



DEVINE

**D-series (D-200, D-400, D-600)
digital class D power amplifiers**



User manual

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Safety instructions



WARNING!



Always keep this device away from moisture and rain! Hazardous electrical shocks may occur!



WARNING!



Only connect this device to a matching power outlet. This device is intended to work on a specified AC currency. Connecting this device to power outlets with other voltages may result in permanent damage and possible hazardous situations, such as fire or electrical shocks!



WARNING!



Be careful with every operation of this device. Touching live wires inside and outside the unit may cause hazardous electrical shocks!

This unit must be operated by, or under the supervision of an adult. This device is not suitable for children.

Every person involved with the installation, operation and maintenance of this device has to:

- Be qualified
- Follow the instructions of this manual
- Make sure there is no damage caused by transport. If the device seems damaged from the outside, do not use it and contact your dealer for more information and consultation.
- To make sure the device maintains in perfect condition and for safe operation, it is necessary for the user to follow the instructions and warning notes of this user manual.
- Damage caused by improper use or modifications to the device are not covered by warranty.
- This device does not have any user-serviceable parts inside. Servicing of this device needs to be done by qualified technicians.

Important notes regarding safety and health:

- Always keep the power cord away from other cables. Handle the power cord and all connectors with caution.
- Never remove any warning or informative labels from the unit
- The ground contact always needs to be connected. Do not cover or remove the ground contact.
- Never leave cables lying around
- Do not open the device and do not modify any hard- or software of this unit.
- Do not insert this object into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the system on and off frequently as this will reduce the lifespan of the device.
- Do not drive the inputs of the fixture with a signal larger than required to work at full performance.
- Only use this device indoor, avoid contact with water, moist or other liquids. Do not place items filled with liquids on top of the unit.

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- Avoid nearby flames or heat sources, do not place this device near flammable liquids, gas or flammable items.
- Always disconnect the device when it is not in use for a longer period of time, when servicing is needed or when the device needs cleaning.
- Only handle the power cord by its connectors. Never pull the cable to remove a connector from its socket, as this could lead to damage and electrical shocks.
- Always operate this device with a stable AC current.
- Always operate this device with the AC ground wire connected to the electrical system's ground.
- Never use other types of cables than specified in the manual, do not use defective or bad functioning cables. Contact your dealer when the included or required cables do not work properly with this device.
- When the device has been exposed to large temperature differences (for example, transport from outdoor to indoor), do not connect the device immediately. Do not activate the unit until it has reached room temperature, as moist might build up inside the unit, which may cause short circuits and/or electrical shocks.

Guidelines and types of use:

- This device is intended to be used by professionals on stage, in theaters, clubs and other equal venues.
- This device is not suitable for children and always needs to be operated by an adult.
- Only use the device when the environment is suitable and will not cause any damage. Do not use the product in moist or dusty environments, or where long-term damage may occur such as:
 - indoor swimming pools where chlorine is used.
 - Beaches, where sand and salt are present.
 - Outdoor, without roof protection
 - Indoor areas where intense heat sources are present or where the temperature exceeds levels which are comfortable for humans.
- Only use the included power cable and only connect the device to a suitable power outlet with the correct output voltage. Connecting the device to a power outlet with the wrong type of voltage or using the product with a wrong type of power cable may cause permanent damage to the device.
- Avoid shocks and collision during use and transport. Do not transport the device while in use. Avoid brute force during the installation and operation of this device.
- Familiarize yourself with the functions of the device before use. Do not allow operation of the device by unskilled or unqualified people.
- Use of the device in other ways than described in this user manual may cause damage and injury. Devine can not be held responsible for any damage or injury caused by improper use.

Storage and transport:

- This device is intended for mobile use. When transported, use the original packaging of the product, or a fitting flight case, preferably filled with foam.
- This device is not intended for permanent use. Operation breaks will ensure that the lifespan of the device remains unchanged.
- If the device is not used for a longer period of time, disconnect it from its power source and store it in its original packaging, or in a fitting flight case.
- Store the device indoor, dry and do not expose the device to extreme temperature differences.

