

GAS
AUDIO POWER



MAX X2

X2-64

HARDCORE CAR AUDIO

MAX USER MANUAL

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

PLAY LOUD & SAFE. Read through this information, follow the instructions and save the manual for future usage and reference.

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

Do not expose the wiring to your new speaker to excessive damp or moisture. If the speaker's wiring 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 speakers 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.

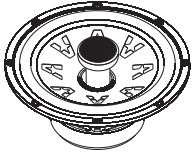
There is a first time for everything, if you need help - ask a friend or contact your local GAS AUDIO POWER dealer/installer.

We want you to experience your product's LOUD sound, 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

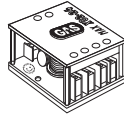
Unboxing your new MAX product is an experience, make sure that the speakers and all the accessories are included in the packaging:



Speakers
(2pcs)



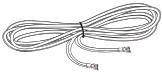
Grills
(2pcs)



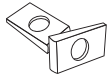
Crossovers
(2pcs)



Manual
(1pc)



Crossover cables
(4pcs)

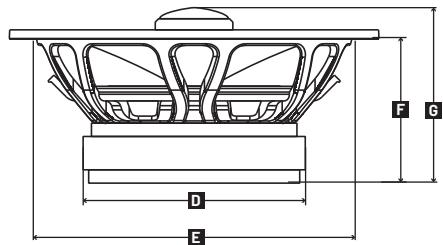
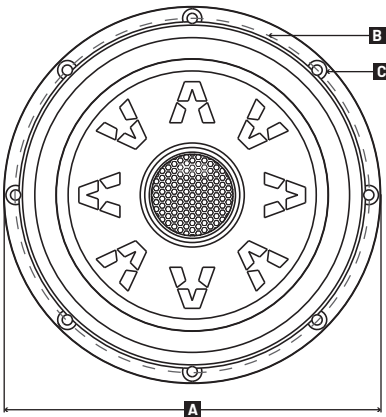


V-type clips
(8pcs)



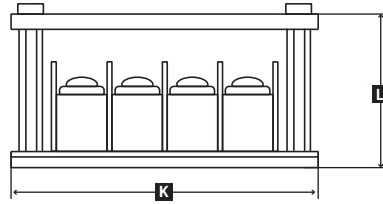
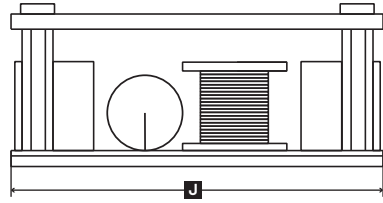
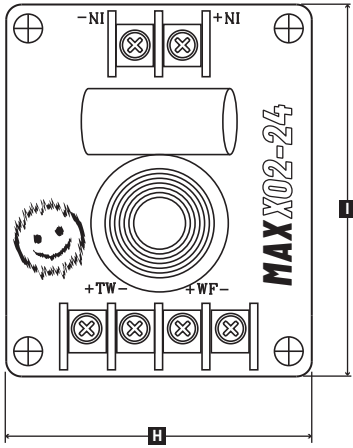
Screws
(16pcs)

DIMENSIONS



| | A | B | C | D | E | F | G | |
|-------|-----|------|------|-----|-----|----|----|----|
| X2-64 | 166 | Ø156 | Ø4.5 | 100 | 142 | 65 | 79 | mm |

DIMENSIONS



| | H | I | J | K | L | |
|--------|----|----|----|----|----|----|
| X02-24 | 60 | 80 | 80 | 60 | 30 | 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 component kits.

MAX X2-64

| | |
|-------------------|-----------------|
| Component | Coaxial speaker |
| Woofer size | 6.5" (165mm) |
| Tweeter size | 0.8" (20mm) |
| Nominal impedance | 4 Ohm |
| Power RMS | 110W |
| Power MAX | 220W |
| Freq. response | 60-23 000Hz |
| Sensitivity | 93dB |

MAX X2-64 TWEETER

| | |
|-------------------|---------------|
| Tweeter size | 0.8" (20mm) |
| Nominal impedance | 4 Ohm |
| Power RMS | 50W |
| Power MAX | 100W |
| Freq. response | 2500-23 000Hz |
| Sensitivity | 93dB |
| Tweeter dome | Silk |
| Tweeter magnet | Neodymium |
| Fs | 1810Hz |

