

MAGP RULES

Version. 2.0

Classes:

There are no classes governing cone and amplifier power. This is not necessary as the rules are designed for real world systems thus allowing minimal advantage to bigger or more woofers (for example less or smaller woofers in the correct enclosure will be louder and sound better than more and larger ones in the wrong size enclosure). Larger amplifiers will need the current to meet what the format demands during the judging process (in short a smaller amp with the correct current will out perform the larger inefficient ones with incorrect current).

Divisions:

There are no stock /amateur or pro divisions as **only consumers may enter!** Industry representatives of any nature or store owners will not be able to compete against consumers (we know who you are & you will be disqualified)

Categories:

As described below. **(All vehicles must be registered & Licensed!)**

Hatchbacks / Station Wagons & SUV's:

(Guidelines) All audio equipment must be installed firmly to safe guard against objects dislodging whilst the vehicle is in motion. No part of the system may obstruct any normal functionality of the passenger occupancy area of the vehicle and or including all areas provided for the passengers. All seats must remain in place as to what was intended by the manufacturer. All seats must be in the passenger carrying mode and must be capable of adjustment without obstruction and also accommodate a person of 170cm in height, whilst having their elbows slightly bent with their hands resting at the 10 and 2 o'clock position on a simulated steering wheel referenced to that of the vehicle without their knees going above their elbows.

All subwoofers must reside in the goods carrying designated area.

An exception will be made for vehicles with woofers built under dash or into the front passenger foot well (maximum size subwoofer allowed will be a 10 inch) no part of the woofer or enclosure can be within a 40 cm direct path of the SPL sensor.

No part of any subwoofer enclosure may exceed above the top trailing edge of the rear seat back.

(Definition) A parallel and line running level to the top trailing edge of the seat back NOTE: (head rests are not included as part of the seat back).

All other audio equipment mounted elsewhere, must be secure and may not obstruct the vision of the driver from either the front or rear windows.

(Definition) A string/laser line held parallel and 90 degrees to the B pillars, whilst measuring from any point from the edge of the clear glass area into the cabin.) No part of the string or laser line may come into contact with equipment relating to the audio system during this test, also no transducing devices can be within 30 cm of the SPL sensor

Primary or secondary batteries must reside in their designated OEM location or the goods carrying area of the vehicle only and must be securely mounted and anchored to the vehicle.

Sedans:

(Guidelines) All audio equipment must be installed firmly to safe guard against objects dislodging whilst the vehicle is in motion. No part of the system may obstruct any normal functionality of the passenger occupancy area of the vehicle and or including all areas provided for the passengers. All seats must remain in place as to what was intended by the manufacturer. All seats must be in the passenger carrying mode and must be capable of adjustment without obstruction and also accommodate a person of 170cm in height, whilst having their elbows slightly bent with their hands resting at the 10 and 2 o'clock position on a simulated steering wheel referenced to that of the vehicle without their knees going above their elbows.

All subwoofers must reside in the goods carrying designated area.

An exception will be made for vehicles with woofers built under dash or into the front passenger foot well (maximum size subwoofer allowed will be a 10 inch) no part of the woofer or enclosure can be within a 40 cm direct path of the SPL sensor.

No part of any subwoofer enclosure may exceed above the top trailing edge of the rear seat back.

(Definition) A parallel and line running level to the top trailing edge of the seat back **NOTE: (head rests are not included as part of the seat back).**

All other audio equipment mounted elsewhere, must be secure and may not obstruct the vision of the driver from either the front or rear windows.

(Definition) A string/laser line held parallel and 90 degrees to the B pillars, whilst measuring from any point from the edge of the clear glass area into the cabin.) No part of the string or laser line may come into contact with equipment relating to the audio system during this test, also no transducing devices can be within 30 cm of the SPL sensor

Primary or secondary batteries must reside in their designated OEM location or the goods carrying area of the vehicle only and must be securely mounted and anchored to the vehicle.

Pickup trucks:

(Guidelines) All audio equipment must be installed firmly to safe guard against objects dislodging whilst the vehicle is in motion. No part of the system may obstruct any normal functionality of the passenger occupancy area of the vehicle and or including all areas provided for the passengers. All seats must remain in place as to what was intended by the manufacturer. All seats must be in the passenger carrying mode and must be capable of adjustment without obstruction and also accommodate a person of 170cm in height, whilst having their elbows slightly bent with their hands resting at the 10 and 2 o'clock position on a simulated steering wheel referenced to that of the vehicle without their knees going above their elbows.

