DEVINE

RX Series (RX-10SA)
Active Studio Subwoofer

User Manual

The information in this user manual is subject to change at any time without notice.

Version 1.0 Date of creation and author's initials:21-07-2020 RV Revision date and author's initials: -

Introduction

Thank you for purchasing this Devine RX Series studio subwoofer. We advise that you read this user manual in its entirety before unpacking the contents of the box, so that you are familiar with all of the functionality that this product has to offer. Please be sure to check that all of the parts and accessories listed below under 'box contents' are included in the package. In the event that the product does not function properly, or if you have any issues while operating it, please remove the plug from the power socket and contact your retailer for assistance.

Box contents:

– Devine RX Series studio subwoofer (RX-10SA)
– Power Cable IEC C13 to Schuko

Please inspect the device and the included accessories.
Should you discover that either the device or any of the included parts have been damaged or rendered defective while in transit, please contact your retailer directly.

Please note that the images included in this user manual serve illustrative purposes only and may differ slightly from the product received.

Contact:
Devine Pro Audio Products
Verrijn Stuartweg 18
4462 GE Goes
The Netherlands
Please do not send any products to this correspondence address.
Should you wish to send in a product for repair or for a refund, please contact your dealer for an RMA (Return Merchandise Authorisation).

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Safety Instructions

WARNING!

Keep this device away from moisture, water and rain to avoid the chance of electric shocks.

Everyone involved with the installation, operation and maintenance of this device must:
- Be qualified
- Be skilled
- Have read the instructions in this user manual
- Be sure that neither the device nor the included accessories are damaged. Should the device or the included accessories be damaged, please contact your dealer for more information.
- Ensure that the device is in good working condition and safe to operate. Please follow the advice and instructions as they are described in this user manual.

Damage caused by misuse and/or modifications made to the device are not covered by the warranty.
This device does not contain any parts that need to be repaired or replaced by the user. Should maintenance or repairs be necessary, they must be handled by a qualified technician.

Important information regarding health and safety:
- Do not remove any labels or stickers from this device.
- Do not leave any cables lying around.
- The device should not be opened up, and any hardware or software that may be present should not be modified.
- To achieve optimal performance, inputs on this device should not be fed with a signal higher than necessary.
- The device should only be used indoors; contact with moisture, water and rain should always be avoided. Do not place any objects containing liquids on top of the device.
- Remove the device from any nearby flames or heat sources; do not place it near flammable fluids, gasses or objects.
- Disconnect this device from the power supply if it will not be used for a longer period of time, if maintenance is necessary, or if the device needs to be cleaned.
- Do not pull on the cable to remove a connector, as this could cause damage.
- Do not use any cables other than the ones described in this manual. Do not use defective cables. Please contact your dealer if the included or necessary cables do not function properly with this device.
- Only use this device with power from a grounded power source.
- In the event that the device is exposed to extreme temperature changes (e.g. transported through a cold outdoor environment into a warm indoor environment), it should not be turned on until it has reached room temperature. This is necessary to prevent moisture from forming in the device, which could lead to electric shocks.

Guidelines and operation of this device:
- This device is intended for indoor use by adults.
- This device is not suitable for use by children, and should always be operated by an adult.
- This device should only be used in a suitable environment where no damage to the device can occur. Do not use the device in moist or dusty environments such as:
    - indoor swimming pools where chlorine is used
    - beaches where there is sand and salt
    - outdoors
    - indoors in spaces where intense heat sources are present, or where it reaches temperature levels that would be considered uncomfortable for a person
- Avoid impacts and collisions during use and transport. Do not transport the device while it is in use. Avoid using excessive force when installing and operating the device.
- The user should become familiar with the functions of this device before using it.
- The user should be able to stop the device's power supply in case of emergencies. At least one of the following should therefore be accessible at all times:
    - the power cable connector on the back of the unit
    - the power socket the cable is plugged in to

- the power socket switch or extension cable switch
- Should the device not be used in the manner described in this user manual, damages or even injuries could occur. Devine cannot be held responsible for any injuries or damages that occur as a result of improper use of this product.

Storage and transport:
- This product is designed for mobile use. It can be transported separately as long as it's well-protected against shocks and collisions.
- This device is not designed for permanent (24/7) use. The expected lifespan of the device will not be affected by occasionally turning the device off. Disconnect the device or turn off the power when it is not actively in use.
- If the device will not be used for a longer period of time, it should be disconnected and stored in a dust-free environment.
- Do not expose the device to extreme temperature differences.

