

# CMP USER MANUAL



## **CMP S3**

S3-12D.5 / S3-12D1

**COMPETITION GRADE AUDIO**

## **WE PLAY LOUD!!**

We know what you want. You want it LOUD, and that is exactly what we do, what we live for. Vibrations, gut-punches and straight up loud music – that's what makes us tick. We won't dress up in fancy words or claim to be something we're not. We are the NO BULLSH!T car audio brand!

Every single product with the GAS logo on it is born out of passion, the same that has driven us for two generations and that will keep us rolling up to your neighbourhood, winning and pushing the limits for many generations to come!

It's up to you to choose your own level of loud, and if you don't like what we do that's OK. You are welcome back when you've had your first true GAS experience. We don't exclude, we don't judge and we do not make up any excuses for who we are.

We are GAS and we are proud to be LOUD!

# **GAS**

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# SAFETY

**Every second counts - especially when it comes to safety. Before installing your CMP S3 series subwoofer, make sure that you read through the manual thoroughly and follow the instructions. Save the manual for future usage and reference!**

Make sure to pay attention to the instructions when you see this symbol: 

Do not expose your new subwoofer to excessive damp or moisture. If the subwoofer is exposed it might result in electric failure, shock or damage to the product. Servicing is required when the product has been damaged in any way and/or doesn't operate normally. Refer all servicing to qualified service personnel only.

Keep the cables inside the vehicle separate from sharp edges or components that may be affected or take damage. Follow the recommended cable sizes and always use high quality cables and accessories. Even if you're eager to put the subwoofer to use - take no shortcuts when installing the cables, make sure that all connectors are protected and secured.

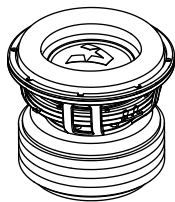
Do not drill any holes without checking what lies beneath, and don't cut anything without making sure that no important components risk being damaged.

If you want more expert advise and guidance - contact your local GAS AUDIO POWER dealer/installer.

We want you to get the full experience of your competition grade products, but we don't want you to injure yourself or others. Use common sense, respect high pressure levels and volume, and follow your local laws and regulations.

# UNPACKING

Unboxing your new CMP product is an experience, make sure that the subwoofer and all the accessories are included in the packaging:



Subwoofer  
(1 pc)



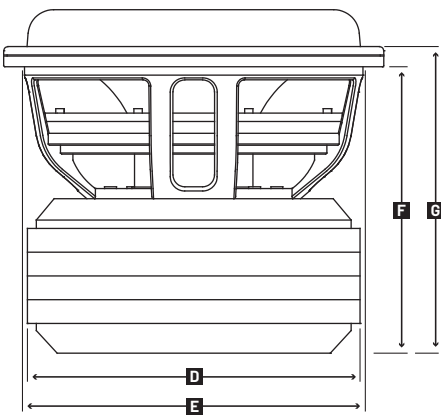
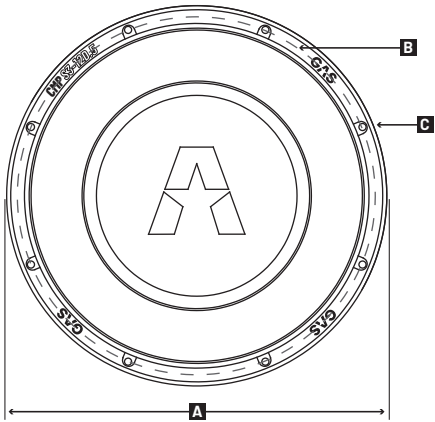
Manual  
(1 pc)



Speaker cable  
(4 pcs)

 The speaker cables are directly attached to the subwoofer instead of terminals.