MAX X02-24 CROSSOVER

| | |
|----------------|-----------------|
| Crossover type | High / Low pass |
| Slope | 6dB / 6dB |
| Cut off | 5200Hz |

MAX X2-64 WOOFER

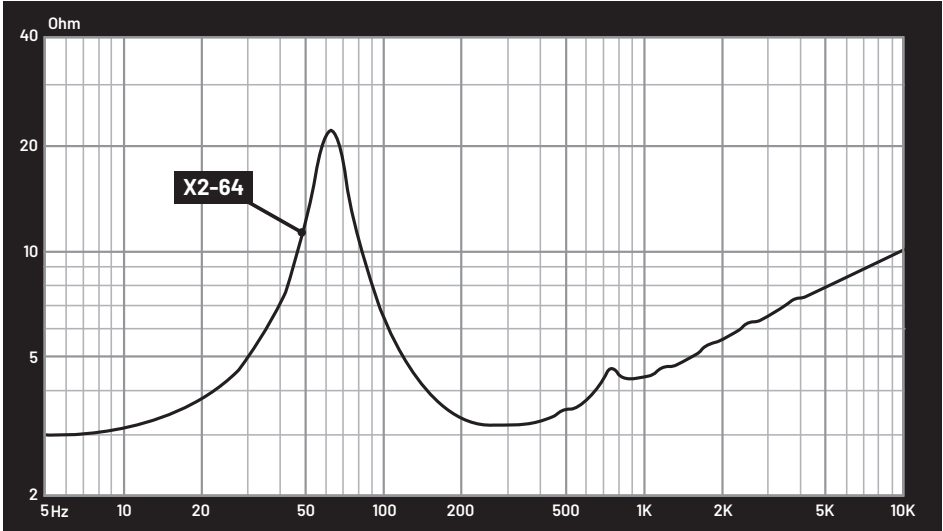
| | |
|-------------------|------------------|
| Woofer size | 6.5" (165mm) |
| Nominal impedance | 4 Ohm |
| Power RMS | 110W |
| Power MAX | 220W |
| Freq. response | 60-6500Hz |
| Sensitivity | 93dB |
| Woofer cone | A3D WRC Paper |
| Woofer basket | Aluminum |
| Woofer suspension | NBR Rubber |
| Woofer magnet | HQ Ferrite |
| Woofer spider | Polycotton/Nomex |
| Voice coil | 1" (25mm) ASV |
| Voice coil wire | Copper |
| Shorting ring | Yes/Copper |
| Terminal | S2 screw/spade |

THIELE/SMALL PARAMETERS

| | | | |
|-----|---------|-----|---------|
| Fs | 62.14Hz | Qms | 3.84 |
| Vas | 17.6L | Re | 2.8 Ohm |
| Qts | 0.47 | Mms | 9.7g |
| Qes | 0.54 | Bl | 4.6Tm |

PERFORMANCE

IMPEDANCE VS FREQUENCY



FEATURES

If you have this in your hand, you've finally made it. Congratulations! You're ready to take the next step, to enter a world of NO COMPROMISES with a coaxial speaker that will take your car to a whole new level. So get out there and impress the non-believers! Show them that true dedication comes from the inside of your car and that "good enough" just doesn't cut it.

THE SUM OF AWESOME

With a high-quality ferrite motor, copper wire voice coil, aluminum former, and copper shorting ring, the GAS MAX X2-64 has a strong and stable foundation for the speaker. It ensures that the speaker can deliver crisp, clear, and powerful audio that exceeds your expectations. But we didn't stop there. The MAX series is all about quality, which is why we used aluminum basket and molded tweeter pole and housing. This speaker is built to handle anything you throw at it; rough and tough conditions are not an issue, thanks to the ventilated basket and high energy magnet with the beautiful GAS A-Star pattern.

NEXT LEVEL WEATHER RESISTANCE

Sweden, where the GAS speakers are designed, is known for its harsh climate. It's cold, warm, wet, windy - we got it all, and on any given day you might even experience them all at the same time. For this reason, the MAX X2-64 features an A3D Lightweight pressed paper cone with WRC (Water Repellent Coating). This cone is strong, with high sensitivity and of course totally weather resistant. This means that you can enjoy your music, no matter the climate or weather.

