

MAD
USER
MANUAL



MAD

D-48BT

MADE TO PLAY LOUD

WE PLAY LOUD!!

We know what you want. You want it LOUD, and that's 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

TABLE OF CONTENT

 SAFETY.....	3
 UNPACKING.....	4
 DIMENSIONS.....	4
 SPECIFICATIONS.....	5
 FEATURES.....	7
The No-compromise zone.....	7
Absolute control.....	7
Flexible connectivity.....	7
For the purists.....	7
 FUNCTIONS.....	8
PC control input / Low level input / High level input / Power input.....	8
Indicators / Turn on setting / Ground lift setting / Low level output...	9
Coaxial input / Optical input / USB input / Remote input.....	10
 HOW TO.....	11
Install DSP.....	11
Power connections.....	12
Low level input (RCA) connections.....	12
High level input connections.....	13
Low level output (RCA) connections.....	13
USB, Optical and coaxial input.....	14
Remote.....	14
Tweaking & settings.....	15
PC software.....	15
Quick presentation of the PC software.....	16
App control.....	21
Crossover.....	23
Equalizer.....	24
Delay settings (Time alignment).....	25
 PERSONAL NOTES.....	26
 TROUBLESHOOTING.....	27
 WARRANTY & DISPOSAL.....	28
 THE GAS WORLD.....	29



SAFETY

PLAY LOUD & SAFE. Before installing your MAD series DSP, 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: 

Make sure that your vehicle has a 12 VDC voltage negative ground system, that it can handle an increased power consumption, and that both the alternator and the power source are healthy and up to the task.

As a precaution, it is recommended to disconnect the vehicles battery before mounting the DSP. **Note:** For new vehicles, disconnecting the battery might cause various errors in your vehicle's electric system that can be cleared only by authorized service partners of your vehicle's manufacturer! Ask your service partner first before disconnecting the battery!

Do not install the DSP where it may be exposed to dirt, excessive damp or moisture. If the DSP is exposed it might result in electric failure, shock or damage to the product. Your DSP will produce heat so make sure it'll have sufficient air circulation. Never cover the surface of the heatsink entirely. 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 DSP to use - take no shortcuts when installing the unit, make sure that all connectors are protected and secured.

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

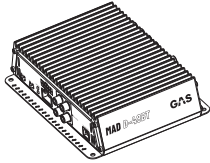
There's a first time for everything, if you need help - ask a friend or contact your local GAS AUDIO POWER dealer/installer.

We want you to experience your product's MAD 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

We know you're excited to dive head first into installing your new DSP, but before you do: Make sure that the DSP and all the accessories are included in the packaging.



DSP
(1pc)



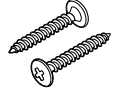
Manual
(1pc)



12-PIN Cable
(1pc)

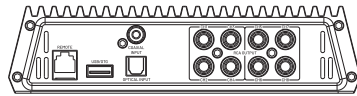
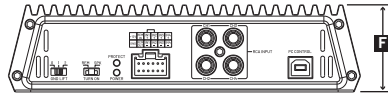
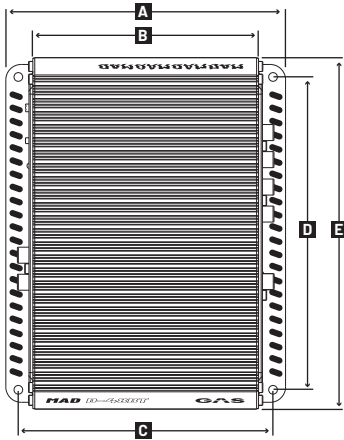


PC Cable
(1pc)



Screws
(4pcs)

DIMENSIONS



	A	B	C	D	E	F	
D-48BT	145	115	132	162	182	45	mm

SPECIFICATIONS

We take pride in our work! Listening, measuring and engineering are essential parts in our workshop. That's how we make sure to bring you an awesome product with NO BULLSHIT!

The GAS MAD D-48BT DSP is a high-performance digital signal processor designed to elevate your car audio experience. Equipped with a DSP chip from Asahi Kasei Microdevices and a high-quality digital-to-analog converter from Cirrus Logic it delivers an exceptional audio performance.

This DSP is built for flexibility. It supports up to four input channels and eight output channels, each equipped with crossovers, time alignment, and 31-band of EQ. Whether you're upgrading a factory system or fine-tuning a fully custom setup, the MAD D-48BT adapts seamlessly to almost any configuration.

For connectivity, it includes four analog high- and low-level inputs, as well as optical, digital, and Bluetooth interfaces, ensuring compatibility with a wide range of audio sources.

GENERAL

Type	8-channel Digital Signal Processor
DSP chipset	AKM
DAC chipset	Cirrus Logic
OP Amps	Texas Instruments
Memory presets	6
Remote control	Yes
Auto Turn-On	Yes
Windows GUI	Yes

INPUT / OUTPUT

Low level input	4-channel RCA
High level input	4-channel
Input sensitivity	2-8 Volt (High Level)
Digital inputs	Coaxial & Optical
Bluetooth	Yes (BT 5.4)
Output	8-channel RCA
Output voltage	3V RMS
Output Level Adjustment	-60dB to +6dB (0.1dB steps)
Adjustable Phase	0° / 180°
In & Out Mixer	Yes



SPECIFICATIONS

AUDIO PERFORMANCE

Freq. response	20 - 20 000 Hz
THD	0.002%
S/N ratio (A-weighted)	Line input >103dB, Coaxial / Optical input: >105dB
Master volume	0 - 66

SIGNAL PROCESSING

Crossover types	Bessel, Butterworth & Linkwitz-Riley
Crossover slopes	6dB / 12dB / 18dB / 24dB / 30dB / 36dB / 42dB / 48dB
Crossover frequency range	20 - 20 000 Hz (1 Hz steps)
Equalizer	8-channel parametric EQ
EQ bands	31-band per channel
EQ range	-12DB to +12DB (0.1dB steps)
Adjustable Q-value	Yes
Time alignment range	0-20 ms / 0-692 cm / 0-272 inch
Time alignment step	1 cm steps

FEATURES

You already know why this exists. MAD D-48BT isn't here to explain itself or convince anyone. It's for builds where you actually care about how things sound, not how they look on paper. Plug it in. Start messing with it. Things will fall into place.