# DIMENSIONS



|          | A   | B    | C  | D   | E   | F   | G   |    |
|----------|-----|------|----|-----|-----|-----|-----|----|
| S3-12D.5 | 321 | Ø302 | Ø6 | 280 | 285 | 241 | 258 | mm |
| S3-12D1  | 321 | Ø302 | Ø6 | 280 | 285 | 241 | 258 | mm |

# SPECIFICATIONS

Below you'll find the specifications that has been checked and tested in our workshop. The specified sensitivity isn't directly connected with the sound pressure in the vehicle, and shouldn't be used as the sole indicator for comparison with other subwoofers.

## ***CMP S3-12D.5***

| Component         | Subwoofer                                      |
|-------------------|------------------------------------------------|
| Size              | 12" (300mm)                                    |
| Nominal impedance | 0.5+0.5 Ohm                                    |
| Power RMS         | 5000 W                                         |
| Power MAX         | 10000 W                                        |
| Freq. response    | 20-100 Hz                                      |
| Voice coil        | Dual 4" 8-layer flat CCA wire                  |
| Voice coil former | BASV                                           |
| Cone              | Reinforced Mica pulp cone                      |
| Dustcap           | True Carbon                                    |
| Basket            | RAW HD aluminum                                |
| Magnet            | 4x165oz Elite Neo/Ferrite Hybrid               |
| Neo Charger       | 1x N52 Elite Grade Neodymium magnet            |
| Suspension        | Mega roll foam (dual stitch)                   |
| Spider            | 4-layer Nomex with Mesh                        |
| Tinsel            | Dual silver coated leads                       |
| Terminal          | Pre-terminated 10mm <sup>2</sup> OFC wire 80cm |
| Weight            | 44.6 KG                                        |

## ***CMP S3-12D1***

| Component         | Subwoofer                                      |
|-------------------|------------------------------------------------|
| Size              | 12" (300mm)                                    |
| Nominal impedance | 1+1 Ohm                                        |
| Power RMS         | 5000 W                                         |
| Power MAX         | 10000 W                                        |
| Freq. response    | 20-100 Hz                                      |
| Voice coil        | Dual 4" 8-layer flat CCA wire                  |
| Voice coil former | BASV                                           |
| Cone              | Reinforced Mica pulp cone                      |
| Dustcap           | True Carbon                                    |
| Basket            | RAW HD aluminum                                |
| Magnet            | 4x165oz Elite Neo/Ferrite Hybrid               |
| Neo Charger       | 1x N52 Elite Grade Neodymium magnet            |
| Suspension        | Mega roll foam (dual stitch)                   |
| Spider            | 4-layer Nomex with Mesh                        |
| Tinsel            | Dual silver coated leads                       |
| Terminal          | Pre-terminated 10mm <sup>2</sup> OFC wire 80cm |
| Weight            | 44.6 KG                                        |

