any flaws that are not explicitly described in these "markers," but which indicate that the sound in certain moments does not correspond to the track's recording concept described above, the Arbiter has the right to deduct additional points from the score.

Track 15. Evaluation of Extraneous Sounds and noises

The assessment of extraneous sounds and noises consists of two components. **First,** during the evaluation of music tracks, the Judge records and notes in the report the presence of interference, rattling, extraneous sounds, and noises in the audio system and the vehicle's interior (up to 3 points).

Second, a noise assessment is performed using a special track (Zero Bit, absolute silence). The presence of extraneous noise is determined from a normal listening position. The judge may approach the speakers to verify that the noise is emanating from them (up to a score of 2).

The score is calculated by deduction from the maximum the following identified deficiencies:

- **Up to 3 points** for extraneous sounds when playing music tracks – rattling of panels and loose interior elements, speaker pops or characteristic ringing sounds of tweeters when they are overloaded, etc. (The judge counts the number of tracks during which extraneous sounds are noticed and subtracts 1 point from the maximum score for each of them).
- **2 point** for a slight noise when playing a track with absolute silence (this can be considered noise that is noticeable only when playing a given track, but does not distract from listening to music, for example, a very light background hiss)
- **1 points** for obvious noise when playing a track with absolute silence (this is considered to be noise that is more noticeable and can distract attention from listening, for example, loud hissing, clicks when switching tracks, whistling due to the generator, sounds caused by various types of interference, etc.)

List of sound evaluation "markers"

Track 8. Gin-Gee

Vocals and shaker
1 Character and Natural Perception
2 Balance
3 Sibilants
4 Image Formation & Stability
5 Shaker

Piano
1 Character of the instrument Solidity
2 Balance
3 Initial Attack
4 Decays
5 Image integration

Double bass
1 Pressure
2 Texture Reproduction
3 Balance
4 Image Formation
5 Integrity

Balance and musical atmosphere
1 Musical balance
2 Tonal balance
3 Volume
4 Character of the recording
5 Microdynamics

Track 9. Ain't No Sunshine

Musical Space
1 Contrast with the previous track
2 Integrity of perception
3 Room dimensions
4 Amplifier noise
5 Stability of instruments and Vocal image

Vocals
1 Character Reflection
2 Performance Character
3 Clarity of sound
4 Balance
5 Sibilants

Bass guitar and electric guitar
1 Bass guitar. Clarity
2 Bass guitar. Balance
3 Bass Guitar. Texture Reproduction
4 Electric guitar. Balance
5 Electric Guitar. Solo

Drum kit and percussion
1 Percussion. Shaker
2 Percussion. Darbuka
3 Drum kit. Attack & Visualization
4 Drum kit. Bass drum
5 Drum kit. Cymbals

Track 10. Drums Solo

Energetic of sound
1 Impact density
2 Low frequency range
3 Stroke Quality
4 Separation
5 Attack

Snare drum, toms, bass drum
1 Snare drum character
2 Toms Character
3 Bass Drum Character
4 Decay
5 Integrity

Cymbal details & accuracy
1 Body, weight
2 Character
3 Strike Difference
4 Integrity
5 Decays

Space & dimensions
1 Ambience
2 Spatial position
3 Instruments Integrity & Consistency
4 Coherent
5 Balance

Track 11. Let It Snow

Musical resolution
1 Contrast with the previous track
2 The initial count
3 Space
4 Fade in & Amplifier Noise during pause at 7 seconds
5 Clarity of secondary instruments

Wind instruments
1 Musical balance
2 Tonal balance
3 Separation
4 Recognizability
5 Baritone saxophone

Drum kit
1 Detail
2 Spatial Stability
3 Cymbal, balance
4 Cymbal Character
5 Rim Strikes

Track 12. Jonny

Bass guitar, electric guitars and vocals
1 Bass Guitar. Tonal Balance & Character
2 Bass Guitar. Integrity
3 Electric Guitars. Aggression & Tonal Character
4 Electric Guitars. Clarity of Different Notation & Separation
5 Vocals and Backing Vocals