Housing:

- Inspect the housing of the device frequently. Severe dents, cracks and missing screws should be avoided at all costs. Do not use the device when the housing is not in optimal condition. Contact your dealer or a skilled technician when in doubt about the state of the device.
- Check the fixture and screws for corrosion. Corrosion should not be present on the fixture. Contact your dealer or a skilled technician when corrosion is found on the fixture.
- Every power or signal chassis/connector should be mounted tightly. Do not use the device when connectors are loose.
- Do not use the power cord when the cores are visible. Contact your dealer for a replacement if needed.
- Avoid the buildup of dust and dirt. Clean the exterior of the fixture every month with a dry or damp cloth. When using the device intensively, the cleaning frequency needs to be increased.

Fuses:

- The main fuse of this device is to be found on the rear of the device. In most cases, directly next to the power inlet.
- Only replace a fuse for a new one with the same type and rating! Do not use a fuse with a higher or lower

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rating.

- Do not bridge the fuse with electrical wires, aluminum foil, as the fuse is used for protection against electrical shocks and short circuit.
- Always mount the fuse cover back to the fuse compartment.



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Guidelines for speaker systems



WARNING!

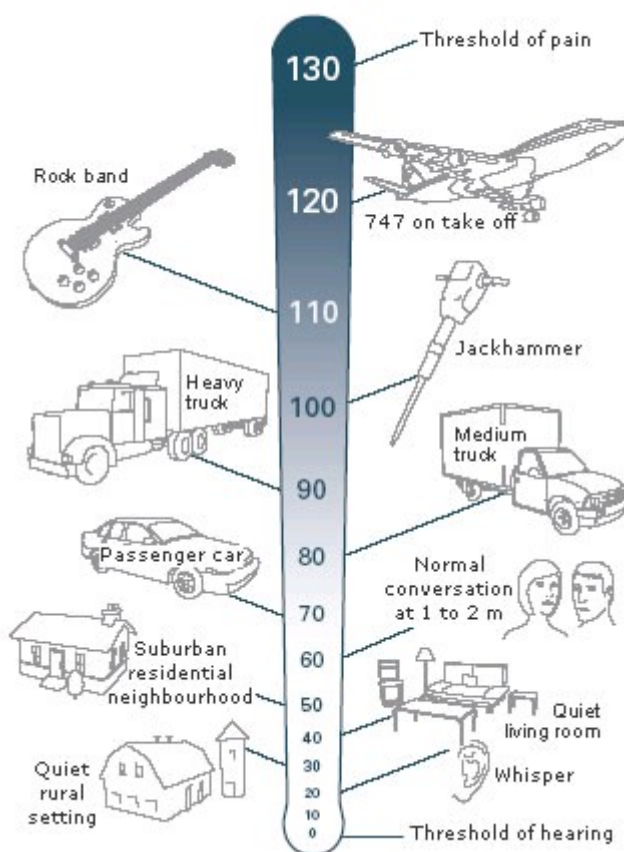


This amplifier is intended to drive passive loudspeakers. These may produce a sound pressure level which can be harmful for humans and animals when used incorrectly and/or without protection. Possible permanent hearing loss may occur when humans or animals are exposed to high sound pressure levels for a longer period of time.

- Avoid exposure to high sound pressure levels for a longer period of time. See the charts on this page for more information about sound pressure levels and exposure to high levels.

Continuous dB	Permissible exposure time
85	8 hours
88	4 hours
91	2 hours
94	1 hour
97	30 minutes
100	15 minutes
103	7.5 minutes
106	3.75 minutes (<4 minutes)
109	1.875 minutes (<2 minutes)
112	0.9375 minutes (<1 minute)
115	0.46875 minutes (+/- 30 seconds)

DECIBEL SCALE (dBA)



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Introduction

Thank you for purchasing this Devine amplifier. To make sure you use this product as intended and for optimal performance and protection of this device, Devine recommends you read this user manual.

