



DEVINE

Flex series (12A / 15A)
Powered speaker with Bluetooth functionality



User manual

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

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.
- 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.

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

- 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 adapter 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 supply 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 does not take responsibility 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 flightcase, 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 flightcase.
- 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 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.

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

Guidelines for speakers



WARNING!

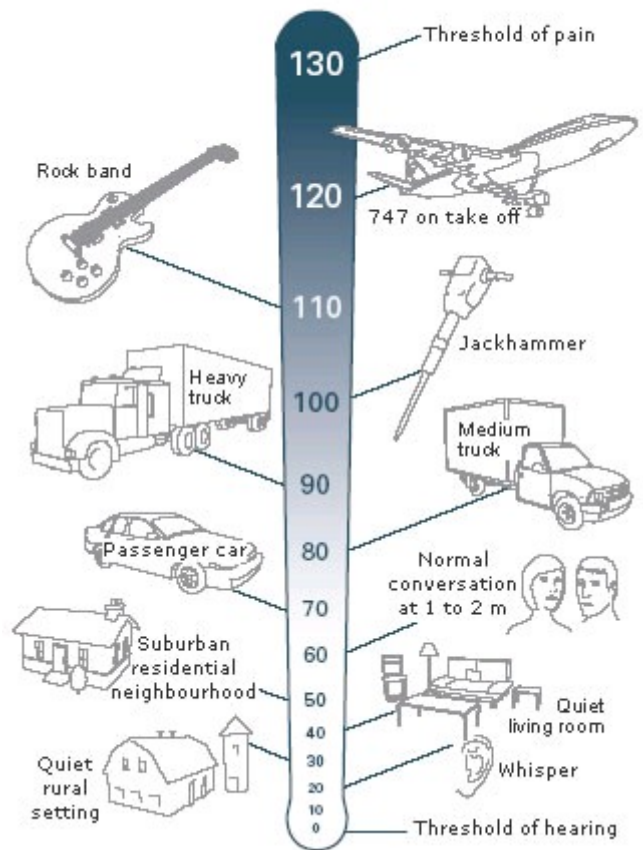


This loudspeaker is capable of producing a sound pressure level which can be harmful for humans and animals when used incorrectly and/or without protection. Possible permanent hearing loss may occur when humans or animals are exposed to high sound pressure levels for a longer period of time.

- 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)



- When installing this speaker on a speaker stand or distance pole, always tighten the screw knobs firmly.
- When using this speaker for the first time, set the gain settings on the amplifier (module) on a minimum level. After this, raise the volume to a comfortable listening level (not at its maximum level). The speaker needs to perform on a moderate level for several hours to perform on its full potential, when used for the first time.
- When transporting the speaker on a cart, use caution during movement. Prevent the cart and speaker combination from tipping over as this may cause serious injuries.

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

Box contents

Box contents:

1x Flex series powered speaker (Flex 12A or Flex 15A)
1x power cable
1x wireless remote
2x monitor stand

Unit and accessory inspection

- Always use the supplied power cable to connect the unit to a power supply. If the cable appears broken or has visible damage, do not use it.
- If the unit is not going to be used for a longer period of time, disconnect it from the power supply and store it in a dust-free environment.
- Always check the unit for possible damage before use. If you suspect that something is wrong with the unit, do not connect it to a power source! If you suspect that your unit is broken or damaged, contact your local dealer or a certified technician to inspect the unit.



DEVINE

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

Use of the speaker

This speaker is designed to perform in professional environments. Either speech, music, or any other type of sound can be played through this speaker.

The powered Flex-series are equipped with their own power amplifier, mounted on the rear of the speaker. This module also houses the internal USB MP3-player, Bluetooth receiver, EQ and the several connectors + volume controls. The built-in power amplifier is capable to produce enough power for the speaker alone. It is not possible to attach a second passive speaker to the amplifier module of this speaker. It is however possible to attach a second active speaker with the signal link-output.

The built-in MP3-player supports most USB-thumbdrives and SD cards. However, the results of some models may vary as many manufacturers have their own standards. The display shows track information and with the silver buttons you are able to browse through your files. The player has on-board controls for the mode, play/pause, stop, repeat, previous and next features. It is also possible to use the included wireless remote control to operate the MP3-player.