All subwoofers must reside in the area behind the seats or back seat (in the case of double-cabs).

An exception will be made for vehicles with woofers built under dash or into the front passenger foot well (maximum size subwoofer allowed will be a 10 inch) no part of the woofer or enclosure can be within a 40 cm direct path of the SPL sensor.

No part of any subwoofer enclosure may exceed above the top trailing edge of the seat back.

(Definition) A parallel and line running level to the top trailing edge of the seat back

NOTE: (head rests are not included as part of the seat back).

NOTE: Pickups with a cut through to the bin area will immediately fall into the panel-van category.

All other audio equipment mounted elsewhere, must be secure and may not obstruct the vision of the driver from either the front or rear windows.

(Definition) A string/laser line held parallel and 90 degrees to the B pillars, whilst measuring from any point from the edge of the clear glass area into the cabin.) No part of the string or laser line may come into contact with equipment relating to the audio system during this test, also no transducing devices can be within 30 cm of the SPL sensor

Primary or secondary batteries must reside in their designated OEM location or the goods carrying area of the vehicle only and must be securely mounted and anchored to the vehicle

Panel vans& Mini Buses:

(Guidelines) All audio equipment must be installed firmly to safe guard against objects dislodging whilst the vehicle is in motion. No part of the system may obstruct any normal functionality of the passenger occupancy area of the vehicle and or including all areas provided for the passengers. All seats must remain in place as to what was intended by the manufacturer. All seats must be in the passenger carrying mode and must be capable of adjustment without obstruction and also accommodate a person of 170cm in height, whilst having their elbows slightly bent with their hands resting at the 10 and 2 o'clock position on a simulated steering wheel referenced to that of the vehicle without their knees going above their elbows.

All subwoofers must reside in the area behind the front seats (in the case of a panel van) or last the row of seats (in the case of a mini bus)

An exception will be made for vehicles with woofers built under dash or into the front passenger foot well (maximum size subwoofer allowed will be a 10 inch) no part of the woofer or enclosure can be within a 40 cm direct path of the SPL sensor.

No part of the subwoofer enclosure may exceed above the average between the highest and lowest, top edge of the front door of the vehicle

(Definition) A line held parallel from where the front door window glass appears from the door sill rubber edge. No part of the system may exceed above this line.

Also no part of the enclosure may exceed further back than the center of the first rear axle if mounted from the cabin towards the rear. In the case where the enclosure is mounted from the tailgate forward, the enclosure may also not exceed further than the center point of the first rear axle.

The only exception to this will be, if the woofers are installed in the side panels. But no part of the woofer or enclosure parts may then exceed past the inner wheel arches

In the case of a pickup cut through no part of subwoofers or enclosure may exceed above the trailing edge of the pickup bin loading area that being an imaginary line parallel and level across the bin in question.

All other audio equipment mounted elsewhere, must be secure and may not obstruct the vision of the driver from either the front or rear windows.
(Definition) A string/laser line held parallel and 90 degrees to the B pillars, whilst measuring from any point from the edge of the clear glass area into the cabin.) No part of the string or laser line may come into contact with equipment relating to the audio system during this test, also no transducing devices can be within 30 cm of the SPL sensor

Primary or secondary batteries must reside in their designated OEM location or the goods carrying area of the vehicle only and must be securely mounted and anchored to the vehicle.

Walls Class:

(Guidelines): All vehicles are classified together under these rules) This is defined by a vehicle that complies to the safety rules in every way, except for the enclosure and or equipment being above or beyond the parameters as described in each class above. However, the enclosure must still remain within the boundaries of the vehicles inner panels (That being the unmodified factory sheet metal)

NOTE: Due to the limited rear view visibility. This class will not be recognized for trophies until there are sufficient entries that have rear view cameras to overcome this problem. However points and certificates will be awarded for all entries

(THIS JUDGING PROCESS HAS BEEN DESIGNED TO MINIMIZE GREY AREAS, AND EDUCATE COMPETITORS)