Drum kit
1 The Initial Countdown
2 Bass drum
3 Drums and toms
4 Cymbal Dynamic Control
5 Cymbal Balance

Listening pleasure

Track 13. A-Test 2022

Scale and energy
1 Scale
2 Body of Impact
3 Impact Accuracy
4 No Distortion
5 Balance of Stereo Effects

Bass range
1 Bass range 40-55 Hz
2 Bass range from 30 Hz
3 Lower Bass Quality
4 Blending
5 Sub-Bass Line

Amplitude linearity

Track 14. Lady General Mu Takes Command

Space & Spatial
1 Width & Depth Scale
2 Decays
3 Stability of images on stage
4 Images Separation
5 Midbass & Lower Bass Control

Musical Balance
1 Strings Instruments
2 Bells and Cymbals
3 Bass Drum
4 Erhu
5 Erhu, HF

Natural perception of instruments
1 Strings Instruments
2 Wooden sticks
3 Bells and Cymbals
4 Bass drum
5 Erhu & Guqin

Sound Quality Assessment Protocol

Group / Class _____ **Installation Complete** _____

Participant _____

Car Model _____ **Volume level** _____

Source Unit _____ **Late Penalty (-5)** ☐

Judge on Duty _____

Tracks 2-7. Technical Tracks

		Position	H. Focus	V. Focus	Height
Left	Track 2	0 1 2 3	0 1 2 3	0 1 2 3	0 1 2
Right	Track 3	0 1 2 3	0 1 2 3	0 1 2 3	0 1 2
Center	Track 4	0 1 2 3	0 1 2 3	0 1 2 3	0 1 2
Left-Center	Track 5	0 1 2 3	0 1 2 3	0 1 2 3	0 1 2
Right-Center	Track 6	0 1 2 3	0 1 2 3	0 1 2 3	0 1 2

		Left edge	Right edge
Sound Stage Width	Track 2, 3	0 1 2 3	0 1 2 3

		DSS	Depth
Distance to Sound Stage and Depth	Track 7	0 1 2 3 4 5	0 1 2 3 4

Track 8. Gin-Gee

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Vocals and Shakers																
Piano																
Double Bass																
Balance and Musical Atmosphere																
Extraneous Sounds																☐

Track 9. Ain't No Sunshine

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Musical Space																
Vocals																
Bass Guitar & Electric Guitar																
Drum kit & Percussion																
Extraneous Sounds																☐

Track 10. Drums Solo

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Energetic of Sound																
Drums, Toms & Bass Drum																
Cymbal Details & Accuracy																
Space & Dimensions																
Extraneous Sounds																☐

Track 11. Let It Snow

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Musical Resolution																
Wind Instruments																
Drum Kit																
Extraneous Sounds																☐

Track 12. Johnny

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bass guitar, Electric Guitar and Vocals																
Drum Set																
Listening Pleasure																
Extraneous Sounds																☐

Track 13. A-Test 2022

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Scale and Energy																
Bass Range																
Amplitude Linearity																
Extraneous Sounds																☐

Track 14. Lady General Mu Takes Command

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Space & Musical Instruments Location																
Musical Balance																
Natural perception of music instruments																
Extraneous Sounds																☐

Extraneous sounds, noises, and interference

	0	1	2	3	4	5
Extraneous Sounds						

Judge's Signature: **Participant's Signature :**

SQC Club
absolute autosound competition
ASIA

2026 ESQC Competition Rules

External Sound Quality Competition (ESQC) Concept

Car audio systems focused on sound quality are close to home audio in their concept. The system is built for person who listens to music from a certain place at a relatively low volume. The goal is to obtain the maximum reliability of the transmission of musical information embedded in the recording. That was, the homely approach to the construction of audio systems is one main goal for the Club.

For lovers of "Concert" sound, the Club has a different concept. The main thing here is the construction of systems that can qualitatively sound the space around the car. This makes it possible to fully feel the atmosphere of large concerts at an outdoor stadium, festival venue or in a club.