Make sure you connect the right audio sources to the right inputs. The mic input is suitable for most microphones, but does not supply phantom power, if your microphone requires that. The line input is suitable for RCA-sources (MP3-players, laptops, smartphones, tablets) and can also be used with an adapter cable to a 3.5mm jack (not included). A XLR-connector is provided for professional audio sources, such as DJ or PA mixers, electronic keyboards and so on. The line output is used to connect a second speaker, such as another Flex series speaker. Connections are available in XLR and 6.35mm jack.

This speaker comes with two monitor stands, which makes horizontal positioning possible. This feature is often used when the speaker needs to perform as a floor monitor for artists. Mount the monitor stands as illustrated, further on this page.

This speaker is also equipped with a lockable 35mm stand adapter, which makes it possible to place the speaker on a suitable height. This makes the distribution of high and mid-frequencies easier. See the image above for details. The lockable screw-knob positions the speaker firmly on your speaker stand, thus preventing any type of resonance.

Warranty is void when damage to this speaker is caused by improper use. When any damage to this speaker occurs, please contact your local dealer for help.



Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

Power amplifier module section

The built-in power amplifier module, combined with the built-in MP3-player, connectors and volume controls, has several options. A short explanation for each feature is described on the next page. The descriptions apply to the Devine FLEX 12A as well.



Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

1. MP3-player display
2. SD card input
3. USB input
4. MP3-player control buttons
5. 5-band EQ
6. amplifier module heatsink
7. MP3-player volume level control
8. Microphone volume level control
9. Line level volume level control
10. Master level volume controls
11. Treble level control
12. Bass level control
13. Power LED indicator (green)
14. Clip LED indicator (red)
15. Microphone input (balanced XLR)
16. Microphone input (6.3 mm jack)
17. Line input (balanced XLR)
18. Line input (unbalanced stereo RCA)
19. Line output (6.3 mm jack)
20. Line output (balanced XLR)
21. ON/OFF switch
22. IEC power input with fuse holder

Practical information and tips for optimal use of your speaker system

For optimal performance and a long lifespan of your speaker, please pay attention to the following when using your Devine speaker:

- This speaker is equipped with a CLIP limiter, which prevents damage to the speaker. This CLIP limiter will activate at excessive volume levels and a red LED shows when the CLIP limiter is active. Prevent the activation of the CLIP limiter system and the indicating LED. The CLIP limiter protects the system from permanent damage, but is only effective at peak signals. Long term exposure causes distortion and power overload, with possible permanent damage to your speaker system.
- When using an external mixer (such as a PA-mixer or DJ-mixer, make sure your master channel sends out signals at 0dB maximum. This will provide optimal signal quality and with the volume control on the speaker you are able to turn up the volume, just before the CLIP limiter LED will slightly flash. This way you are using the speaker to its full potential with optimal sound quality.
- When using the internal equalizer system and adjusting the sound balance of your speaker, keep the master volume on a medium, neutral level which is comfortable to your ears. When you want to add extra bass, try to decrease the intensity of lower frequencies first. When you want to add more high frequencies (for vocal and speech applications), try to decrease the low frequencies. This way, the EQ system does not have to function as a pre-amplifier, thus providing optimal sound quality.

The EQ function features a 7-band system:

- The Treble and Bass knobs have a -12 to +12 range and operate in a 10 Hz and 100 Hz range.
- The 5-band EQ on the top right operates in frequencies 63 Hz, 500 Hz, 1 kHz, 3.2 kHz and 12 kHz. These also feature a -12 to +12 range, but are used with a miniature slider instead of knobs.

The Treble and Bass knobs are used for main applications, but it is possible to adjust the sound characteristics of the speaker in detail when using the 5-band EQ on the top right. The combination of these two systems provide an excellent frequency coverage, which grants you optimal control over the performance of this speaker.

The EQ function is used on the overall main signal and is therefore not bound to any specific input.

- Do not switch the power on and off frequently as this reduces the lifespan of the speaker and its internal components. The speaker can be used for a whole day without any cooling-down time, if sufficient cooling is provided.