Electrical system requirement and guidelines

(Guidelines) The electrical system must be that of the same or equivalent to the factory spec of the vehicle in question. Maximum voltage when car is running at 3000rpm cannot exceed 14.5 volts. There is no limit to batteries allowed however they may only be of a design intended for the motor industry and may not exceed 12.5 volt at rest. The main or first battery must reside in the compartment intended by the manufacturer of the vehicle in question and must not inhibit or obstruct the normal operation of the vehicles features or safety values e.g.: The bonnet must close completely. The additional batteries may only reside in the goods carrying compartments, (except) in the case where provision has been made by the vehicle manufacturer. **No battery may obstruct the passenger carrying area.**

(It is also recommended that all batteries charge and delivery cables be fused adequately)
There are no limits to the amperage upgrade of an alternator. However there is only allowed to be one and it must reside in the factory intended location, modifications to regulators are not allowed disqualification will be imminent if tampered with. The electrical system needs to be charged from the vehicles own electric system, i.e. no external charging devices are allowed during the judging process (however external charging is allowed before judging)

**(SECTION1) DC STORAGE & CHARGING:
(POINTS SCORED) _____**

PRIMARY BATTERY SUPPLING AUDIO SYSTEM

- Termination**.....(0/5/10/15) **Note: This includes both +- terminals & the chassis gnd.**
- Wiring tied or anchored safely**.....(-10/0/5/10/15) **-10 if found to be dangerous.**
- Insulation & sleeving**.....(-10/0/5/10/15) **-10 if found to be dangerous.**
- Battery secured**.....(-10/0/5/10) **Note: must not be able to be dislodged -10 if found to be dangerous.**
- Fuses or breakers**(-10/0/5/10) **Note: Must mounted and the cable length must be within 40 cm of the battery terminal to score maximum (-10 for no protection)**
- Voltage**.....(9v or less = -10) (10v-11v =-5) (11v-12v=0) (12v-13v=+5) (13v-14.5v=+10)

(Voltages found to be higher than 15 will score -20)

(Procedure): Multimeter is connected across the primary battery during the 3 minute SPL. The lowest DC result is recorded. **TIP:** (Use a meter with a minimum hold function)

Gnd resistance (0 to 20)&(0 to-25)

Actual gnd resistance in ohms

Note: Plus scores work as follows(1ohm = 10 Points/0.9ohm = 11 Points/0.8ohm = 12 Points etc)(Max points=20)

Note: Minus scores work as follows (1.1 Ohm = 9 Points/1.2 Ohm = 8 Point/1.3 = 7 Points etc)(Any readings higher than 2 Ohm will start scoring "Minus" points. **Note:** The maximum deductible points are -25, but the actual reissuance must be recorded.

(Procedure): Multimeter is connected from the battery ground to the ground point or the nearest to the furthest amplifiers from the battery. The cable used to extend the meters terminals resistance must be deducted

SECONDARY BATTERY

Termination (0/5/10/15) Note: This includes both +- terminals and the chassis gnd point.

Wiring tied or anchored safely (-10/0/5/10/15) **-10 if found to be dangerous.**

Insulation & sleeving..... (-10/0/5/10/15) **-10 if found to be dangerous.**

Battery secured (-10/0/5/10) Note: must not be able to be dislodged **-10 if found to be dangerous.**

Fuses or breakers(-10/0/5/10) Note: Must be anchored and the cable length must be within 40 cm of the battery terminal to score maximum **-10 for no protection.**

CAPACITORS

Termination (0/5/10/15) Note: This includes both +- terminals and the chassis gnd point.

Wiring tied or anchored safely (-10/0/5/10/15) **-10 if found to be dangerous.**

Insulation & sleeving..... (-10/0/5/10/15) **-10 if found to be dangerous.**

Capacitor secured (-10/0/5/10) Note: must not be able to be dislodged **-10 if found to be dangerous.**

Fuses or breakers(-10/0/5/10) Note: Must be anchored and the cable length must be within 40 cm of the capacitor terminal to score maximum **(-10 for no protection)**

**(SECTION 2) CRAFTSMANSHIP & INSTALLATION OF AUDIO EQUIPMENT:
(POINTS SCORED) _____**

Note: To acknowledge extra effort there are possible bonus points for each of the following sections

SOURCE UNIT

Mounting (0/5/10)

Visually integrated..... (0/5/10/15)

Bonus points:

Custom creativity of remotes& moulding in of items and face customizing (0/5/10/15/20)

SPEAKERS

Mounting including grilles..... (0/5/10/15)

Cosmetically integrated (0/5/10/15)