The Devine D-series amplifiers consist of several high quality power amplifiers. The D-series are digital class D power amplifiers, with a digital amplifier circuit installed. Thanks to this technology, the D-series are very compact, lightweight and still very reliable and powerful. The D-series are available in three models.

Box contents:

1x D-series amplifier (D-200, D-400, D-600)

1x power cable

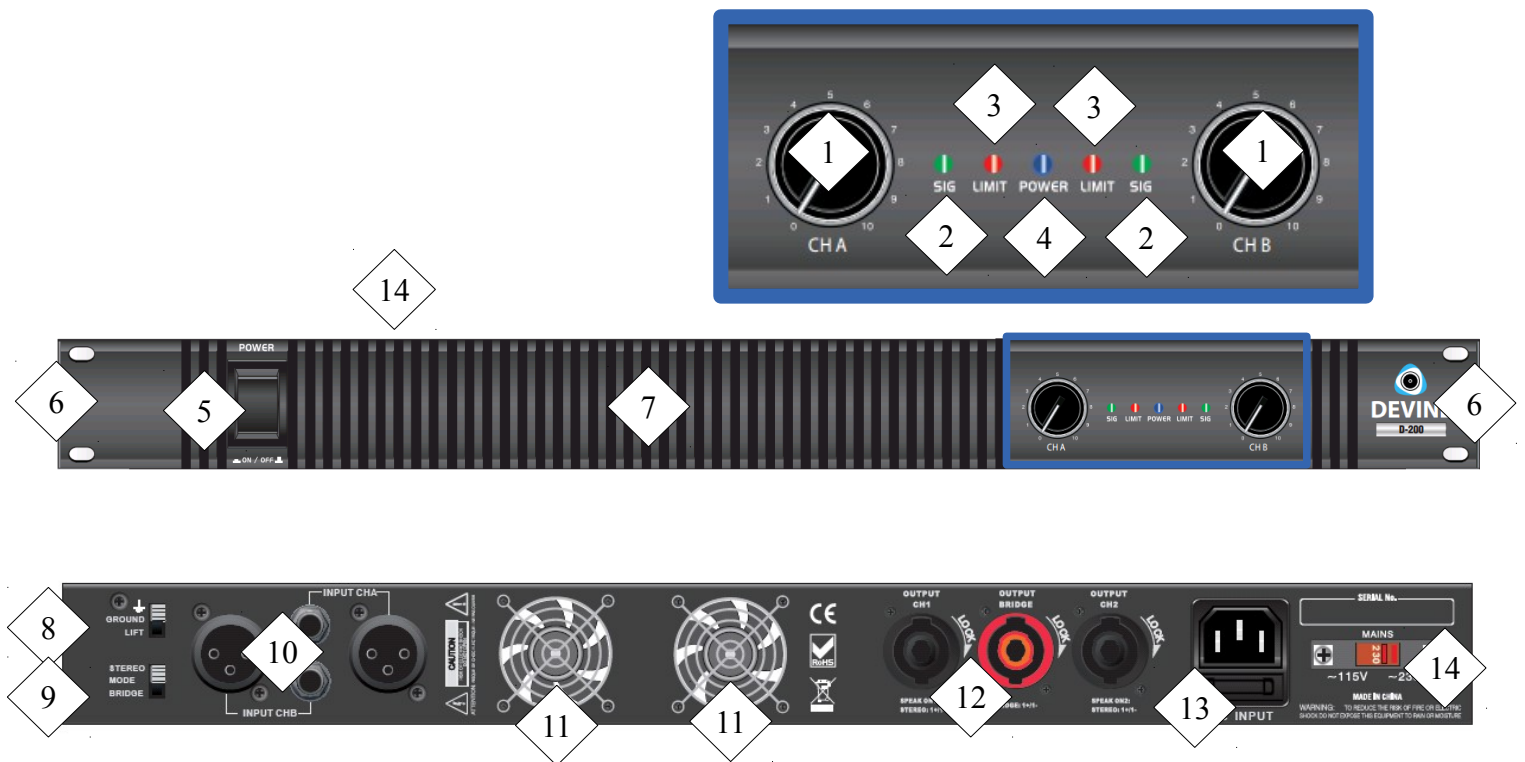


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Device overview



1. Volume controls
2. Signal LED indicator
3. Limiter LED indicator
4. Power LED indicator
5. ON/OFF switch
6. Rack mount brackets
7. Ventilation slots
8. Ground lift switch
9. Mode switch
10. Signal input section (Balanced XLR / 6.35 mm TRS jack)
11. Cooling fans
12. Speaker output section (Speaker-lock)
13. Power input connector + fuse holder
14. AC voltage switch 100 / 240V

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Use of the amplifier

The Devine D-series amplifiers are built to last. To be able to get the most out of your speaker system, it is recommended to read this section thoroughly, to become familiar with all the options and features of this amplifier. Correct use of the amplifier will ensure that the expected lifespan of the amplifier remains unchanged, as overload of this power amplifier may result in defects of your power amplifier and/or speaker system.

Power ratings

The Devine D-series are a complete range of digital class D power amplifiers, each with their own power ratings. This way, you are able to select the right amplifier for any job! The D-series consist of the D-200, D-400 and D-600, each with their own different power rating. The D-200 is the most affordable version, with a relatively low power rating. This is the ideal power amplifier for speakers which do not need a large amount of power. The most powerful version is the D-600, which can be used to power a large subwoofer in bridge mode, or a couple of PA-speakers.

To be sure that this power amplifier can be used safely to power the speakers you wish to connect, pay attention to the power ratings of your speakers.

If the RMS power rating of the power amplifier is identical or max. 2x as powerful as needed to drive your speakers, the amplifier is suitable. It is not recommended to use a power amplifier which is not capable of delivering full power to drive your speakers for optimal performance.

For example, it is not recommended to drive a speaker with a 300W RMS power rating with a power amplifier which is only capable of delivering a maximum power of 200W RMS. An amplifier with a power rating between 300W RMS and 600w RMS would be perfect.