WHEN "GOOD" ISN'T GOOD ENOUGH

The GAS MAX X2-64 coaxial also features a low Fs design midwoofer, which reproduces not only the midrange spectrum but also the vital midwoofer experience with great authority and dynamics. The NBR suspension & Polycotton/Nomex spider provides impressive detailed and responsive sound reproduction, and the 20mm silk dome tweeter delivers clear and brilliant highs without getting harsh. In other words, you'll be able to hear every detail, making your favorite music sound bolder and more lifelike.

EASY TO INSTALL

To give you better and easier mounting options, we've also included a separate crossover. You can even choose between passive or active use of the tweeter and midwoofer. The coaxial design use dual S2 Crosshead terminals, which allows you to choose either the spade connector or connect with a crosshead screw, giving you the best of both worlds.

HEAR THE DIFFERENCE

The speakers come with hexagon patterned grilles with an aluminum badge, which protects the speaker and keeps your build stylish. The aluminum badge adds a touch of elegance to your car audio system. Upgrade your car audio with the GAS MAX X2-64 coaxial speaker to experience the sound difference (and quality) for yourself.

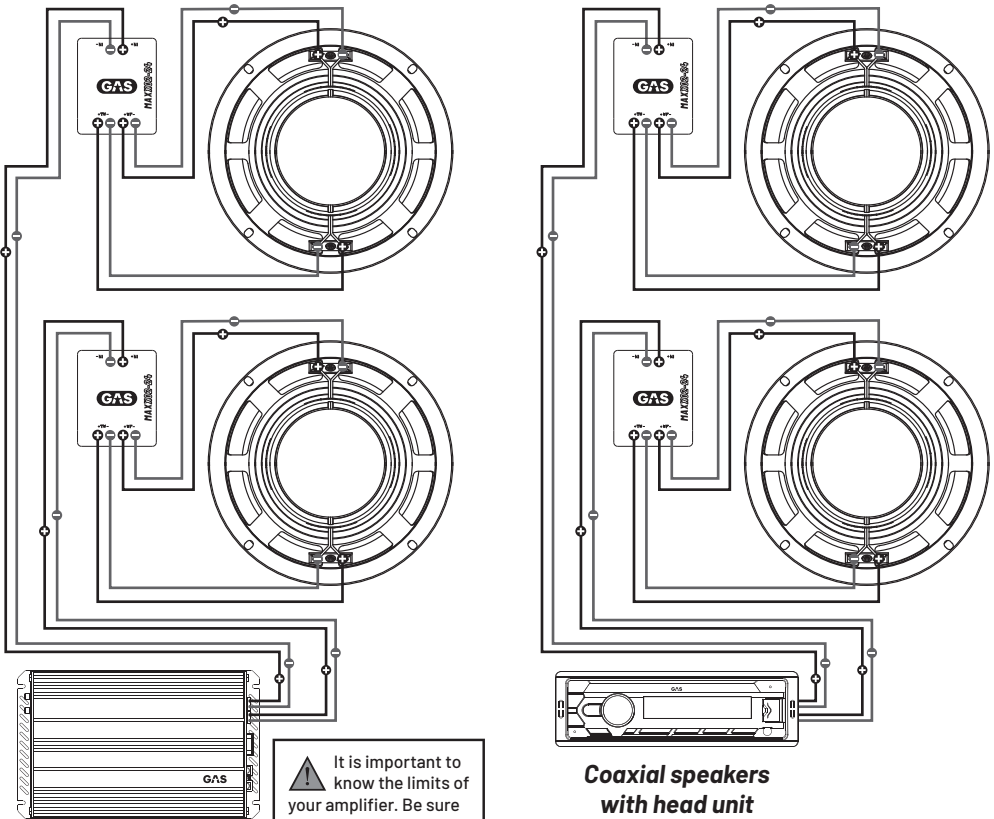
HOW TO

INSTALL SPEAKERS

Before installing your brand new speakers, 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!