Bonus points:

Custom creativity with pods, kick/door panels and grilles etc..... (0/5/10/15/20)

SUBWOOFERS

Mounting including grilles if applicable..... (0/5/10/15/20)

Cosmetically integrated.....(0/5/10/15/20)

Bonus points:

Custom creativity with enclosure and use of materials & motorization, lights etc (0/5/10/15/20)

AMPLIFIERS

Mounting..... (0/5/10/15)

Cosmetically integrated.....(0/5/10/15)

Bonus points:

Custom creativity with rack, heat sink , forced cooling, motorization and lighting etc(0/5/10/15/20)

CAPACITORS

Mounting (0/5/10/15)

Cosmetically integrated..... (0/5/10/15)

Bonus points:

Custom creativity with installation and use of materials, lighting etc (0/5/10/15/20)

PROCESSORS

Mounting (0/5/10/15)

Visually integrated.....(0/5/10/15)

Bonus points:

Custom creativity with installation, motorization and lighting etc (0/5/10/15/20)

MULTIMEDIA

Monitors in the cabin, factory or non custom (0/5)

Monitors in the cabin custom installed
(0/10)

Monitors anywhere else on the vehicle (0/15)

(SECTION 3) ACOUSTICAL CAPABILITIES

POINTS SCORED: _____

Note: Phase testing will be done at the drivers head with the detector facing towards the windscreen, the use of a masking cushion is recommended to achieve best results. (Vehicle representative may need to assist with fader/ balance and volume settings, operated from the passenger seat)

SPEAKER PHASE TEST WITH PHASE DETECTOR (Track 1)

Left front stage tweeter & mid/bass (0/10)

Right front stage tweeter & mid/bass (0/10)

Front stage (tweeter & mid/bass between pairs) (0/20)

Rear fill in phase to left or right (0/10)

Rear fill in phase to front at drivers ear (0/10)

Sub in phase to front stage at drivers ear (0/20)

ABSOLUTE LEFT AND RIGHT CONFIRMATION TEST CD TRACK (Track 2&3)

Front channels (0 /10)

Rear channels (if mono default 10 points) (0/10)

Bonus points:

Centre Image (10)

FRONT STAGE PERCENTAGE TO REAR(Track4)

100% Front with no obvious delay from behind but only realistic reflections (20)

75% Front with some bleed and untimed delay from rear speakers (10)

50% Front with 50% Rear (headphone effect)..... (5)

0% Front with all music from the rear (0)

SYSTEM NOISE TEST USING '0' BITS RECORDING(Track6)

Engine off volume down (0/5)

Engine off volume full (0/10)

Engine running at approx 3000 rpm with head lights on volume off.....(0/15)

Engine running at approx 3000 rpm with head lights on volume full (0/20)



Note: Fill in fader position or number in the circle used during the staging evaluation

(RTA) Note: The following test is conducted with fader set at front stage testing position, pink noise to be at minimum of 6db's above the noise floor, which should not exceed 100 db. Judge to assist and guide competitor whom must operate the system from the passenger seat. Microphone is to be placed on the driver's seat at ear level facing forward. Scoring is on deviations exceeding 3 decibels, pink noise is measured at 1/3 octave intervals, point deductions are calculated by computer.

RTA REAL TIME ANALYSER RESPONSE CURVE (Track 7 using pink noise) (0-20)

(SPL) Note: No wiring alterations or changes to the system may be made during the judging process with the exception of adjustments that can be made by the driver whilst in the driving position. The SPL run must be carried out by the entrant; the system may only be operated from the driver's seat with all vehicle openings closed. Failure to comply will nullify the SPL results. Ear protection must be worn during testing, source material is provided. The maximum period allowed for this evaluation is 3 minutes, during which the average and not the peak SPL will be measured. Only typical car audio transducers are permitted and must be driven from typical car audio DC powered amplifiers (non compliance will result in 0 score for this section or possible disqualification.) **Important:** Termlab to be set to SPL format with

sample at 180 and update at 256.