THE NO-COMPROMISE ZONE

MAD D-48BT is an 8 channel DSP that lets you take control where it counts. OEM system, full custom build, daily driver that just got serious. Throw it in. It doesn't really care what kind of setup you run. Inside sits a DSP from Asahi Kasei Microdevices and a Cirrus Logic DAC. Clean signal, low distortion at 0.002 percent, and enough headroom to keep things together when the LOUD level reaches new heights.

ABSOLUTE CONTROL

Measure it. Trust your ears. Argue with your friends about it. That's part of the deal. Every channel gets a 31 band parametric EQ with adjustable Q values and 0.1 dB steps. Enough control to get it right. Bessel, Butterworth and Linkwitz Riley filters are all there, up to 48 dB per octave. Time alignment on all eight channels lets you move the stage around until it locks in. This is where you start tweaking. Or obsessing.

FLEXIBLE CONNECTIVITY

The MAD D-48BT adapts to any system. It supports four RCA inputs, four high-level inputs, plus coaxial, optical, and Bluetooth 5.4 sources. Dive deep into the Windows tuning software or iOS and Android app for full control. Whatever your setup, nothing is left behind.

FOR THE PURISTS

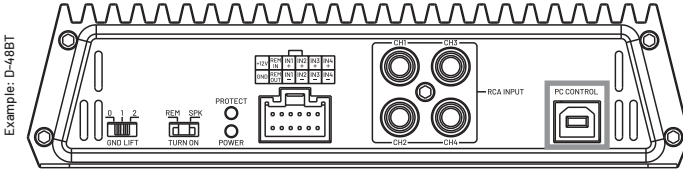
This is where the MAD philosophy shines! The D-48BT provides 8 RCA outputs at 3V RMS, backed by a 105 dB signal-to-noise ratio that keeps your signal clean and powerful. Adjustable phase control and output level trims (0.1 dB resolution) give you absolute command of every driver in your system.



FUNCTIONS

The MAD DSP is made for those who crave high performance and unlimited tuning possibilities! We've packed this DSP with lots of cool features. We know you're itching to start building your new sound system, but make sure to read through these pages. Understanding the DSP functions will help you make correct adjustments, protect your equipment, and unlock the full potential of your setup.

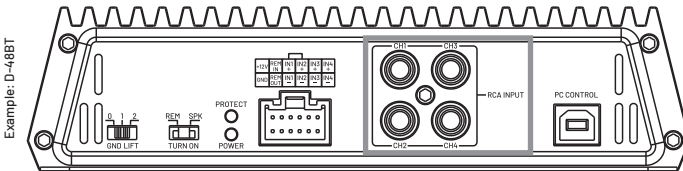
PC CONTROL INPUT



PC CONTROL.
Connects to your computer via USB cable (included).

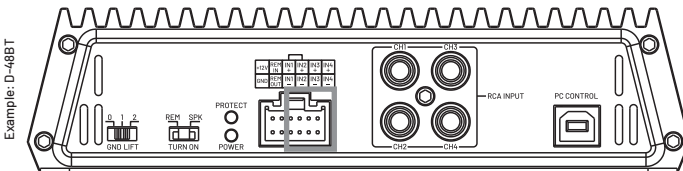
⚠ Follow the HOW TO instructions

LOW LEVEL INPUT



RCA INPUT CH1 - CH4.
Connects to your head unit's RCA output.

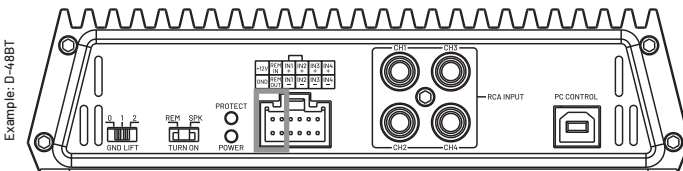
HIGH LEVEL INPUT



Used instead of low level input/RCA to connect the speaker output directly to the DSP.

⚠ Never use high level and low level input at the same time!

POWER INPUT

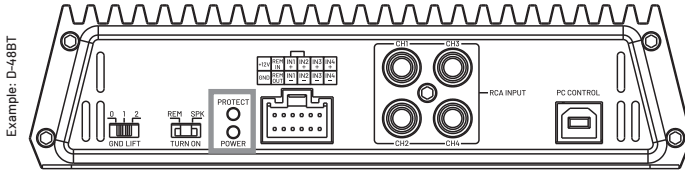


4-PIN connection for POWER, GROUND and REMOTE IN/OUT.

⚠ Make sure the vehicle uses a 10-16V power source and electrical system.

FUNCTIONS

POWER / PROTECT INDICATOR

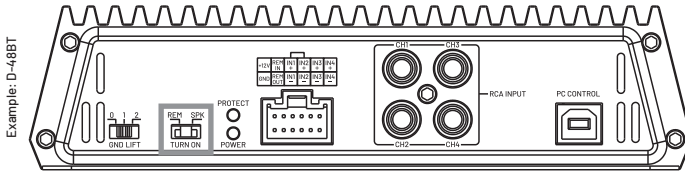


POWER. Glows GREEN when the DSP is connected and on.

PROTECT. Glows RED when the DSP indicates a failure.

⚠ If protect glows, read TROUBLE SHOOTING.

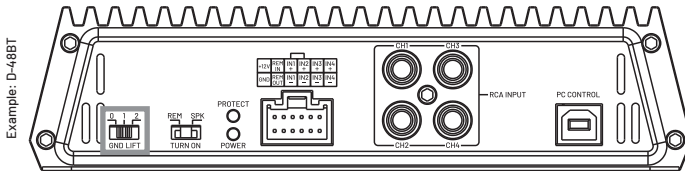
TURN ON SETTING



TURN ON. Settings for automatic turn on signal.

⚠ Follow the HOW TO instructions

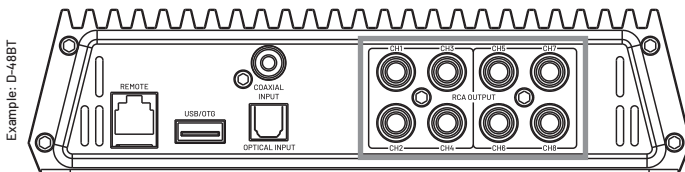
GROUND LIFT SETTING



GND LIFT. Separates the signal ground from the power ground to help prevent ground loop noise and interference.