The reasons are:

- A more powerful amplifier does not need to perform at 100% of its capacity when the speaker is already driven with a signal powerful enough to drive the speaker at maximum performance.
- A more powerful amplifier has more headroom when driving a speaker on its maximum level. Therefore, peaks in the music will not cause clipping (and thus, signal distortion and possible damage when long-term clipping exposure takes place)
- A more powerful amplifier can often be used again if you choose to purchase new speakers with a higher maximum power rating.
- Defective speakers (often described as 'blown up') are mostly caused by power amplifiers which cause too much signal distortion due to frequent and long-term clipping.
- Most speaker ratings are based on measured or theoretically calculated sine waves. As it is likely to play music through your speaker system, the audio signal exists of peaks and dips in the music. Most speakers are capable of handling certain (short-term) peaks, even when an unexpected signal peak is produced. It is therefore safe to use a more powerful amplifier to drive your speakers.
- Clipping amplifiers can cause permanent damage to both your speakers and power amplifier. A powerful amplifier is more likely to provide sufficient headroom and long-term exposure to excessive amplifier power will only affect your speaker system.

How far can I turn the amplifier volume knobs?

Keep in mind that the power ratings of your speaker system and power amplifiers are mostly measured or theoretically calculated with sine waves. As mostly music is played through your speaker system (which has a dynamic character), you always need to monitor your speaker performance. Audio distortion may cause a loss of signal quality and excessive power released to your speakers may cause signal quality issues and possible permanent damage.

To be able to maintain optimal signal quality, make sure to use this checklist. This is a genuine way to adjust your speaker system to perform at full performance, but without losing audio quality.

1. Make sure your signal source is not overdriving. When using a DJ or PA mixer, or a DJ controller with audio interface, make sure it does not send a signal which exceeds 0dB. Any higher values than 0dB will cause signal distortion.

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2. Make sure that after you checked step 1, the amplifier volume controls are carefully turned up as far as possible.