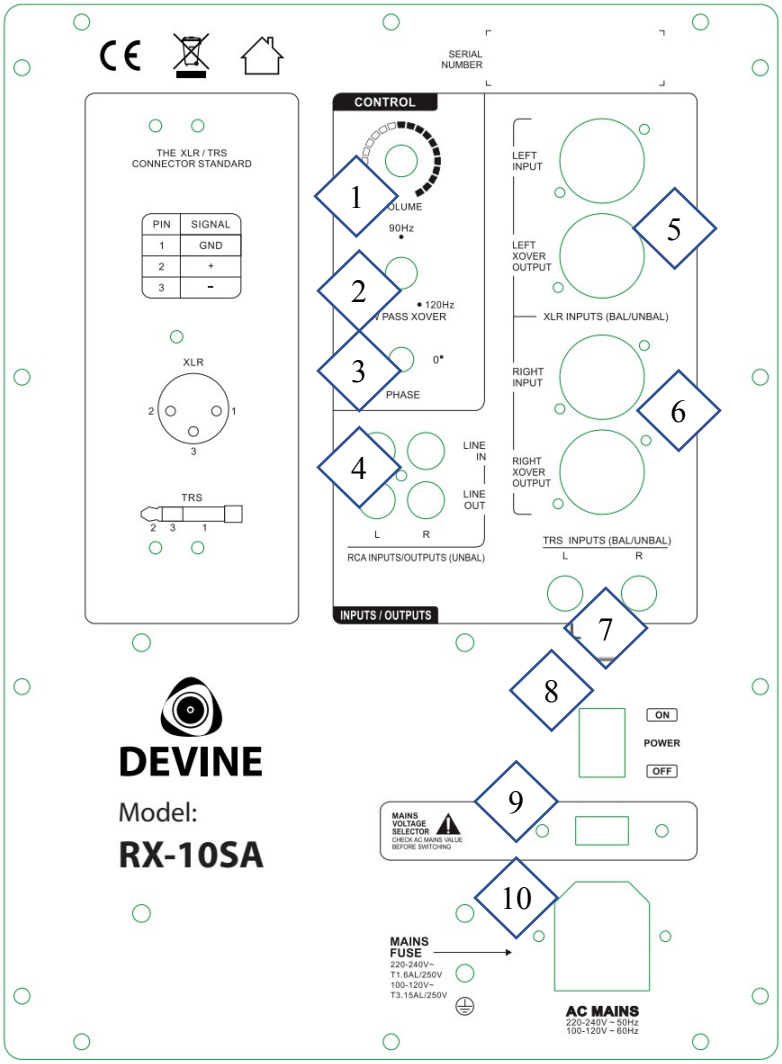
Housing
- Inspect the device's housing frequently, and always just before use. Avoid operating the device if there are large dents or cracks, or if screws are missing. Do not use the device if the housing is not in good condition. Contact your dealer or a qualified technician if you are unsure about the state of the device.
- Check the device and the screws for corrosion. Corrosion must not be present on this device. Contact your dealer or a qualified technician if you find any corrosion on the screws.
Every power and signal connector should be securely mounted. Do not use the device if the connectors are not secure.
Avoid dust and dirt build-up. Clean the device once a month by disconnecting it from the power supply and wiping it down with a dry or slightly moist cloth. If the device is used frequently, the cleaning intervals should increase.

Symbol explanation:

	**WEEE:** Ensure that this device is disposed of properly. This product falls under the WEEE (Waste Electrical and Electronic Equipment) directive. The requirements of this directive apply to all manufacturers and producers of electronic devices in the EU. Do not throw this product away with regular rubbish. Please contact your local authority for more information about how to recycle and dispose of these products in your region. By recycling this product in the proper manner, we can work together to ensure that we can continue to enjoy these kinds of products and still protect the environment as much as possible from pollution.
	**CE:** The CE logo indicates that this product meets the European norms and requirements to which it must legally conform.
	**Only suitable for indoor use**: this product was only designed for indoor use. The maximum environmental temperature must not exceed 40 degrees Celsius (104 degrees Fahrenheit).

Overview of the Device

1. Volume control
2. Low pass crossover (50 – 120 Hz)
3. Phase switch (0 / 180 degrees)
4. Stereo RCA inputs and outputs (unbalanced)
5. Left-channel XLR inputs and outputs (balanced)
6. Right-channel XLR inputs and outputs (balanced)
7. Stereo TRS jack input (balanced/unbalanced)
8. On/off switch
9. Voltage switch **(default 230V!)**
10. IEC C14 power input with fuse holder



Using the Subwoofer

The RX-10SA studio subwoofer is a great addition to a pair of RX studio monitors but also works well with monitors from other manufacturers. By using this subwoofer, it’s possible to get an honest and accurate representation of the lower frequencies in your productions. The subwoofer is designed to produce subtly present lows, but can also be used to add more bass to casual listening sessions, combined with a set of RX monitors and connected to a computer or television, or as a DJ console expansion.