(Electrical) Note: Battery voltage test to done at this time (refer to section 1 primary battery)

(SOUND PRESSURE LEVEL ACHIEVED) (Track 8 & 9)..... (____)

**(SECTION 4) OVERALL PRESENTATION OF THE VEHICLE
POINTS SCORED: _____**

Note: Points will be awarded for each of the following:

DISPLAY AREA TO ENHANCE VEHICLE APPEARANCE

- Neatness and cleanliness.....(0/5/10/15)
- Floor covering and props(0/5/10/15)
- Lighting to enhance vehicle features and condition(0/5/10/15)
- Vehicle Information media (Print/photo/video etc)(0/5/10/15)

CLEANLINESS AND CONDITION OF VEHICLE EXTERIOR

- Rims and tires (0/5/10/15/20)
- Under fender wells (0/5/10/15/20)
- Attention to detail of paint work(0/5/10/15/20)
- Attention to detail of badges, trim, tail pipes & bumpers (e.g. Left over polish) etc.....(0/5/10/15/20)
- Engine bay and under bonnet(0/5/10/15/20)
- Windows (e.g. chips, scratches, smudges discoloration etc)..... (0/5/10/15/20)

CLEANLINESS AND CONDITION OF VEHICLE INTERIOR

- Roof liner and carpets (0/5/10/15/20)
- Boot lid and carpets (0/5/10/15/20)
- Seats (0/5/10/15/20)
- Dash and Centre Console (0/5/10/15/20)
- Gear knob, Steering Wheel, Handbrake and Pedals (0/5/10/15/20)
- Door Panels (0/5/10/15/20)
- Windows (e.g. chips, scratches, smudges discoloration etc).....(0/5/10.15/20)

CUSTOM EXTERIOR BODYWORK

- Front Bumper/spoiler (0/5/10/15)
- Rear Bumper /diffuser..... (0/5/10/15)
- Side Sills and Wings(0/5/10/15)
- Custom paint & Graphics (0/5/10/15/20)
- Custom Fender Arches (Flares etc) (0/5/10/15)
- Do the Front, rear Sides and wing complement each other..... (0/5/10/15)
- Custom lighting of exterior (headlights, taillights & under glows) (0/5/10/15)
- Custom wheels (size and design) (0/5/10/15)
- Stance of vehicle (0/ 5/10/15)

CUSTOM INTERIOR ACCESSORIES

- Door pins..... (0/5/10/15)
- Steering wheel..... (0/5/10/15)
- Seats..... (0/5/10/15)
- Seat Belt Clips & Pads.....(0/5/10/15)
- Gear Knob..... (0/5/10/15)
- Custom lighting of interior (0/5/10/15)
- Dashboard..... (0/5/10/15)

Does the entire vehicle follow an overall theme with thought put in to the final package?(0/10/15/20)

(SECTION 5) PERFORMANCE UPGRADES and MECHANICAL CUSTOMIZATION

POINTS SCORED: _____

Note: Cars with performance parts as standard will only qualify for a maximum of 5 points per item.

- Customized engine bay..... (0/5/10/15/20)
- Customized undercarriage..... (0/5/10/15/20)
- Turbo/ Super Chargers..... (0/5/10/)
- Charger Installation and plumbing..... (0/5/10/15/20)
- Inter cooler and plumbing.....(0/10/15/20)
- NOS (Safety and plumbing must be evaluated).....(0/5/10/15/20)
- Induction Kit..... (0/5/10/15)
- Engine management (no Chips)..... (0/10/15/20)
- Exhaust system including branches.....(0/10/15/20)
- Throttle Bodies..... (0/5/10)
- Performance Gadgets E.g.: timing/boost controllers etc..... (0/5/10/15/20/25/30)
- Suspension upgrades and lowering kits(0/5/10/15/20)
- Braking Upgrades (vehicle featuring major performance upgrades without brake upgrades get -10).....
(0/5/10/15)
- Bonus points :**
- Hydraulics and Air suspension.....(0/5/10/15/20)

A judging panel of no less than 6 judges will assess the vehicle, each judge must be from a field relevant to their industry. No judge may enter a vehicle into the contest. All decisions are to be considered final, however with the exception of a split decision the head judge will override and reinforce the final decision.

NOTE: All risk regarding hearing loss or damage including any equipment damage or failure or theft of any items during or after the event is the sole responsibility of the vehicle owner. No claim or liability can be made against the MAGP event host or their judges.

COMPETITION NO. _____ REGISTRATION NO. _____
COMPETITOR NAME _____

COMPETITOR SIGNATURE _____ VENUE _____
VEHICLE OWNER FULL NAME _____

DATE _____ HOST _____

GRAND TOTAL POINTS SCORED _____