WARNING: When increasing the volume controls of your amplifier, always listen carefully to the connected speakers and keep an eye on the clip indicators of your amplifier. You need to decrease the volume level of the amplifier channels when any of the following situations are noticed:

- Amplifier channel Clip LED lights up frequently
- Speaker produces a slight distorted sound / noticeable loss of audio quality and clarity

To be sure that slight peaks in music do not affect your signal quality and performance, let your signal source send an audio signal at +3 dB. Then, set the optimal volume control settings on your amplifier and pay attention to your speakers and amplifiers (as described above in step 2). When your speaker system performs on full output without audio quality issues, decrease the audio signal of your signal source back to 0dB. Now, when a slight audio peak is sent out through your signal source, it will not affect your speaker system.

Signal source = mostly problem source!

The signal source of your system (mostly a DJ or PA mixer, or a DJ controller) is the source of audio quality problems in most cases. This is mostly caused by improper gain structure and can be caused by excessive input signals on your channels. Make sure to monitor every processed audio signal in your system for perfect audio performance. Please note that every fault in your signal source, will be processed and amplified by your speaker system.

Always make sure that the master output of your signal source is not exceeding the 0dB point. If so, noticeable audio quality loss and possible distortion could be present. Even when your master volume setting does not exceed the 0dB point, it is possible that an overloaded signal is present on your channel inputs with a gain set too high. Pay close attention to gain settings on your channel inputs and do not let the input signal exceed 0dB as well.

Front panel

The front panel of any D-amplifier is equipped with just a few buttons and LED indicators. This makes it possible for professionals and amateurs to work with any of the D-series amplifiers. The front panel has the following controls and indicators on board:

Controls:

- volume control for each channel, 0-10 (used to set the desired volume for each channel)
- Power on/off switch (to switch the device on and off)

Indicators:

- Green signal LED (Lights up when an incoming audio signal is noticed by the amplifier)
- Red Limiter LED (Lights up when the limiter is active and overloading of the amplifier components is noticed)
- Blue Power LED (Power On status indicator)



Input section

The Devine D-series amplifiers is equipped with a signal input section on the rear of the amplifier, clearly marked. This input section is suitable for one stereo input signal, while using the input of your choice. Examples of proper inputs are available from PA-mixers, DJ mixers, DJ controllers, audio interfaces and many other devices which provide high quality stereo line output signals. The D-series are equipped with balanced XLR inputs, as well as balanced 6.35 mm TRS (jack) inputs. This ensures optimal quality and will help to prevent hum and buzz noise issues.



Devine does not recommend to connect a signal source without clear volume setting display (such as an

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MP3-player or smartphone) directly, as it is not possible to see if the signal is below or above the 0dB line. However, it is possible to connect such a device to an audio mixer, to be able to see how high the outgoing volume level of your device is set.

The inputs of this power amplifier may be used as 'signal pass' connections, to be able to connect multiple amplifiers in a daisy chain setup. Devine recommends to link no more than three D-series power amplifiers in a daisy chain setup, to prevent the loss of signal level and quality.

WARNING! Do not send two signal inputs to the amplifier at the same time, as the combination of two signal inputs will drive the preamp section of the amplifier with a signal higher than allowed. Wrong use of the inputs may cause loss of quality or even permanent damage.

Ground lift option

The Ground Lift option is used to remove the ground connection of any incoming balanced input signal. This may help to remove noise, caused by a flowing current in the ground shield. Mostly this is caused by unearthed equipment which is connected to the chain, or the use of different power circuits. Make sure all your connected audio equipment is connected to the same grounded power circuit. Do not use ground lift when not necessary to ensure optimal signal quality. The default setting on your power amplifier should be 'Ground'.

WARNING! Please be aware that removing the ground shield of your equipment may be dangerous. The ground shield of your signal inputs makes sure that excessive currents will be eliminated and removed through the ground shield. Removing the ground shield improves the risk of (hazardous) electrical shocks on conducting materials such as metal microphone housings.