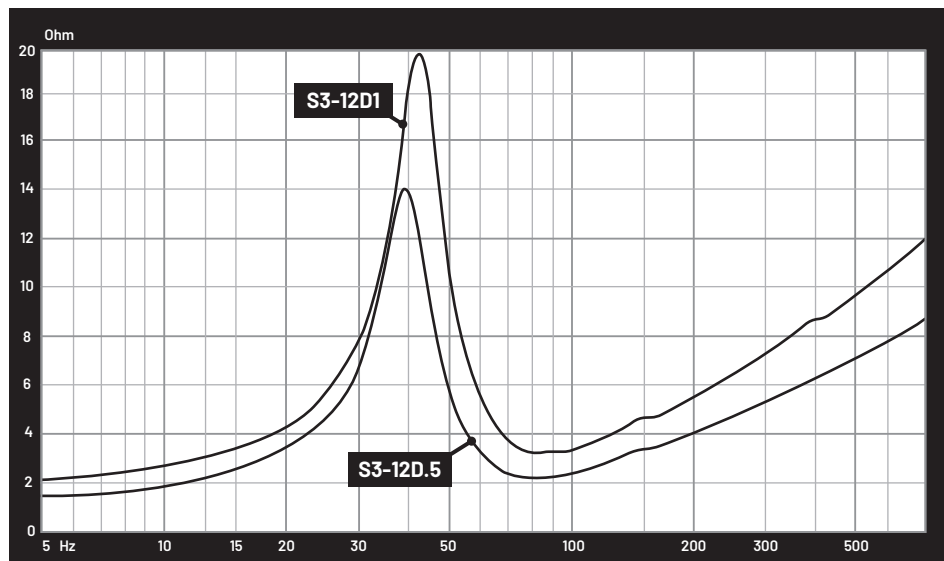
# PERFORMANCE

## THIELE/SMALL PARAMETERS

|           | S3-12D.5    | S3-12D1 |
|-----------|-------------|---------|
| Impedance | 0.5+0.5 Ohm | 1+1 Ohm |
| Re        | 1.0 Ohm     | 1.8 Ohm |
| Fs        | 38.8 Hz     | 42.4 Hz |
| Qms       | 4.17        | 4.09    |
| Qes       | 0.31        | 0.41    |
| Qts       | 0.29        | 0.37    |
| Vas       | 11.1 L      | 9.8 L   |

|                          | S3-12D.5            | S3-12D1             |
|--------------------------|---------------------|---------------------|
| Sd                       | 452 cm <sup>2</sup> | 452 cm <sup>2</sup> |
| Mms                      | 432.4 g             | 412.2 g             |
| Le                       | 0.86 mH             | 1.22 mH             |
| Xmax                     | 80 mm               | 80 mm               |
| dB/SPL                   | 85dB 1W/1M          | 84.5dB 1W/1M        |
| BI                       | 18.3                | 22.0                |
| Driver Vol. Displacement | 9.3 L               | 9.3 L               |

## IMPEDANCE VS FREQUENCY



# FEATURES

Prepare to experience earth-shaking bass like never before. This is the CMP S3-series of powerhouses crafted to redefine performance. These astonishing subwoofers feature a RAW HD aluminum frame, ensuring unparalleled stability and rigidity. With the CMP series, every detail is meticulously tuned to perfection - because only the best is good enough.

## EXTREME POWER HANDLING

A dual black-anodized 4-inch 8-layer flat aluminum wire voice coil grants the CMP S3-12D1 & CMP S3-12D.5 formidable power handling and heat dissipation capabilities. They come in 2 versions, 1+1 or 0.5+0.5 Ohm for a perfect impedance match with your chosen amplifiers. To achieve the best possible signal transfer and increased durability, dual silver-coated tinsel leads have been sewn into the spider pack. The pre-terminated 10mm<sup>2</sup> oxygen-free copper direct leads provide excellent conductivity to ensure a strong and reliable direct connection between the subwoofer coil and your amplifier, with no points of added resistance or poor contact.

## WORLD CLASS ENDURANCE

At this ultimate level, linearity and accuracy are key. A moving assembly with a huge cone and a prime US-made voice coil (80 mm winding height), which needs to stay in perfect alignment even at extreme excursions. To keep this huge moving mass in check, we've implemented a 4-layer Nomex spider pack with orange mesh alongside a mega-roll foam surround at the top - of course double-stitched to the cone.

## HIGH-GRADE PRECISION

The extremely stiff cone - reinforced with mica pulp - provides uncompromising performance for supreme control and accuracy, even at the highest-pressure levels. On top of that - literally - is a tailored carbon dust cap to protect the guts of this 43-kilogram beast and ensures cone warping is a thing of the past. The result is a subwoofer with extreme rigidity, unparalleled control and outstanding precision.

## ELITE PERFORMANCE

A subwoofer designed from the ground up for the extremes. At its core is a hand selected, massive 11" wide Quadruple-stacked Hybrid Neo/Ferrite motor, weighing in at over 41 kg - powered by four oversized 280 mm / 165 oz magnets for a total of 666 oz. It provides total control along the huge 80mm X-max for unparalleled accuracy and depth. In addition, the cutting-edge DVS2™ cooling system ensures that the subwoofer operates at peak performance even during the most intense competitions. The CMP S3-12D1 & S3-12D.5 demands attention and loads of space, but will reward you with an unprecedented level of bass.