ESQC is a sound quality competition for cars that in open space with maximum sound quality, authenticity and involvement. At the end of several seasons, such competitions have proven their attractiveness for competitors and spectators.

ESQC System Requirements

The main requirement for the audio system is that all its components must be installed to or within the car body and the sound system must be powered by the vehicle's charging system and batteries only.

It is permissible to use loose remote controls, smartphones, streamers connected to the system via a wireless connection as an audio signal source and/or to control the system.

To ensure the most equal conditions of the competition, competitors are divided into 3 (three) classes. Admission to classes depends on the degree of modifications of the car and the size of the sounded system !.

Systems of different classes are evaluated from different distances.
The installation is evaluated only according to safety criteria in accordance with the Club Rules and for compliance with the class chosen by the Competitor

Firstly, to be allowed to compete in the ESQC categories, the car must meet these requirements:
• The competition car must be registered with a license number.
• The parking brake must be set. If the parking brake cannot be set, the competitor must use wheel chocks under the vehicle's tires to ensure the safety of everyone around the vehicle, or turn the vehicle's engine off during testing.
• The car must be able to drive on its own power by a driver sitting in the car.
• All car audio system must be installed in to or attached to car include but not limited to motorized system, manual moveable components.
• The maximum voltage is 16 VDC with the engine running or not, measured on the amplifier's power input terminals.
• No modified or self-built active equipments is allowed (e.g. head unit, line driver, amplifier, active crossover, power supplied etc.). Except otherwise allowed.
• All components of the audio-system have to be installed into the car – trailers etc. are not allowed.
• Components other than audio-system (Non-audio Use) may be supplied using 220 Volts with power inverter.

ESQC Competition Classes

Competition Class divided in 3 classes depending on numbers of speaker drivers (woofer, midrange and tweeter) and the modification of a car.

- ESQC Solo
- ESQC Picnic
- ESQC Party

ESQC Solo

To be allowed to compete in this category, the vehicle must be suitable for use as an daily-use, means of transportation with the preservation of standard seats in the car in the standard position (including the second row of seats).

The car compete in this class must retain all OEM equipment, the panel that installed speakers may be enhance include the trunk or luggage compartment that installed the subwoofer(s)

Installation elements may not be located outside the body parts of the vehicle. Retractable and folding structures are prohibited in this class.

The speakers involved in the reproduction of the test material must be installed in the door panels of the front and (or) rear doors of the car, and (or) in the trunk lid of the luggage compartment not higher than the lower border of the door glass line.

It is allowed to install mid - or high-frequency drivers on the dashboard, front pillars, door corners in the mirror area.

Low-frequency drivers (subwoofers) located in the luggage compartment must not be installed above the level of the cabin and (or) trunk glass (along the upper border of the hull). The exception is the installation of subwoofer speakers in a shelf under the rear window.
Switching on the speakers in the trunk lid together with the speakers in the other doors is allowed within the amount of speakers allowed in this class, provided that such speakers are installed no higher than the lower border of the door glass line, except for cases when the speakers are installed in the standard luggage compartment lid opening upwards.

Allow to add one additional battery and one battery must remain on OEM location and no modifications on alternator.

Other requirements for compete in this class such as,

- Limited to **6 speaker drivers** (woofer, midrange, tweeter) with maximum diameter no larger than 6.5-inch
- Subwoofer(s) **1 x 12-inch** or 2 x 10-inch or 3 x 8-inch
- The distance to the listening (Evaluation) point is 3–8 meters

ESQC Picnic

This class recommended for Competitors whose audio system is able to provide the best possible sound and sound pressure should be appropriate for a beach party or picnic.

To be allowed to compete in Picnic category, the car must be suitable for use as an everyday means of transportation with the preservation of standard driver and front passenger seats in the car in the standard position, rear seat (2nd row seat) may be removed.

From B pillars to the front windshield must retain all OEM equipment, the panel that installed speakers and area behind B pillars to rear glass may be enhance include the trunk or luggage compartment that installed the subwoofer(s)

Installation elements may not be located outside the body parts of the vehicle. Retractable and folding structures are prohibited

The speakers involved in the reproduction of the test material must be installed in the door panels of the front and (or) rear doors of the car, and (or) in the trunk lid of the luggage compartment can higher than the lower border of the door glass line.