Output section

The rear of the D-series amplifiers is equipped with a speaker output section on the rear of the amplifier, clearly marked. These outputs can be connected to the inputs of passive speakers or subwoofers (when used correctly – explained later on in this user manual).

The output section of the amplifier makes use of speaker-lock connectors (two black connectors, one red connector).



Speaker-lock

The black Speaker-lock connectors are used for regular speakers in a standard stereo setup and are *Neutrik Speakon*® compatible. These connectors are used for mobile use, where the connectors will be plugged in and removed frequently. To connect one of these plugs, insert the connector in the Speaker-lock chassis and turn the connector clockwise. You will hear a 'click', which means that the connector is locked in place and perfectly connected.

This kind of connector is usually equipped with 4 pins (2 pin versions are available as well), divided in +1/-1 and +2/-2. The outputs for all D-amplifiers are wired on +1/-1 for each channel.

The red Speaker-lock connector is used for Bridge mode, but technically identical to the black Speaker-lock connectors. Please be aware that the wiring is different!

The Bridge output makes use of the two amplifier channels and combines its power to one signal output.

This makes it possible to use all of the power from one D-series amplifier to drive one full range speaker or subwoofer (when used correctly – explained later on in this user manual).

The Bridge output is also wired on +1/-1.

Bridge mode

The Devine D-series amplifiers are equipped with a switch to activate bridge mode. Also the output connectors of the amplifier are prepared for bridge mode setups. Bridge mode makes it possible to combine the power from two channels on one amplifier, to be able to provide sufficient power for one large speaker or subwoofer (when used correctly – explained later on in this user manual). This way, one single power amplifier provides power for one speaker, where in normal setups two speakers would be connected to one

power amplifier. To use bridge mode, the switch which normally states *Stereo mode* needs to be switched to *Bridge mode*. Stereo inputs can be connected to the amplifier, as well as mono inputs.

When using the amplifier in bridge mode, only connect speakers through the Bridge connectors.

Crossover information for subwoofers

Please be aware that the D-series amplifiers do not have an on-board switchable crossover. This means that it is not recommended to connect a subwoofer without internal filter to the outputs of this power amplifier. Doing so may cause damage to your subwoofer.

It is however possible to use an external 19 inch crossover, a D-series amplifier and a subwoofer without internal filter, connected in this particular order. This way, any incoming signal must go through the crossover first, thus removing any high frequencies from the signal (these will be sent to different outputs for your fullrange speakers).

The crossover output for your subwoofer will send a signal to your amplifier inputs, containing frequencies not higher than the level you have set. This particular small group of frequencies will be amplified through the D-amplifiers and sent to your subwoofer through the speaker outputs. Never cross any signals for subwoofers higher than 300 Hz.

Impedance

The Devine D-series are tough professional PA-amplifiers, built to deliver power to your speakers continuously.

However, the impedance of your connected loudspeakers is very important, as an impedance which is too low, may cause serious damage.

The minimum impedance of a connected loudspeaker (chain) should be no less than 4 Ohms, the D-amplifiers are not 2 Ohms stable!

This means, that there should never be any speaker or speaker chain connected which has a smaller impedance than 4 Ohms each side. In bridge mode, only a speaker or speaker chain with a total minimum impedance of 8 Ohms should be connected.

In stereo mode, it is possible to connect:

- two PA-speakers, each with a minimum impedance of 4 Ohms, each connected to one of the amplifier channels.
- four PA-speakers, each with a minimum impedance of 8 Ohms, whereas two speakers are directly connected to the amplifier (each connected to one channel), the two others are connected to the first two speakers.

In bridge mode, it is possible to connect:

- One PA-speaker or subwoofer, with a minimum impedance of 8 Ohms

Installing the amplifier

To install the D-series amplifiers in a 19 inch rack or flight case, practical mounting brackets are provided. There are only mounting points at the front panel installed, due to the low weight of the amplifiers. Thanks to the minimal depth of 18 cm, the amplifiers can be installed in racks or flight cases with limited depth. Each D-amplifier is only 1U high.