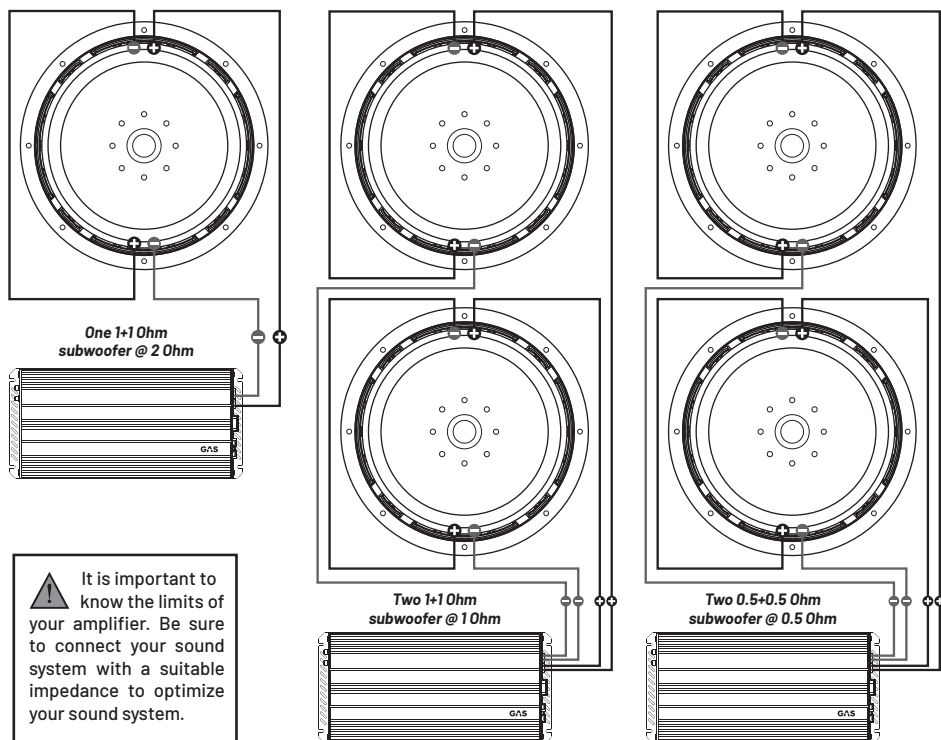
# HOW TO

## INSTALL SUBWOOFER

Before installing your brand new subwoofer, make sure that you have everything you need. Have the right tools ready, and make sure that you have the necessary knowledge/skill to perform the installation properly. Preparation and knowledge is crucial!

The CMP S3-12D.5 uses dual 0.5 Ohm voice coils, while the CMP S3-12D1 uses dual 1 Ohm voice coils. If you want to connect two or more S3 series subwoofers, you can vary the impedance by altering the wiring configuration to use a series, parallel or series-parallel setup.

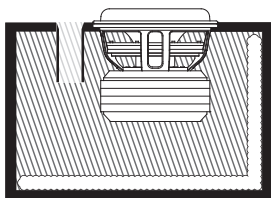
Make sure to look through the recommended wiring schematics below and choose the setup that corresponds with the number of subwoofers in your sound system. Take note of the impedance stability of your amplifier. Don't be afraid to consult your local GAS AUDIO POWER dealer/installer if you have any questions.



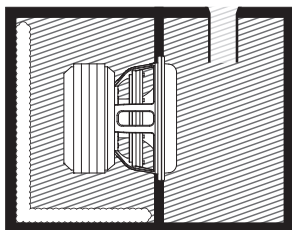
# HOW TO

## BUILD ENCLOSURE

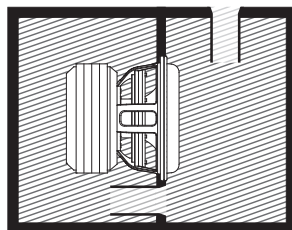
To achieve competition grade sound and optimal performance , you should mount your CMP subwoofer in an enclosure. Here's information about optimized volumes for different types of enclosures and how they perform with the CMP S3 subwoofer. If you feel unsure about how to build an enclosure on your own, consult a local GAS AUDIO POWER dealer/installer.