It is allowed to install mid - or high-frequency drivers on the dashboard, front pillars, door corners in the mirror area.

Low-frequency drivers (subwoofers) located in the luggage compartment may installed up to the level of the cabin and (or) trunk glass (along the upper border of the hull).

Switching on the speakers in the trunk lid together with the speakers in the other doors is allowed, provided and such speakers can installed higher than the lower border of the door glass line.

Allowed to add two additional batteries and one battery must remain on OEM location, alternator can be modified or upgraded but must remain on OEM location.

Other requirements for compete in this class such as,

- Limited to **10 speaker drivers** (woofer, midrange, tweeter) with maximum diameter no larger than 8-inch
- Subwoofer(s) **1 x 15-inch** or 2 x 12-inch or 4 x 10-inch
- The distance to the listening (Evaluation) point is 5–10 meters

ESQC Party

Unlimited speaker drivers, Unlimited subwoofers

Cars capable of loudly and efficiently sounding the space around the car within the boundaries of 10 to 20 meters can participate in the class.

Any modifications of cars related to the installation of an audio system are allowed, including the connection of components that consume a voltage of 220V through an inverter.

It is allowed to the installation of speakers above the lower limit of the glazing, the placement of low-frequency speakers in the passenger compartment outside the doors and instead of the rear seats, the placement of speakers on retractable, lifting and other additional structures.

Removable structures that go beyond the body elements, as well as changes to the car body associated with the installation of an audio system, are allowed, provided that this does not contradict the safety requirements for the operation of the vehicle.

- Unlimited Speaker drivers
- Unlimited Subwoofers

All ESQC Classes

When making a decision on the admission of a car to the class, the Judges are guided by the Rules, internal regulations of the Club and common sense.

Decisions on controversial issues and situations not provided for by the Rules are made by the Event Director, and in case of his absence from the venue – by the Head Judge of the Event.

Decisions in such cases become a precedent until changes are made to the Rules and internal regulations.

Technical Tracks

ESQC Assessment Method Track 16. System Volume Level

Evaluation begins with setting the volume level. For the evaluation of audio systems, the minimum possible playback volume of the test material at the listening point is 88 dBs.

The Judge on-duty will take the measurement and the Competitor will set the volume using the pink noise recording track from the SQC Track 16.

The measurement is carried out using special equipment designed to accurately determine the sound pressure level when the weighing filter "C" is turned on at the listening point selected by the participant.

The maximum score is 10 points.

If the system is unable to achieve the specified volume level of 88 dBs when measured, the Arbiter shall deduct 2 penalty points for each dBS below the minimum level.

Further evaluation can be carried out at a volume equal to or greater than the minimum permissible (at the request of the participant).

If the system is able to reach the minimum allowable volume at the listening point, but the competitor, for whatever reason, ask the Judge to evaluate at a lower volume, the Judge will also deduct 2 penalty points for each dB below the 88 dBs level.

The set volume level is recorded and remains unchanged throughout the evaluation procedure.
Other relations between the participants and the Judge, including those related to the evaluation procedure, are regulated by the rules of the Club in the current version.

Track 17. Correct Connection

A piece of music in which only the left channel plays first, then only the right channel, then both channels in mono mode, then the channels in the opposite phase, and finally the usual stereo.
If the system passes the test, 10 points are given in the protocol.
If connection problems are found (for example, channels are mixed up or speakers are connected in the wrong polarity), this is reported to the competitor. The competitor will have 5 minutes to fix the problems. After first 5 minutes pass, if connection problems still exist, competitors must decide to continue the evaluation, or be disqualified.

If the Competitor decides to continue the evaluation of the system, with existing connection problem, 10 points are deducted in this Protocol.

Musical Tracks

Principle for Evaluating Music Tracks 18-20

Each of the tracks in this selection contains many points that you should pay attention to when evaluating an audio system - these are the so-called "markers" described in detail in this methodology.