⚠ Follow the HOW TO instructions

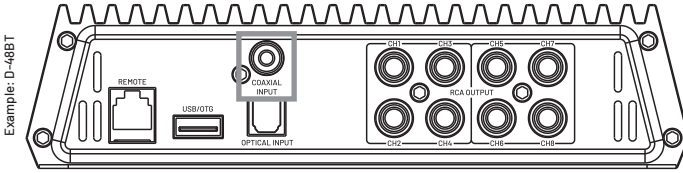
LOW LEVEL OUTPUT



RCA OUTPUT CH1 - CH8. Connect RCA to amplifier(s).

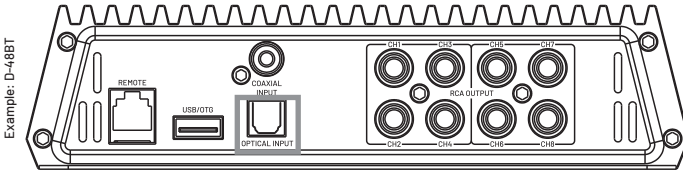
FUNCTIONS

COAXIAL INPUT



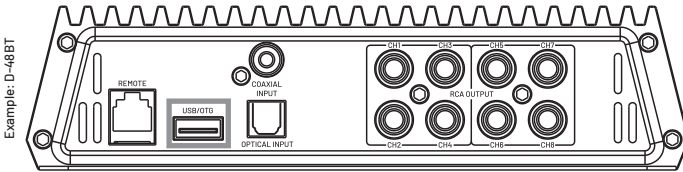
COAXIAL INPUT.
Receives digital audio via coaxial cable.

OPTICAL INPUT



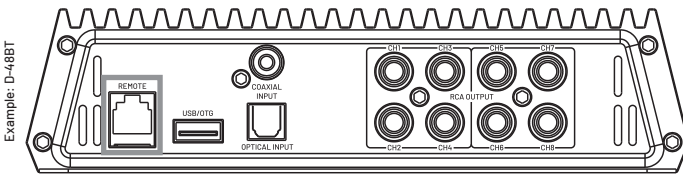
OPTICAL INPUT.
Receive digital audio via optical cable.

USB/OTG INPUT



USB/OTG INPUT.
Receive digital audio via USB cable.

REMOTE INPUT



REMOTE. Use this to connect a remote level output control knob for an easy access and adjustment of the DSP output.



HOW TO

A well-built sound system will set you apart from the rest and elevate your entire vehicle. It's important that you carefully read the instructions on the following pages. This is to make sure that you install and use the DSP correctly, for the true MAD EXPERIENCE!

INSTALL DIGITAL SIGNAL PROCESSOR

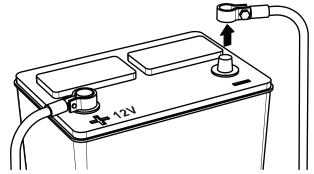


Make sure your vehicle is up to task. You need a 12VDC negative ground electric system and the power source and the alternator should be fully functional and healthy.



Better safe than sorry! Find a location that has a normal temperature and is safe from rain, excessive moisture and dirt when you're going to install your DSP.

Disconnect and secure the negative terminal from your power source to eliminate the risk of damaging yourself or the products. Place the negative terminal in a secure position so that it won't accidentally contact the positive or the negative power source post.



It's time to find the perfect location to place your DSP! Since the DSP produces heat you don't want to install it where it might get overheated. Find a place where air can circulate around it to stay cool. Also leave enough space so it's easy to connect your cables and reach for the controls. Don't bolt the DSP to your vehicle chassis (if this is your only option, you need to isolate the DSP from the screws).

Find the best way to run the cables through your vehicle! This might take some time, and may vary between different models. Preferably the cables shouldn't be visible when you're finished and they shouldn't be placed in a way that they obstruct any of the vehicle's functions or hinder you from operating the vehicle safely. It's also important you don't run the power cable together with the signal cable, since this can cause interference.

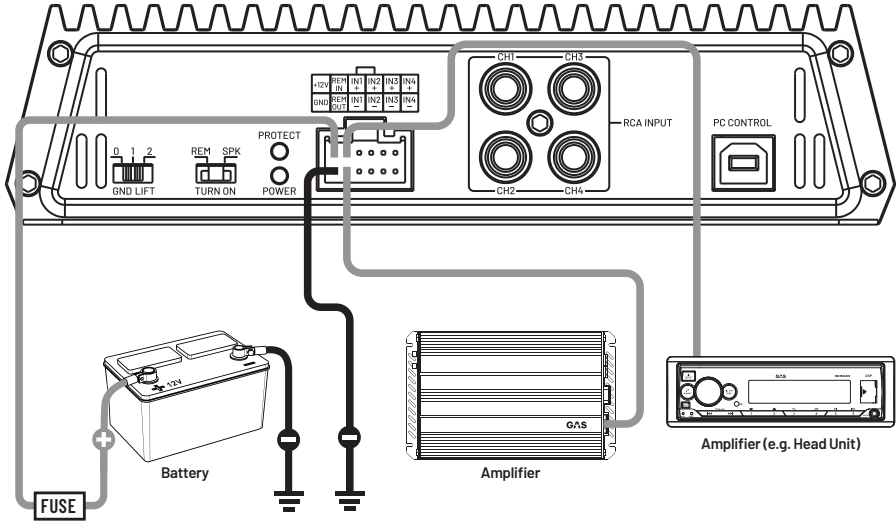
Connect the DSP correctly! Before you connect the DSP, it is important to know how you should connect it. Use the included cables and make sure that the needed wiring accessories are prepared. On the following pages are wiring schematics to show you what connection goes where.



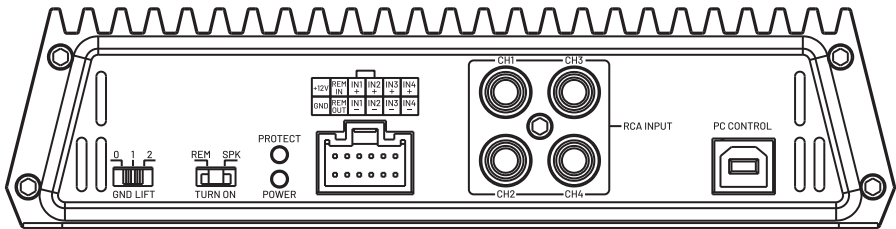
Make sure that you connect the ground (GND) wiring first, before anything else is connected. Do not start the DSP until the connection is completed.