**VENTED**

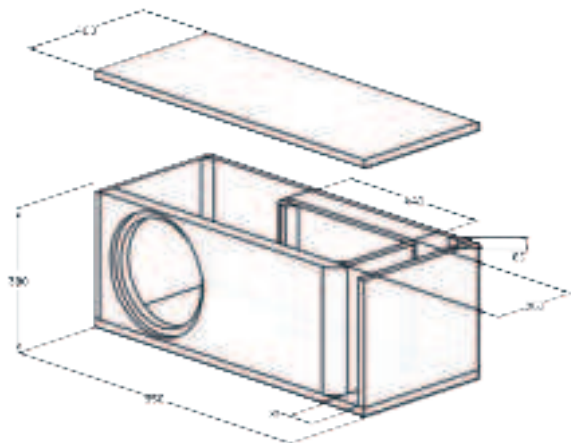


**4TH ORDER BANDPASS**



**6TH ORDER BANDPASS**

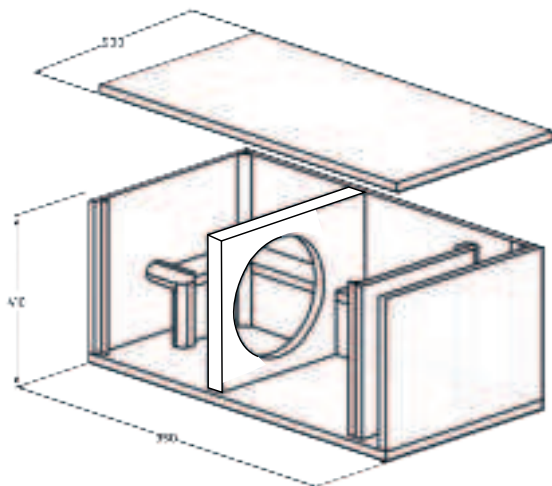
**CMP S3-12D.5 / S3-12D1 DRAWING 64.9 L):**



| Type        | Vented                             |
|-------------|------------------------------------|
| Dimensions  | 950x380x400 mm                     |
| Material    | 22 mm                              |
| Baffle      | Double                             |
| Net volume  | 64.9 L                             |
| Tuning      | 33 Hz                              |
| Vent area   | 272.16 cm <sup>2</sup>             |
| Vent length | 820 mm<br>(incl. 22 mm roundovers) |
| Vent dim.   | 81x336 mm                          |
| Cutout dia. | 285 mm                             |
| Outer dia.  | 321 mm                             |

# HOW TO

## CMP S3-12D.5 / S3-12D1 DRAWING (48.5+61.4 L):



|             |                    |
|-------------|--------------------|
| Type        | 6th order Bandpass |
| Dimensions  | 950x410x500 mm     |
| Material    | 22 mm              |
| Baffle      | Double             |
| Orientation | Front chamber      |
| Cutout dia. | 285 mm             |
| Outer dia.  | 321 mm             |

|                    |                                 |                     |                                 |
|--------------------|---------------------------------|---------------------|---------------------------------|
| Net volume (rear)  | 48.5 L                          | Net volume (front)  | 61.4 L (with driver)            |
| Tuning (rear)      | 26 Hz                           | Tuning (front)      | 48 Hz                           |
| Vent area (rear)   | 91 cm <sup>2</sup>              | Vent area (front)   | 274.5 cm <sup>2</sup>           |
| Vent dim. (rear)   | 70x130 mm                       | Vent dim. (front)   | 75x366 mm                       |
| Vent length (rear) | 781 mm (incl. 22 mm roundovers) | Vent length (front) | 477 mm (incl. 22 mm roundovers) |

## DO I NEED POLYFILL?

Hell yeah! We recommend using polyfill for all sealed, vented and bandpass enclosures for the best overall performance.