When listening, pay attention to the "markers" described for each of the tracks. It's great if the system reproduces them all properly. If the system shows a deficiency in any of the "markers", the Arbiter subtracts points from the total depending on its impact on the overall sound picture.

- 1 point is deducted for each noticeable, but not too critical for perception flaw.
- 2 points are deducted if the defect greatly affects the naturalness of the perception of a musical fragment or even creates discomfort when listening.

Track 18. Nothing Else Matters

Track idea

The recording is a fragment of the well-known composition Nothing Else Matters performed by the VoicePlay & J.None band in the style of acapella. Five voices with their own unique timbre easily immerse us in this legendary composition. I would especially like to highlight the Geoff Castellucci bass, which was used both as a vocal and as a sub-bass link of the composition. This recording has the same sub-bass that gets to the lowest limit of your system and will definitely show it.

"Markers" for assessing sound quality

- Sub-bass range

- Vocals and separation
- Naturalness and balance.

Sub-bass range.
Almost from the first seconds of the fragment, a powerful sub-bass periodically appears. A short blow, but enough to feel all its solidity and weight. If you can't hear it, then your system simply can't play there. If there is a lot of it, and it clogs everything else, sounds blurry and just looks like an avalanche, then you can be congratulated. The car can, it remains to adjust it to an acceptable level, because an excess is also a disadvantage.

Vocals and separation.
Physicality. Don't forget that the vocals should sound free. You should not have the impression that vocalists are being held by the throat. A vocalist without a body also sounds strange, as well as with an enlarged and disproportionate body. A tenor should not be a baritone and a bass to a baritone should not lose weight either.

Coloration. Make sure that the voices are not colored. Whether it's a plastic color up to a synthetic sound or the appearance of a boom and a horn voice from a bucket.

Saturation.
When there is a feeling of lifelessness and dryness of the vocal, as if it was simply tidied up and pushed back, then a similar but opposite situation will sound as if the microphone is hugged with both hands and sung into it point-blank. Vowel sounds will help us understand this very well. Highlighting or missing sounds such as "o" or "a" require attention and correction.

Brightness.
Another alarm bell is the "tension" of the system. The sounds seem to be squeezed out, the timbres lose their naturalness and lightness. Voices become dull. And what about the other side of the coin? The vocals are bright and sonorous, as if ringing right in the ear, and the sound of hissing like "ch" and "sh" hits the ears unpleasantly. We need to find a compromise between these two situations.

Sibilance
. Sibilance! The same ones that are "with" and all hoarse-whistling. Should not whistle or drill the ear, as well as should be in general. Loss of sibilance or their release is definitely a mistake.

Naturalness and balance.
The structure of the bass vocal.
The composition itself is very balanced. The voices are perfectly matched to each other, do not interfere and do not shout out individual notes. And any loss of balance is associated with shortcomings in the system. You can analyze each of the voices separately. For example, bass vocals should not be lost and fade into the background, as well as should not swell and clog up the rest of the vocalists. Also, it should not sound louder or quieter in places or even stand out from the composition.

Violation of the structure of the rhythmic pattern of the bass vocal also indicates shortcomings in the system. Since the melody is created by the voices, the lack or excess of any vocals can spoil the perception.

The nature of space.
One of the balance markers on this composition will relate to space. Excess space, as well as lack of space, immediately become noticeable. In the first case, there is a feeling that the hall effect has been turned to the limit, but in the second case, everything is the opposite. And in addition to the loss of space itself, the composition also loses attenuation and re-reflection.

HF balance.
And, finally: this fragment should not sound like a track after a bunch of processing with the loss of barely perceptible details. And it should not sound as if the microphone is in the throat of the vocalist and we hear the whistling of air in the ligaments.

Track 19. Johny

Track idea
This is rock! Rock that is used by Judge to evaluate SQ systems. And by it you can understand how well the system withstands loads.