HOW TO

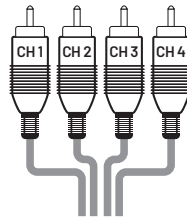
POWER CONNECTIONS



LOW LEVEL INPUT (RCA) CONNECTIONS



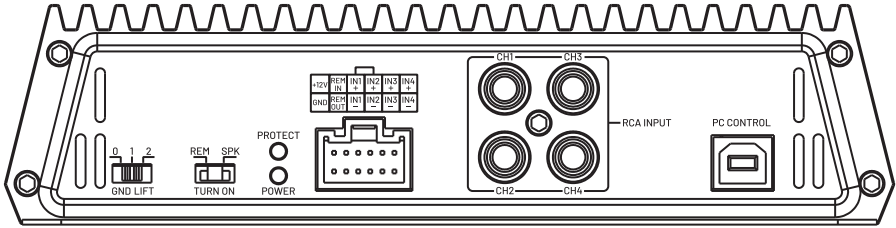
For audio connection between the head unit and the DSP, you can either use Low Level Input (RCA) or High Level Input. Low Level Input (RCA) is preferred for the best audio performance.



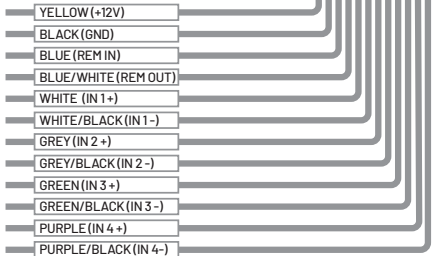
⚠ Never use high level and low level input at the same time!

HOW TO

HIGH LEVEL INPUT CONNECTIONS



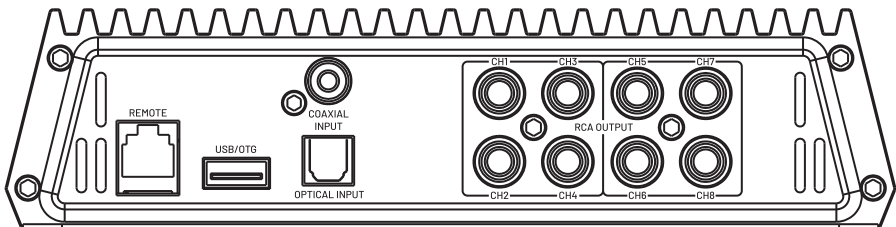
⚠ Never use high level and low level input at the same time!



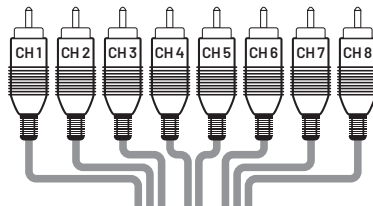
If you don't have any RCA outputs on your head unit you can use the high level input function instead. Use the included HI input cable. This will connect the speaker output of the head unit directly to the DSP.

CHANNEL	CABLE COLORS	CONNECTION
1	White & White/Black	Left front speaker input (+)(-)
2	Grey & Grey/Black	Right front speaker input (+)(-)
3	Green & Green/Black	Left rear speaker input (+)(-)
4	Purple & Purple/Black	Right rear speaker input (+)(-)

LOW LEVEL OUTPUT (RCA) CONNECTIONS

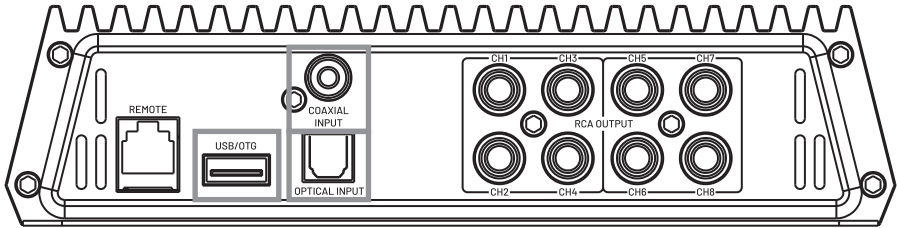


Connect one or more amplifiers to the DSP via RCA signal cables (8 channels in total).



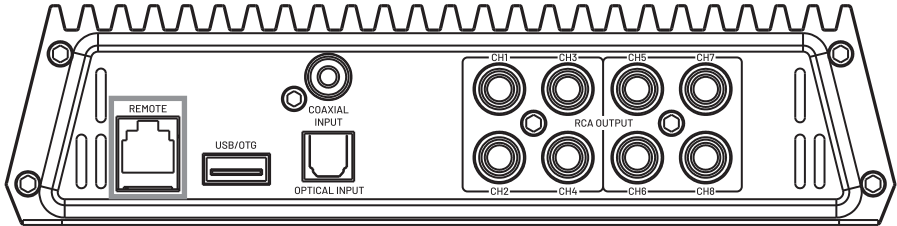
HOW TO

USB, OPTICAL AND COAXIAL INPUT



USB/OTG, coaxial and optical inputs let you connect high-quality digital sources with minimal noise or interference. These high-bandwidth connections preserve the original signal, ensuring accurate audio reproduction in your system.

REMOTE



The remote input let you connect a remote control to your MAD DSP and makes it possible for you to fine tune your system volume from the front seat while listening to your favorite song. **NOTE!** DSP remote sold separately.



Always make sure that your full concentration is on the road while you drive. Do not make detailed adjustments on the remote's setting while driving.