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

- The speaker is equipped with an internal fuse, located directly next to the IEC power input section. If this fuse blows for any reason, only replace it with a fuse that has the same values as the original fuse. Do not bridge the gap with any electrical wiring or whatsoever as this voids your warranty.
- Severe shocks and impact must be prevented as much as possible. Secure this speaker properly in place during transport to prevent damage to the housing and the internal components of the speaker.
- The included wireless remote control is used to operate the built-in MP3-player. Controls to change the MP3 player volume (digital), EQ settings, working mode and even a numeric keypad for direct access to track numbers are featured.
- The Bluetooth functionality of the speaker runs through the internal MP3-player. To connect any mobile Bluetooth device (such as a smartphone, tablet, netbook, MP3-player or computer), follow these steps:
 - Turn on the speaker
 - Hold the 'MODE' button of the MP3-player module until 'Bluetooth' appears on the display.
 - Use your mobile device to search for the speaker (named 'Bluetooth'). When found, connect your device.
 - Use password '0000' to connect your mobile device with the speaker.
 - After these steps, sound played from your mobile device will be produced by the speaker. The maximum distance is about 10 meters, when the signal is not disturbed by any objects that may cause interference.
- This speaker uses a large heatsink for cooling, instead of a regular fan. This prevents noise and possible dust buildup inside the speaker and the amplifier module. It is important not to block the heatsink with any objects, to provide sufficient cooling and airflow, for optimal disposal of heat generated by the amplifier module. Blocking the heatsink, for example caused by positioning the speaker too close to a wall, may cause overheating. This may result in permanent damage to your speaker, not covered by warranty.
- The speaker is provided with an internal mixer, making it possible to adjust the volume levels between several audio inputs. The volume of the MP3-player, microphone input and line level input can be adjusted from a variable 0 to 10 range. The main volume knob is used to determine the input level of the main signal.
- Pay attention to the volume settings, as power overload may cause permanent damage to the amplifier module and speaker components. Use your eyes and ears to determine the optimal settings for your application. When the red CLIP LED is active and/or when you hear any distortion, you need to take action and decrease volume levels to prevent damage.
- The speaker is equipped with M10 mounting points and a pullback point, but is not intended to be installed directly above your crowd as the internal construction is not designed for this application. When using the M10 points to install the speaker, make sure that it is impossible for any person to be located directly underneath the speaker or in any possible injury-zone if any failure occurs. Consult local regulations regarding rigging applications. Devine can not be held responsible for any damage or injury caused by improper installation of this speaker.
- Never use the transport handles to install the speaker in a hanging position, as these are only intended for transport purposes. It is however possible to use the handles to secure the speaker, for example when positioning a Flex 12A or 15A on top of a subwoofer stack. Use a proper strap and pay attention to the stress on the handles, as excessive tension might cause permanent damage.

Powered speaker troubleshooting

If you have any problems with active speakers, 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.

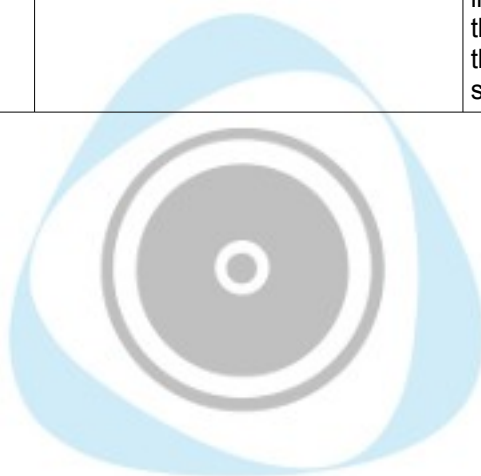
This troubleshooting section contains the most frequent problems and is not a complete collection of possible faults, defects and solutions. The troubleshooting section applies for powered speakers. It is possible that not all described problems, causes and solutions apply to your situation as product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