"Markers" for assessing sound quality
- Energetics of sound
- Electric guitars and vocals
- Drum kit and bass guitar

Energetis of Sound
Middle drum.
Smoothing out the attack of the middle drum, which entails a loss of solidity in the vocals, suggests that you need to make some adjustments to the system or settings. The main thing is not to overdo it, so that the vocals do not become vile, the middle drum is too loud, and the strings of the bass guitar do not come to the foreground.

Attack.
You shouldn't have the feeling that the system sounds muffled. The sticks at the beginning of the track are not so open, the drum beats are muffled, and even space is lost? But there shouldn't be too much brightness either. Bright vocals, annoying electric guitars and excessive sharpness of the sticks at the beginning.

Electric guitars and vocals
Vocal color and 1st electric guitar.
When listening, pay attention to the vocals and electric guitars. The vocals should not be pinched or have a "horn" color. And how many electric guitars can you count? Two are excellent. One is worth paying attention to the second.

Backing vocals and 2nd electric guitar.
Let's get back to the vocals again. Backing vocals can be heard along with him. Who is louder? Backing vocals shouldn't stand out and come to the forefront, and the main vocals shouldn't sound like they're out of a bucket. It should sound voluminous and free. Do you remember one guitar in the last marker? Now the second one can disappear here, be careful, attentive and accurate.

Hissing and brightness of guitars.
Pay attention to the sound of hissing sounds in the vocals, as well as the sound of electric guitars. They should not hide, camouflage and fall into the depths. But they should not attract unnecessary attention to themselves, and even more so should not mask other sounds with their brightness.

Drum kit and bass guitar.
Bass drum.
Imagine that you have a bass guitar playing very well and qualitatively, but at the same time there is almost no kick. Or, on the contrary, the bass drum absorbs everything around, and the bass guitar does not even raise an eyebrow.

Low-frequency balance.
And there is another situation. The bass drum conspired with the bass guitar and together they begin to strangle and muffle ... Tools are near and people around. You can agree with them so that they sound together, full-fledged and integral. The main thing is that you do not lose your solidity and weight at the same time.

Bass guitar.
The final touch in the relationship between the bass drum and the bass guitar is when there is a bass drum, but the bass guitar is hidden. And no, it's not the final one yet. It happens that the bass guitar begins to growl intensely, fill everything, clog neighboring instruments and generally interfere.

Hi-hats and Cymbals.
Hi-hats! Do they sound? It's great! And if not? Let's analyze. What are they? Muted? Or, on the contrary, are they highlighted as if they want to come to the fore and show everyone who is the cymbal?! With excessively beautiful long tails.. In general, too much. And with it the highlighting of sibilance.

The character of the high frequency.
And what about the transparency of the cymbals? Do they scatter with a crystal shimmer of sounds? Good! Or maybe there is no crystal, or they turn into the hiss and crunch of cups in the cold and crush with excess highs? Even the limit of the audible range can spoil the impression.

Track 20. Lady General Mu Takes Command

Track idea
A fragment of a composition from a Chinese opera (Lu Opera), on which traditional Chinese instruments are recorded. From the very beginning, the sound feels large-scale, grandiose, with good space and clearly drawn instruments.

The drums on the recording are distinguished by a good attack, the powerful support of a string ensemble of 24 people adds scale, and the guqin and erhu make up their own unique musical pattern.

"Markers" for assessing sound quality
- Attack and energy
- Space & Musical Instruments Location
- Natural Perception of Music Instruments

Attack and energy.
The lack of attack on this fragment leads to the fact that it becomes boring to listen to, and the string ensemble becomes a toy. Everything is sluggish, slow and uninteresting. This indicates a serious flaw in the system. The opposite situation is no better either: an excessive attack turns the drum beats into cannon shots, and the string ensemble becomes so numerous that it merges into a single hum.

Space & Musical Instruments Location
Big drum and ensemble. Notice the sound of the bass drum and string ensemble in the introduction. They should not get lost, as if they are not there or they are far in the background. Also, they should not be hypertrophied so that they appear in front of everyone and mask other tools. The drum and the ensemble should not change their sizes, i.e. not be inflated to the whole stage and not be toy drums.