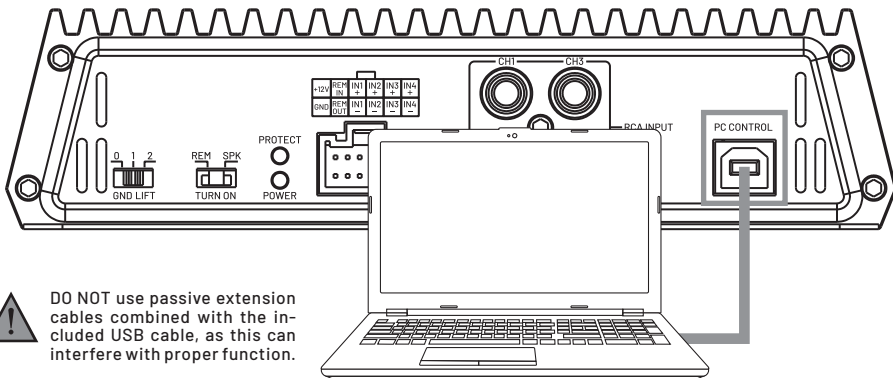


HOW TO

TWEAKING & SETTINGS

The devil is in the details. Tweak the settings on your MAD DSP using the recommendations below and cross the line that separates the average user from the hardcore high-power audio junkie!

PC SOFTWARE



DO NOT use passive extension cables combined with the included USB cable, as this can interfere with proper function.

To establish communication with the software, an available USB port is required. Connect the unit to your PC using the included USB cable. When connecting the USB cable, your system will automatically assign a port for the DSP. The DSP must be in operation mode to adjust any settings. When you have installed the software, simply click the program icon on your desktop or select it from the software list to launch the program.

Software Installation

To get started with the installation, download the DSP software from the Support Area on our website: www.gasaudiopower.com.

Requirements

- Compatible Operating Systems: Microsoft Windows® XP SP3, Vista, 7, 8, 8.1, 10, 11.
- PC requirements:
 - Minimum 1.5 GHz processor
 - 1 GB RAM
 - Graphic card with at least 1024x600 resolution

! We highly recommend using the latest version of the DSP software available on our website for optimal performance.

HOW TO

QUICK PRESENTATION OF THE PC SOFTWARE

Below is a quick presentation of how the PC software works and some of its functions. For further information/guidance on how to use DSP computer software, consult your local GAS CAR AUDIO dealer.

MIX



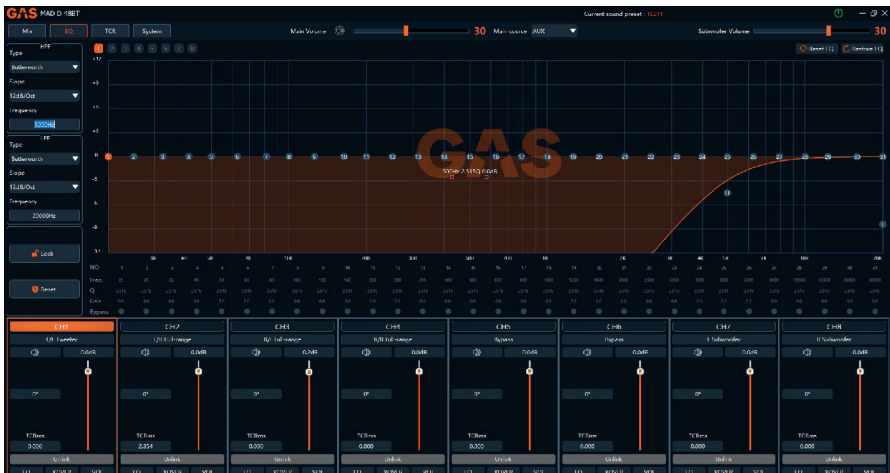
Directing the input source channels to the corresponding RCA output channels.



- Input channels can be individually enabled or disabled.
- Level adjustment range: -99 dB to 0 dB.

HOW TO

CROSSOVER, EQ & LEVEL



Crossover Settings

- High Pass Filter (HPF).
- Low Pass Filter (LPF).
- Band Pass Filter (combination of HPF + LPF).
- Crossover Types: Bessel, Butterworth, and Linkwitz–Riley.
- Slope Options: 6 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, and 48 dB per octave.
- Frequency Range: 20 Hz – 20,000 Hz.

31-Band Parametric Equalizer

- Each output channel includes a 31-band parametric equalizer.
- EQ bands can be adjusted in 1 Hz increments, allowing precise tuning even if a 1/3 octave band is not ideally positioned.
- Q value (bandwidth) is adjustable between 0.40 and 28.85.
- Gain can be set between -12 dB and +12 dB.

Level Settings

- The output level for each channel can be adjusted individually within a range of -60 dB to +6 dB.
- Channels can also be grouped and adjusted simultaneously, either in pairs or in larger groups, depending on your configuration needs.
- Additionally, phase adjustment is available with two selectable options: 0° or 180°.

HOW TO

LINK FUNCTION

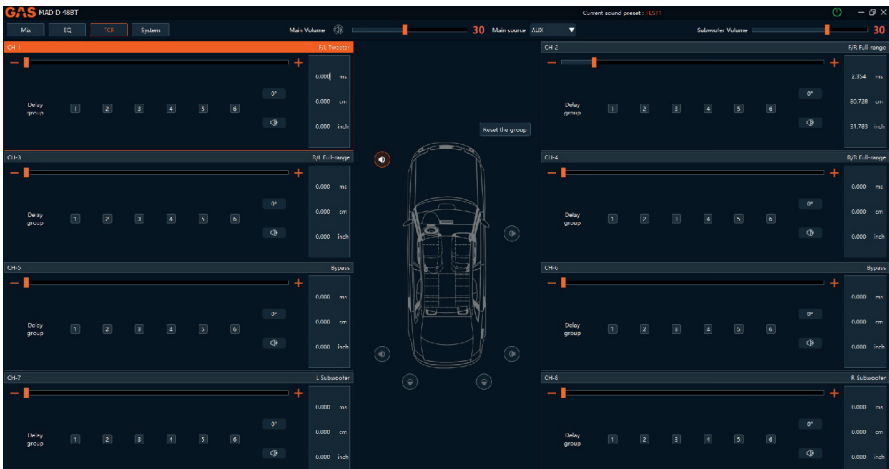


The Link function in the EQ menu allows copying and linking of key parameters between selected channels:

- Copy/Link EQ only
- Copy/Link crossover settings only (HPF/LPF)
- Copy/Link channel levels only

This offers maximum flexibility when creating matched, mirrored, or paired channel configurations.