A polyfilled enclosure will bring out the full potential of your subwoofer, by starting an isothermal process when energy flows through the fibers (very scientific). This means that the air gets more dense, so it lessens the BOOM and brings out the BASS! It can also reduce harmonic distortion. Sounds complicated, we know. But it's easy to do! Cover two sides in a ported enclosure or make a loose polyfill ball behind the driver in a sealed enclosure. Try it out! If you like the bass to hit harder - just take away some. Do you want to lessen the effect? Put in some more.

# TROUBLESHOOTING

## NO POWER/SOUND

Check the subwoofer to make sure it isn't damaged. If your subwoofer doesn't get any power, the most common issue is either in the wiring or in the amplifier. Use a multimeter to measure the amplifier's voltage on the +12V terminal and the remote signal terminal. Use a multimeter to make sure that you have a negative ground connection. Check the built-in fuse (if there's one) on the amplifier. If there's no power coming through – control the fuse on the power cable. If this is intact – make a full check of the wiring to ensure cable integrity.

Check all the speakers connected to your sound system. Check all the speaker cables and all the signal cables. Check your head unit to make sure no settings are limiting the amplifier's functions or the subwoofer. When all of the above has been tested/looked over, and all is as it should be but there's still no sound, consult your local GAS Audio Power dealer.

## UNWANTED NOISE

Start by looking over the subwoofer and other speakers in the sound system so there is no damage or connection issue with the wiring. Make sure that your signal cables or speaker cables aren't too close to the power cables. Check your amplifier's grounding point and make sure that the surface is clean. When all of the above has been tested/looked over, and the unwanted noise does not vanish, consult your local GAS Audio Power dealer

## DISTORTION

Start by looking over the subwoofer and other speakers in the sound system so there's no damage or connection issue with the wiring. Check the speaker cables to make sure that the polarity isn't reversed on one channel. Check the settings on the amplifier, make sure that the gain/level is set according to the amplifier's instructions. If your amplifier has a boost function, lower its effect or turn it off.

# WARRANTY & DISPOSAL

This product is covered by warranty, depending on the conditions in the country where it's sold. If the subwoofer is returned for service, please include the original dated receipt (or a copy) with the product. Make sure that the subwoofer is packaged properly and secured, preferably in its original packaging.



The crossed-out wheeie bin symbol means that the product, literature and packaging included must be taken to separate collection at the end of their working life. Don't dispose of these products as unsorted municipal waste: take them for recycling. For info on your nearest recycling point, check with your local waste authority.



This product has been granted with the CE certification mark to show that the product follows the health, safety, and environmental protection standards for products sold within the European Economic Area (EEA).



GAS Audio Power products comply with the relevant provisions of the RoHS Directive for the European Union. In common with all Electrical and Electronic Equipment (EEE) the product shouldn't be disposed of as household waste. Alternative arrangements may apply in other jurisdictions.



GAS Audio Power is a global partner of the European Mobile Media Association, an organization that focus on promoting the custom made mobile media installations to consumers.

# THE GAS WORLD

You've entered the world of GAS. We aim to please, and we've made sure to have products made for you. No matter what stage of the LOUD-addiction you might find yourself in, there is a GAS product to fill your need.

## ***MAD***

Just starting out? The MAD series is made to play LOUD and to be the express lane to a no bullsh!t sound system that will make sure everyone can hear you coming!

## ***MAX***

The MAX series holds products made to deserve the center stage. Powerful, heavy duty and designed to be noticed. We made NO COMPROMISES because we know that you wouldn't accept it.

## ***CMP***

The CMP series has been developed for the crucial seconds when the dB-counter starts to tick. All CMP products have hand-picked, high quality, COMPETITION GRADE components and they are specially designed to withstand an awesome amount of power.

# THANKS FOR JOINING GAS AUDIO POWER!



## **GAS**

**AUDIO POWER**

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