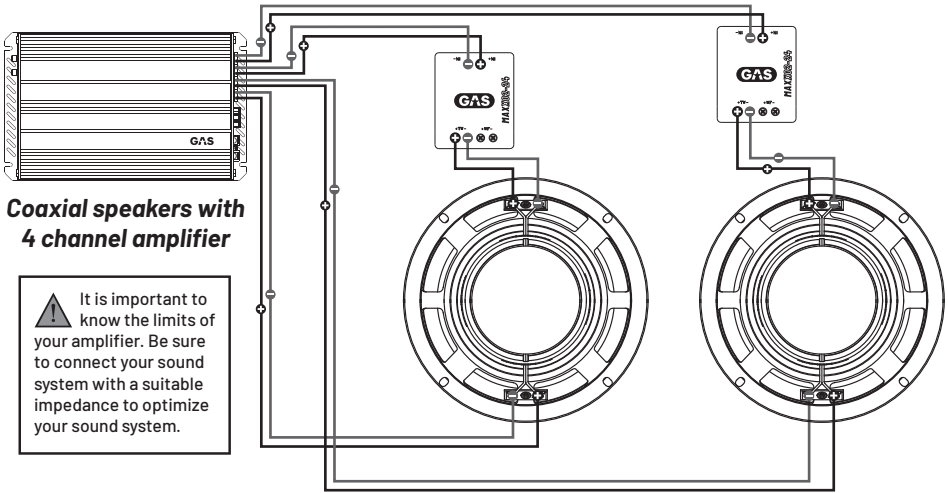
Make sure to look through the recommended wiring schematics below and choose the setup that corresponds with the number of speakers in your sound system. Take note of the impedance stability of your amplifier. Don't be afraid to consult your local GAS AUDIO POWER dealer/installer if you have any questions.

STANDARD CONNECTION WITH CONNECTED CROSSOVER:



HOW TO

SEMI-ACTIVE CONNECTION WITH PASSIVE CROSSOVER ON TWEETER:



Coaxial speakers with 4 channel amplifier

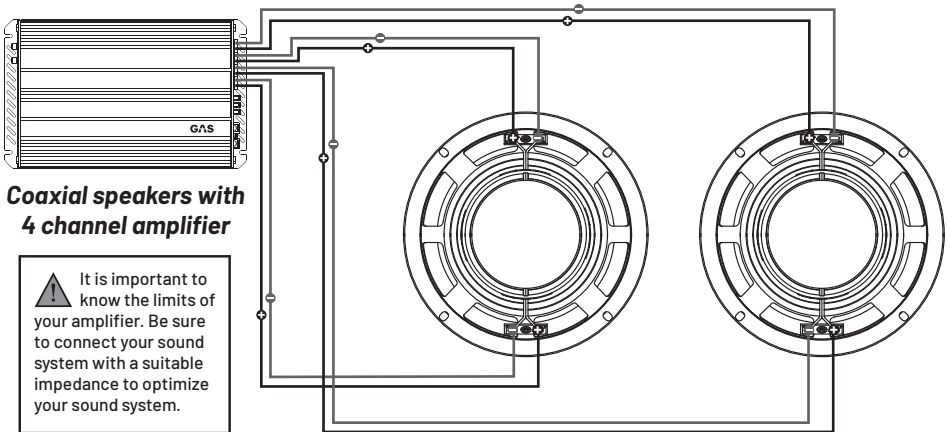


It is important to know the limits of your amplifier. Be sure to connect your sound system with a suitable impedance to optimize your sound system.

FULL-ACTIVE CONNECTION WITHOUT INCLUDED PASSIVE CROSSOVER:



Before using the Full-active connection setting, check your active crossover's values and settings - a good starting point is 6dB HP/LP crossover points @4500Hz. If you are unsure or have any questions, consult your local GAS Audio Power dealer/installer.