TCR - TIME CORRECTION

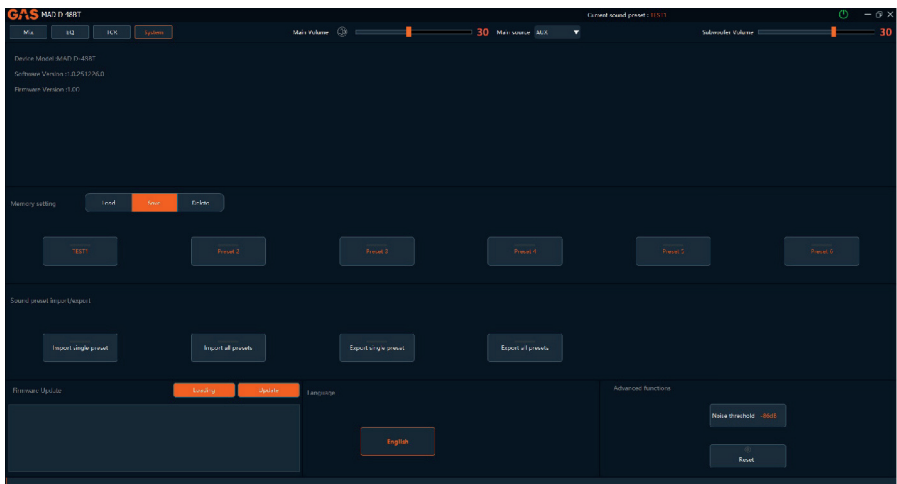


Configure time alignment for all 8 RCA output channels individually, or group them using the Delay Group function.

The delay can be adjusted in milliseconds (ms), centimeters (cm), or inches (in) - depending on your preferred unit of measurement.

HOW TO

SYSTEM



Memory Setting

You can save different system settings using six available Presets.

1) Save a preset:

- Press the Save button
- Select the Preset slot you wish to save to
- Enter a name for your preset
- Press the Save button again to confirm

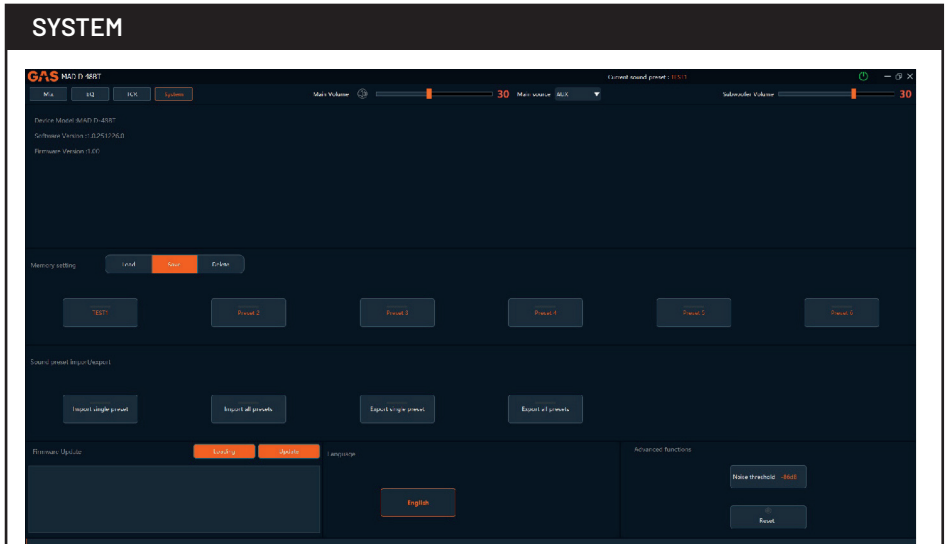
2) Load a preset:

- Press the Load button
- Choose the preset you want to activate
- The selected preset will be loaded
- The currently active sound effect will be displayed in the upper right corner of the screen

Sound effect import /export

Preset sound settings can be exported and imported either individually or all at once. This allows for easy sharing, backup, or transfer between devices.

HOW TO



Firmware Update

Future firmware updates can be installed via this section. For optimal performance, always download the latest firmware from our official website: www.gasaudiopower.com

Noise Threshold

The Noise Threshold setting determines the minimum signal level that the DSP will process. Any audio signal below this level is considered unwanted noise - such as hiss or static - and will be attenuated or muted, resulting in cleaner and clearer sound. This is particularly noticeable during silent or quiet sections of music, or when no audio is playing.

The Noise Threshold acts like a noise gate:

- If the incoming signal level is above the threshold, the DSP processes it normally.
- If the signal drops below the threshold, it is considered noise and is reduced or muted to avoid unwanted sound artifacts.
- Can be adjusted from -20 to -119db and set to OFF.

Reset

This operation will reset the DSP to its factory settings.

HOW TO

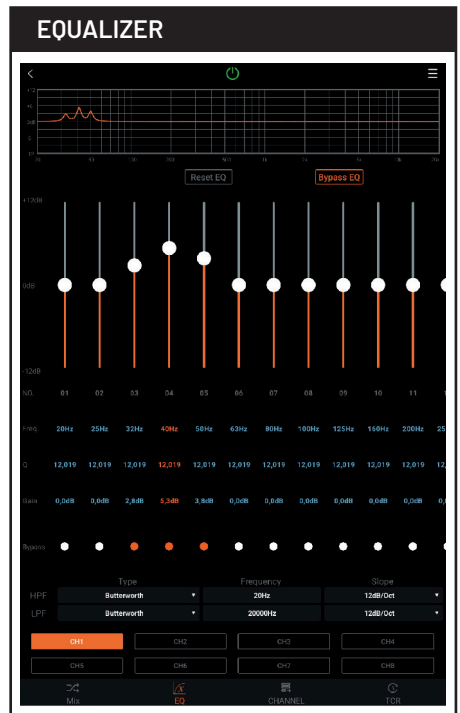
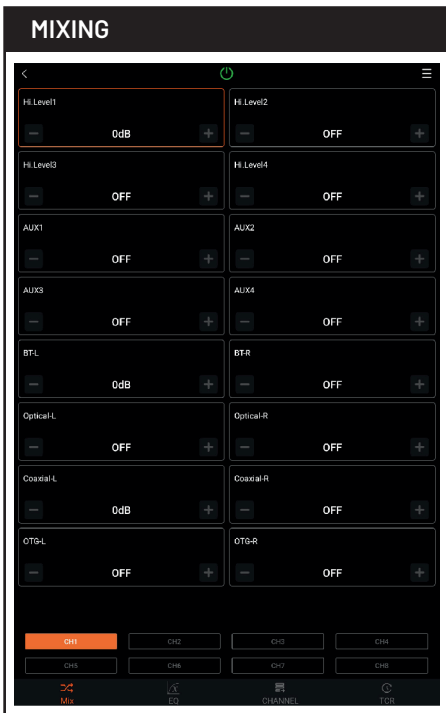
APP CONTROL

No PC? No problem. MAD D-48BT is fully tunable straight from your phone or tablet. Download the GAS MAD D-48BT app for iOS or Android and take control wherever you are.