Space. Have you noticed how big the space is on this track? No? Is everything small and flat? Or maybe it's too big and bloated? The space should be organic, should not shrink to the size of a tiny orchestra. At the same time, it should not be so hypertrophied that it changes the sound of the entire composition and individual instruments beyond recognition and plastic color (sounds from a cup).

Responses of space. Dry sound, loss of space responses, early attenuations? Or maybe the other way around? An overly rich sound with space responses running to the foreground and disrupting the foreground/background layout? These are all shortcomings that should not be in a good system.

Natural Perception of Music Instruments
Drums. Focus on the sound of the drums. Try to guess their size, hear the body of the reels and their membrane. The drums should not be toy-like, and on the contrary, they should not be inflated to a low-frequency hum.

Sticks. Pay attention to the sounds of beating the drums with sticks. Can you describe them? They should not be plastic or booming, as if hitting a cardboard box.

Saturation. How is the sound of the instruments perceived in general? It should not be dry or lifeless, covered with a blanket and without a sense of space. And vice versa, the instruments should not seem bright, uncomfortable and irritating to the ear. Everything should sound balanced and natural.

Brightness. Now try to concentrate on one tool. Let's take the Erhu as an example. The instrument should not lose its individuality and characteristic timbre. At the same time, it should not shout out individual notes and stand out more than other instruments.

Microdynamics in the high-frequency range. This fragment is striking in that for all its scale it sounds light and airy. It has many small nuances and aftersounds that complement the overall picture and complete the musical image. This is how it is perceived on a good system. There should be no excessive transparency and glassiness. All micro-nuances should be perceived naturally. They should not be lost or, on the contrary, focus attention on themselves as if you bring your ear to the instrument.

Bonus Track

Bonus tracks provide an opportunity for the Competitor to fully reveal the capabilities of the system for Judge and the audience perspective.

The choice of musical material is up to the Competitor - They can choose a bonus track from the disc, or provide any other material on his own media and at his choice.
When choosing a bonus track, the participant pays attention to the parameters that can favorably emphasize the features of the sound of his system.

The score for the bonus track is given according to the principle inverse of the rating of the mandatory material. The total amount cannot exceed 10 points.

For each sound component that favorably distinguishes the participant's system, he is awarded 2 points:

- High, undistorted volume
- Conveying emotions, involvement
- Drive, dynamics
- Physical sense of rhythm, tactility
- Ability to convey sound nuances, intelligibility

ESQC Assessment Protocol

Class	☐ **Solo (3-8m)** ☐ **Picnic (5-10m)** ☐ **Party (10-20m)**	**Judging Range (m) :**	
Competitor		**Volume :**	
Car Model			
Judge(s)		**Late Penalty (-5)**	☐

Proper Volume Level & Connection

Track 16	Ability to reach 88 dB (C-Weighted)	0		2		4		6		8	10
Track 17	Correct Connection	0									10

Track 18. Nothing Else Matter

Sub-Bass Range	0	1	2	3	4	5	6	7	8	9	10
Vocals and Separation	0	1	2	3	4	5	6	7	8	9	10
Naturalness and balance	0	1	2	3	4	5	6	7	8	9	10

Track 19. Johnny

Energetics of Sound	0	1	2	3	4	5	6	7	8	9	10
Electric Guitar and Vocals	0	1	2	3	4	5	6	7	8	9	10
Drum Set and Bass Guitar	0	1	2	3	4	5	6	7	8	9	10

Track 20. Lady General Mu Takes Command

Attack and Energy	0	1	2	3	4	5	6	7	8	9	10
Space & Musical Instruments Location	0	1	2	3	4	5	6	7	8	9	10
Natural perception of music instruments	0	1	2	3	4	5	6	7	8	9	10

Bonus Track.

Undistorted Volume	0	1	2
Involvement	0	1	2
Drive, dynamics	0	1	2
Rhythm Sensation	0	1	2
Sound Nuances Reflection	0	1	2

Thank you, we were glad to evaluate your car.

Judge : **Participant :**

For notes