Coaxial speakers with 4 channel amplifier

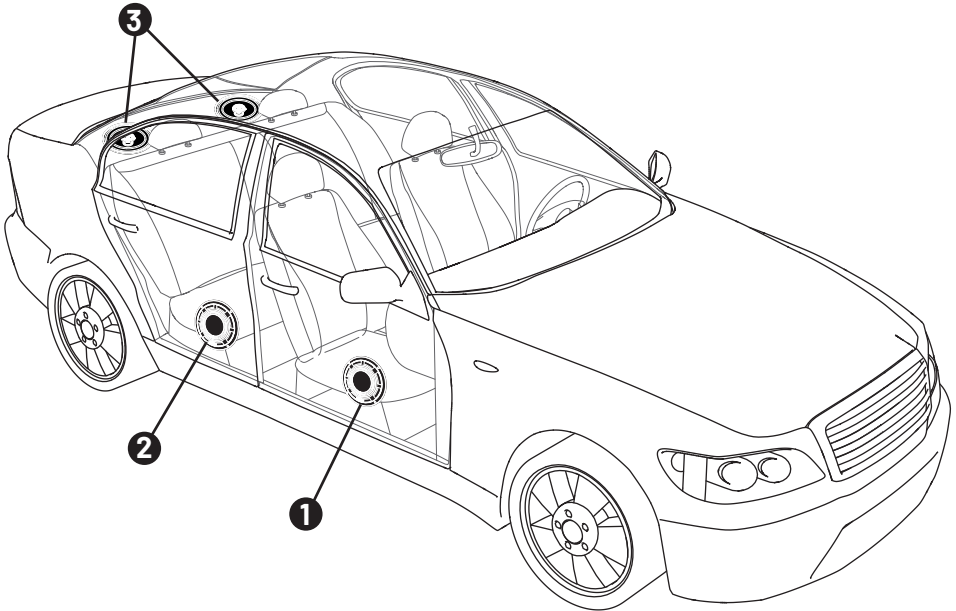


It is important to know the limits of your amplifier. Be sure to connect your sound system with a suitable impedance to optimize your sound system.

HOW TO

SPEAKER PLACEMENT

Wiring tutorial - check! Now you know how to connect cables and speakers correctly, but where do you place the speakers? You will most likely have one or two possible locations to put the speakers depending on make and model. This is where the fun begins!



1) FRONT DOORS

The front right and left doors are typical speaker positions. In some models you'll find original speakers in the kickpanel - right in front of the doors in the footwell.

2) BACK DOORS

If your car's on the newer side of the spectrum, you might find OEM coaxial speakers here and component speakers in the front. Friends in the back seat need awesome sound too!

3) REAR SHELF

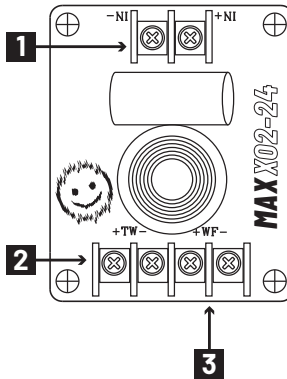
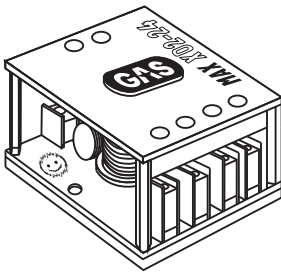
If you don't have speakers here, you're missing out! The rear shelf is a popular location by sound enthusiasts and some car manufacturers to put speakers. If you don't have it - ADD it!

HOW TO

CROSSOVER FUNCTIONS

The crossover model included with the X2-64 speaker is made to give you a maximized sound experience! The crossover consist of one 2-way high & low pass filter for each channel. MAX X02-24 is a 6dB/6dB external crossover that need to be used unless you are using an active set-up. There are several options to connect the crossovers with both passive and active set-ups (see pages 9 & 10) for wiring schematics.

MAX X02-24 CROSSOVER:



- | | |
|----------|--|
| 1 | INPUT TERMINALS Input terminal from amplifier. |
| 2 | TWEETER OUTPUT TERMINALS Output terminal for tweeter (left ports). |
| 3 | WOOFER OUTPUT TERMINALS Output terminal for woofer (right ports). |

TROUBLESHOOTING

NO POWER/SOUND

Check the speakers to make sure they're not damaged. If your speakers don'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 it's 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 speakers. 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/installer.

UNWANTED NOISE

Start by looking over the 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/installer.

DISTORTION

Start by looking over the 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, turn it down 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 speakers are returned for service, please include the original dated receipt (or a copy) with the product. Make sure that the speakers are 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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