Problem	Possible Cause	Solution
Speaker does not activate itself	ON/OFF switch set to OFF	Turn on the speaker 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	Remove the fuse cover underneath the power input and check the fuse. Replace the fuse with the same type and rating if needed. Use caution when removing the fuse holder, remove the holder with a small screwdriver and gently move the holder towards you. Applying too much force may cause broken fuse holders!
No sound	Signal source level set to minimum	Increase signal source level
	Signal source level on the mixer panel set to minimum	Increase volume of signal source on the mixer panel with the volume knobs
	Master volume set to minimum	Increase master volume
	Cable broken	Change cable
	Lost Bluetooth contact	Move your Bluetooth device closer
Distorted sound	Signal source level too high	Decrease signal source level
	Signal source level on the mixer panel set too high	Decrease signal source level on the mixer panel
	Master volume set too high	Decrease master volume level
Lack of bass	Track without low frequencies	Try another reference track
	Bass level set to minimal level	Increase Bass level
Lack of high frequencies	Track without high frequencies	Try another reference track
	Treble level set to minimal level	Increase Treble level
Too much bass	Bass level set to high level	Decrease Bass level
Too much high frequencies	Treble level set to high level	Decrease Treble level
CLIP limiter indicator keeps on flickering or is constantly lit	CLIP limiter circuit is active to prevent overloading of internal	Decrease volume settings (signal source, signal source on mixer)

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

	components	panel or master volume) Also try to set Treble and Bass to normal levels.
Speaker can not be placed on a speaker stand	Tightening knob is turned too tight	Loosen tightening knob
	Stand not suitable	Measure stand top diameter, this should be around 33-36 mm for optimal placement. Use another speaker stand if needed.
Buzzing noise coming from the speaker	Ungrounded power connection	Connect the speaker to a grounded outlet
	Ungrounded signal source	Connect the signal source to a grounded outlet
	Interference from power cables	Avoid placing power and signal cables in a parallel structure
	Bad cables	Remove the cable or increase/decrease the volume of the speaker. If the noise is gone, the problem is somewhere in your signal chain.



DEVINE

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV

Technical specifications

	Flex 12A	Flex 15A
Type of speaker	Self-powered, active speaker	
Housing	ABS polypropylene construction, two-way bass-reflex system	
Frequency range (-10 dB)	50 Hz – 20 kHz (flat EQ)	40 Hz – 20 kHz (Flat EQ)
Frequency range (+/-3 dB)	55 Hz – 18 kHz (flat EQ)	45 Hz – 20 kHz (Flat EQ)
Coverage pattern	100 degrees horizontal, 45 degrees vertical	
Directivity Index (DI)	9 dB	9 dB
Directivity Factor (Q)	8	8
Crossover frequency	3 kHz	3 kHz
Amplifier power (LF + HF)	300 Watt RMS	375 Watt RMS
Amplifier power LF (continuous)	250 Watt	300 Watt
Amplifier power HF (continuous)	50 Watt	75 Watt
Distortion	Less than 0.1%	Less than 0.1%
Maximum SPL	129 dB	129 dB
Sensitivity	97 dB	98 dB
Signal indicators	Red CLIP LED indicator, green Power/signal indicator	
Input gain (Input 1: Mic)	-infinity to +40 dB	
Input gain (Input 2: Line)	-infinity to + 40 dB (max. 20 dB signal input)	
Main volume gain	-infinity to +4 dB (max. 20 dB signal input)	
Input impedance	64 kOhm (balanced), 32 kOhm (unbalanced)	
LF driver	12 inch, Devine 265F-I 300mm Differential Drive woofer with dual 2 inch voice coils	15 inch, Devine 265F-I 380mm Differential Drive woofer with dual 2.5 inch voice coils
HF driver	1.35 inch, Devine 3414H 34.4 mm compression driver	1.35 inch, Devine 3414H 34.4 mm compression driver
Connector (Input 1: Mic)	Balanced XLR / ¼ inch TRS	
Connector (Input 2: Line)	Balanced XLR / stereo RCA	
Connector (main link output)	Balanced male XLR (+20 dB peak) based on Mix volume	
XLR pin assignment	Pin 2: +, Pin 3: -, Pin 1: GND	
Enclosure	Polypropylene impact co-polymer for main PA and monitor applications	
Handles	One on the side of the cabinet	
Stand mount	36 mm pole socket with stabilizing tightening knob	
Mounting points	4x M10 suspension points, 1x M10 pullback point	
Grill	Black powder coated steel grill with acoustic transparent backing screen	
AC input	230V AC, 50/60 Hz	
Dimensions	590 x 420 x 320 mm	685 x 465 x 415 mm

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 2.0 Creation date + author initials: 22-04-2013 RV Revision date + author initials: 25-02-2014 RV