Stacking multiple amplifiers while mounted in a 19 inch rack is possible, the position of the amplifiers in the rack is not important thanks to the low weight of each amplifier. If you have heavier equipment than these power amplifiers, it is recommended to install them as low as possible into a rack, as the turnover point for gravity will be positioned lower (thus preventing the case from tipping over).



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Power input, fuse and electrical information

The Devine D-series are identical in power connection, they all work with a standard IEC input, also found on devices such as a desktop computer. The protective fuse is installed directly next to the power input, as connected power signals will transfer through the fuse first. When the fuse blows for any reason, disconnect the device from any power source and inspect the unit before replacing the fuse. If the fuse needs replacement, use a fuse of the same type and rating and never bridge any gaps with any other conducting materials. Doing otherwise may cause very dangerous situations and possible (lethal) injury. Devine can not be held responsible for any injuries or damage caused by replacing fuses with wrong types/ratings or other conducting materials.



Furthermore, there is a 115 / 230V AC switch provided. The default setting is 230V AC, do not change this unless you are going to connect the amplifier to a 115V AC outlet! Do not remove the cover in front of the switch unless you have to change the switch.

Ventilation and cooling

D-series amplifiers from Devine can perform all day or night without cooling-down time. Thanks to large conventional heat sinks and fan cooling, the amplifiers will not overheat in normal environment conditions. To make sure fresh, cool air is delivered to the amplifier and hot air is blown away from the fan, there are ventilation holes perforated in the housing of the amplifier. Do not in any way block any of the ventilation gaps, to ensure perfect performance. All ventilation slots are equipped with some foam behind the slots. This prevents the buildup of dust, dirt and influences of small particles such as confetti inside the unit and will keep the inside of the amplifier clean. It is recommended to use a vacuum cleaner to clean the ventilation slots regularly, to provide a perfect airflow.

When mounted in a 19 inch flight case or rack, also ensure that there is sufficient ventilation for the power amplifiers. Keep in mind that most flight cases and racks have closed backsides and hot air rises. Therefore, it is always recommended to install a ventilation panel above your amplifiers, to get rid of excessive heat.

The installed cooling fan is temperature controlled and will only work at full potential when full power is required from your amplifier.

Stacking amplifiers directly (when mounted in a rack or in use as desktop stack) is possible. No more than three Devine amplifiers should be stacked, unless there is some included space between every three amplifiers. This to ensure proper heat dissipation and perfect performance during use.

Built-in protection

The D-series amplifiers are equipped with different types of protection measures, to ensure they keep on performing in optimal condition and are protected against any influence which may cause serious damage to the internal electronics.

The following measures are provided:

- Temperature monitoring and protection (prevents from overheating)
- Electronical protection (protects from short circuits)
- DC current prevention on the outputs (DC current on your speaker may cause permanent damage)
- AC protection (fuse)
- Limiter (prevents from overloading)
- VHF distortion (prevents wireless microphone systems from interrupting the signals inside the amplifier)
- Soft Start (prevents a large amount of drawn current from your power circuit when turning a complete amplifier rack or stack on – which could activate your circuit breaker)

Power amplifier troubleshooting

If you have any problems with your power amplifier, consult this troubleshooting section to solve any difficulties with your product. If this troubleshooting section does not solve your problem, contact your dealer for more information and help.

This troubleshooting section contains the most frequent problems and is not a complete collection of possible faults, defects and solutions. The troubleshooting section applies for power amplifiers. It is possible that not all described problems, causes and solutions apply to your situation as product details may vary from product to product.