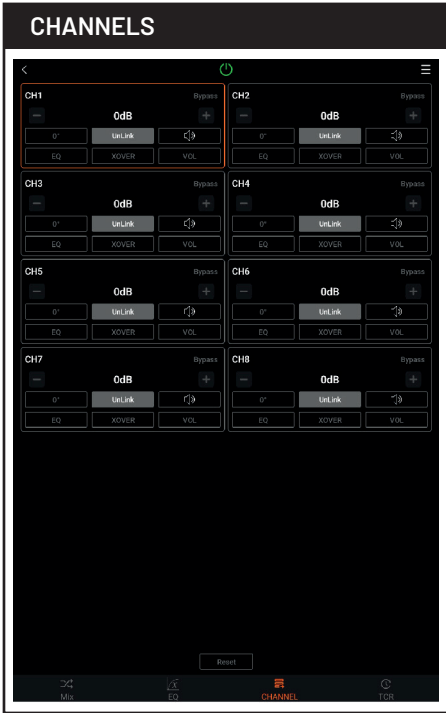


EQ, crossovers, time alignment, input and output routing, presets. It's all there. Every adjustment, every tweak, right at your fingertips. Sit in the driver's seat, listen, adjust, repeat. That's how it should be done.

Connect via Bluetooth, open the app and start dialing it in. Simple. Direct. You're in control.



HOW TO



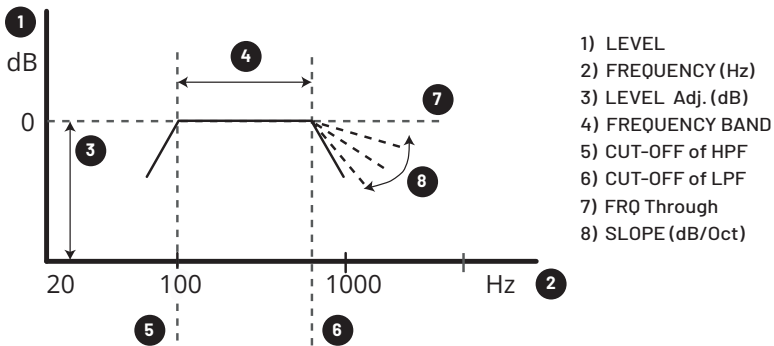
To make sure that the App functions properly, make sure to update it regularly via either the App Store or Google Play when there is an update available.

HOW TO

CROSSOVER

Adjusting crossover settings is the key when it comes to sound optimization. The crossover function gives you a great variety of options to customize your own settings, just for your sound system. Use the Notes page in the back of the manual to write down your crossover settings for future reference.

Illustrated picture



Using Cut-off of the HPF (High-Pass Filter) or LPF (Low-Pass Filter) gives you the possibility to adjust the frequency range for each line out.

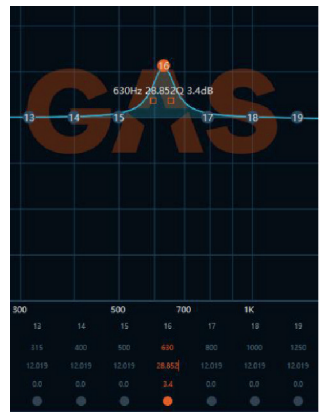
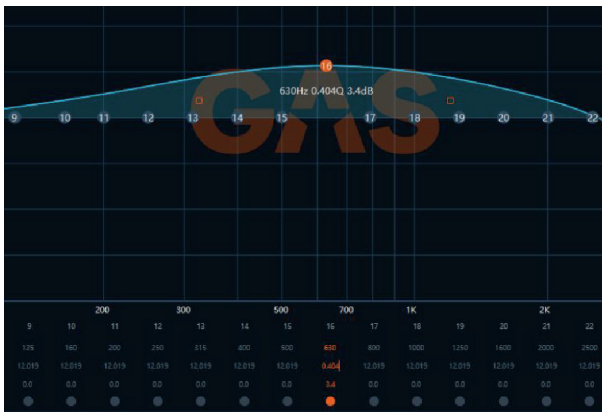
- **HPF - High Pass filter** lets the high frequencies pass and cuts off the lower frequencies.
- **LPF - Low Pass filter** lets the low frequencies pass and cuts off the higher frequencies.
- **Pass through** - No filter is used
- HPF and LPF can be combined to create a **Band Pass filter**
- **Level:** Adjusts the different levels between the outputs.
- **Slope:** Lets you adjust the frequency range for each output. The slope shows how many decibels the signal is dropping when the frequency is one octave lower (or higher). How many dB/oct. the signal is dropping for each unit. Adjustable between 6, 12, 18, 24, 30, 36, 42 and 48 dB/oct depending on filter type.
- **Filter Type:** Choose from three crossover types - each with unique sound characteristics.
 - *Bessel* provides smooth phase response, delivering a more natural and organic sound.
 - *Butterworth* offers flat frequency response, making it a versatile, all-around choice.
 - *Linkwitz-Riley* features steep, precise crossover points, perfect for sound set-ups that demand clarity and precision.
- **Phase:** By changing phase (normal, reverse) you can adjust the signal between 0-180 degrees. Reversing the phase can improve the sound around the crossover frequency.

HOW TO

EQUALIZER

Each channel features a 31-band equalizer, giving you a total of 310 adjustable EQ bands across all channels. EQ settings can be applied individually per channel, or linked in pairs or groups for synchronized adjustments.

The equalizer supports both graphic and parametric modes, allowing you to freely move EQ bands and group them where needed. Thanks to the parametric functionality, you can fine-tune the Q-value from 0.4 to 28.8.