Problem	Possible Cause	Solution
Product can not be activated	ON/OFF switch set to OFF	Turn on the amplifier with the ON/OFF switch, to the ON position
	Power not plugged in	Connect the included power cable to the power inlet and a wall outlet or power socket.
	Fuse blown	Disconnect power, inspect the unit and your power supply for technical malfunctions. If nothing is damaged, replace the fuse with one of the same type and rating and plug the device back into your power outlet.
No sound produced	Signal source level set to minimum	Increase signal source level
	Signal source level on the device panel set to minimum	Increase volume of signal source on the amplifier with the volume knobs
	Defective cable	Change cable
	Speaker not connected properly	Check the connection from your amplifier to your speakers
	Wrong working mode selected	Select the correct working mode (stereo or bridge) and apply the correct cabling
Distorted sound	Signal source level too high	Decrease signal source level
	Signal source level on the amplifier set too high	Decrease signal source level on the amplifier
	Speakers can't handle the supplied amplifier power	Decrease volume level on your signal source or amplifier to avoid damage
	Clipping amplifier channels	Decrease volume level on your signal source or amplifier to avoid damage
Lack of bass	Playback of a track without low frequencies	Try another reference track to play through the speaker system.
	Bass level set to minimal level on your signal source	Increase Bass level until neutral position is achieved
Lack of high frequencies	Playback of track without high frequencies	Try another reference track to play through the speaker system

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	Treble level set to minimal level	Increase Treble level until neutral position is achieved
Too much bass	Bass level set to high level	Decrease Bass level until neutral position is achieved
Too much high frequencies	Treble level set to high level	Decrease Treble level until neutral position is achieved
CLIP limiter indicator keeps on flickering or is constantly lit	CLIP limiter circuit is active to prevent overloading of internal components	Decrease volume settings (signal source, signal source on mixer panel or master volume) Also try to set Treble and Bass to neutral levels.
Protect LED is active	Protection of the internal components and blocking the incoming/outgoing signals due to overloading of internal components	Turn off the amplifier and check if your speaker impedance is correct, if your signal source is sending an overloading signal or if the amplifier has been turned up over its maximum capacity.
Buzzing noise coming from the speaker	Unearthed power connection	Connect the speaker to a grounded outlet
	Unearthed signal source	Connect the signal source to a grounded outlet
	Interference from power cables	Avoid placing power and signal cables in a parallel structure and keep them as far apart as possible. If needed, cross cables only in a X-shape.
	Bad cables	Remove/replace the cable or increase/decrease the volume of the speaker. If the noise is gone, the problem is somewhere in your signal chain.

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Technical specifications

The Devine D-series amplifiers (D-200, D-400 and D-600) share almost the same electronic circuit. The differences in the series are mostly the power ratings and in addition to this, the larger power supplies installed in the devices. As the technical details are nearly identical, the table below describes the specifications and values for all amplifiers next to each other. Some values and descriptions may be identical for more than 1 amplifier. Please pay close attention to the power amplifier which you have purchased, by comparing the type number shown on the front panel of your amplifier with this technical detail scheme.

	D-200	D-400	D-600
8 Ohm stereo output (RMS)	2x 100W	2x 200W	2x 300W
4 Ohm stereo output (RMS)	2x 180W	2x 360W	2x 540W
8 Ohm bridge output (RMS)	1x 360W	1x 720W	1x 1080W
Frequency response (+/-1.5 dB)	20 Hz – 20.000 Hz		
Minimum channel impedance	8 Ohms		
Input sensitivity	1V		
Input impedance (Balanced)	20 kOhm		
Input impedance (unbalanced)	10 kOhm		
SMPTE	0.05%		
S/N ratio (A-weighted)	>100 dBA		
T.H.D. (Total Harmonic Distortion)	0.05%		
Damping factor @ 1 kHz – 8 OHm	>200		
Slew rate	20V/uS		
Built-in protection measures	Soft start, DC current, Short circuit, Limiter, Overheat		
Cooling	Temperature controlled fans, heatsinks, ventilation slots		
Connections (input)	Balanced XLR and 6.35 mm TRS jackplug, stereo inputs		
Connections (outputs)	2x black Speaker-Lock for channel outputs 1x red Speaker-Lock output for bridge mode		
Input voltage	115/230V AC, 50/60 Hz		
Stand-by power consumption	<1W		
Net. weight	3.2 kg		
Dimensions	483 x 160 x 44 mm		
Dimensions (rack install)	19 inch, 1U		

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