Q-Value Explained

- A low Q value creates a wide bandwidth, affecting a broad range of frequencies.
- A high Q value creates a narrow bandwidth, ideal for targeting and boosting or cutting specific frequencies.
- Higher Q values result in a more defined “bump” at the selected frequency, producing a tight boost or a more resonant tone at extreme settings.

Gain Adjustment

Each band's gain can be set between -12 dB to +12 dB, controlling the peak (boost) or dip (cut) level of the frequency band.

HOW TO

DELAY SETTINGS (TIME ALIGNMENT)

Time alignment is crucial for achieving the best sound performance in your system. The goal is to make sure that all sound from your speakers reaches your ears at the same time, resulting in clearer imaging and improved coherence. To achieve this, you'll need to set delays for each speaker based on its distance from your listening position.

How to set Time Alignment

1. Measure the distances

Measure the distance from your listening position, reference point (RP), to each of your connected speakers.

2. Identify the farthest speaker

The speaker farthest from your listening position will have the greatest delay. Set the delay for this speaker to 0ms (or 0cm) in the DSP via the PC software. This will serve as your reference point.

3. Calculate the delay for other speakers

For each remaining speaker, subtract its distance from the distance of the farthest speaker. The closer the speaker is to you, the more delay it will need. For example, if the farthest speaker is 150cm away, and the others are at 70, 80, 90, 100, and 120cm:

- 150 cm - 70 cm = 80 cm
- 150 cm - 80 cm = 70 cm
- 150 cm - 90 cm = 60 cm
- 150 cm - 100 cm = 50 cm
- 150 cm - 120 cm = 30 cm

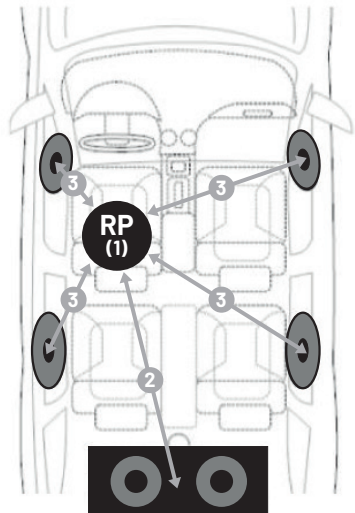
4. Convert Distance to Delay (in milliseconds)

Sound travels at 340 meters per second, or 34cm per millisecond. To convert the distance to delay, divide the distance by 34.

- 80 cm / 34 = 2.35 ms
- 70 cm / 34 = 2.06 ms
- 60 cm / 34 = 1.76 ms
- 50 cm / 34 = 1.47 ms
- 30 cm / 34 = 0.88 ms

5. Input Delay Values

Enter the calculated delay values into the DSP, either in milliseconds (as calculated) or directly in centimeters.



By aligning the timing of all your speakers, you ensure that sound from each one arrives at your listening position at the same time, optimizing the overall sound performance and creating a more immersive listening experience.

PERSONAL NOTES

Now that you've done your homework and know how to adjust your crossover settings, it is smart to write them down for future reference. Work smart, not harder, that way you will get the most out of your sound system and have the MAD EXPERIENCE!

Tweeter	FREQ	_____
	SLOPE	_____
	PHASE	_____
	GAIN	_____
Midrange HPF	FREQ	_____
	SLOPE	_____
	PHASE	_____
	GAIN	_____
Midrange LPF	FREQ	_____
	SLOPE	_____
	PHASE	_____
	GAIN	_____
Woofer	FREQ	_____
	SLOPE	_____
	PHASE	_____
	GAIN	_____



TROUBLESHOOTING

NO POWER

Check the DSP to make sure it isn't damaged. If your system doesn't get any power, the most common issue is either in the wiring or the fuse. Use a multimeter to measure the DSP voltages, both yellow and blue cable (+12-16V). Check that all speaker cables are connected to your sound system. If you are using a car specific cable harness, make sure it is for your car model. Most modern cars have some kind of CAN-Bus system to start the OEM head unit, for these cars a special CAN-Bus harness is needed. Make sure that the RCA cables are properly connected if external amplifier is used and that you have 12V remote on external amplifier.

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. If the noise changes with the accelerator, it is most certain a ground loop issue. Make sure that the grounding point is good, especially if an external amplifier is used. When all of the above has been tested/looked over, and the unwanted noise does not vanish, consult your local GAS dealer.

DISTORTION

Start by looking over the installation and all cables 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. When an external amplifier is used, 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. GAS MAD D-48BT have an advanced DSP with several settings, that used with none correct setting can make the setup sound less good. Reset the settings as a last option.

PROTECTION

Ensure that all wiring is correctly connected and that no cables are in contact with the DSP chassis. The DSP will enter protection mode if it becomes overheated. It will automatically resume normal operation once the temperature returns to a safe level. To prevent overheating, always follow the installation guidelines outlined in the "HOW TO" section and leave adequate space around the DSP to allow for proper airflow.

Protection mode can also be triggered by a short circuit in the signal path. If this occurs, check the high-level input wiring (if used) and inspect the RCA connectors and cables for any short circuits. If all connections have been checked and verified, and the DSP remains in protection mode, please contact your authorized GAS AUDIO POWER dealer for further assistance.



WARRANTY & DISPOSAL

Our products are made with passion and expertise to give you the products you need to have an awesome audio powered experience that's LOUD. All our products are covered by warranty, depending on the conditions in the country where it's sold. The warranty is valid from the date of the original receipt as proof of purchase (warranty period differs depending on local warranty laws and policies).

If the DSP is returned for service, please include the original dated receipt (or a copy) with the product. Make sure that the DSP is packaged properly and secured, preferably in its original packaging. If you have any questions regarding the terms of warranty, please contact your local GAS AUDIO POWER dealer/distributor.



The crossed-out wheelee 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

GAS AUDIO POWER and SHAKY are registered trademarks by Winn Scandinavia AB and is protected by relevant laws and jurisdictions such as Copyright and Trademark laws.

Winn Scandinavia AB | Idrottsvägen 37, 70232 Örebro, Sweden | www.winnscandinavia.com

Winn Scandinavia AB reserves for possible typos, factual or numeric errors that may have been printed on any products, package designs, user manuals and/or other included accessories.

GAS
AUDIO POWER