The RX-10SA is designed to work alongside a pair of studio monitors and to take over the processing and production of any low frequencies in the audio signal. Thanks to a variable crossover, you can set the cut-off limit anywhere between 50 Hz and120 Hz. Any frequencies above the set crossover point are then sent to the speakers, while the frequencies below the limit are handled by the subwoofer to give the speakers more headroom, improving their performance.

Subwoofers like these are ideally used in larger rooms and as an addition to a pair of regular monitors.

Warning Before Use

The Devine RX subwoofers are capable of producing volume levels that can cause temporary or permanent hearing damage. Use these units with care and keep the volume at a reasonable level when possible. The volume should ideally be set to a comfortable level when listening to music.

Devine cannot be held liable for any injuries or damage resulting from the use of this product.

Connecting the Subwoofer

The Devine RX-10SA is ideally placed somewhere on the floor, but preferably not in a (far) corner to prevent dense sound effects. A tight sound is what’s usually desired. Try out different positions in the room with a basic set-up that can be easily moved around. The response of the room, the acoustics, can have a huge effect on the sound and how much bass is ultimately shaped. Feel free to experiment with the settings to find what best suits the situation.

If possible, use balanced cables and connections. In general, XLR cables and TRS jack cables (can be recognised by the tip, ring and sleeve) are what’s used in a professional set-up, where the subwoofer is combined with a DJ mixer/console or an audio interface.

It’s also possible to use unbalanced cables, in this case, RCA and TS jack cables. But bear in mind that unbalanced signals require more amplification power and are more sensitive to external factors, which increases the risk of interference and noise.

Audio Technology and Set-Up

Sound Sources, Interface & DAC

Once your studio monitors are in the right position, it's important to use a good-quality sound source for the best possible results. This includes audio files that, ideally, should be the best-quality original material and not converted files.

The hardware used to play audio should also be the best quality possible. When playing files via a computer (PC or laptop) or a mobile device (smartphone, recorder or tablet), it's a good idea to use an audio interface or DAC (Digital to Analogue Converter) that will convert digital files into an analogue signal while retaining as much of the original quality as possible. Built-in sound cards, especially cheaper models and those found in mobile devices tend to have a negative influence on the sound.

The audio interface or DAC you use should preferably have a relatively high output with plenty of headroom to prevent problems with distortion and ensure the audio signal reaches your monitors at a sufficient volume without the need for much extra amplification. Any extra amplification that's required can have a negative influence on the audio signal.

Cables

The type of cables used can also influence the quality of the sound. For best results, use good-quality balanced signal cables with TRS jack plugs or XLR connectors. Using unbalanced cables is also possible but this can have a negative influence on the volume of the incoming signal and makes it more sensitive to interference.

In general, studio and recording equipment is always fitted with balanced outputs. Consumer products like smartphones and laptops tend to have unbalanced outputs.

Making Volume Adjustments

These Devine studio monitors are equipped with a volume control that can regulate the incoming signal if necessary. It is designed to be used to adjust the monitors, not to correct issues with the incoming signal. When using devices like a smartphone or laptop, the incoming signal may be relatively weak. In this case, a DAC or a device that is capable of boosting the signal, like an audio interface, a mixer or a DI box should be used.

Ideally, you'll be able to control the volume of the signal your DAC or interface sends to your monitors. This can also be software-controlled like the volume control on your computer, laptop or mobile device, for instance. It could also be a separate passive or active volume controller that regulates the level of the analogue signal. These often have simple 'dim' or 'mute' buttons that allow you to easily halve the sound or mute it entirely. These features are handy when you need to discuss the sound with someone while listening, for example.

Crossover

The RX-10SA is equipped with a built-in low-pass crossover, which filters the sound of the input signal and takes out any lows up to a certain limit. This limit can be set between 50 Hz and 120 Hz using the crossover control. Again, feel free to experiment with the settings to find what best suits your set-up.

Thanks to the filtering and removing of the lows, your regular speakers or monitors are able to focus on a narrower frequency range. Since the reproduction of lows costs more energy than that of other frequencies, this not only boosts the performs of your complete set-up, but the overall energy efficiency and the level of definition in the audio.

Phase switch

The phase switch enables you to mirror the sound reproduction of the subwoofer by 180 degrees. This can be useful when you’re dealing with a combination of factors, including:
– Fading frequencies caused by the crossover not setting a hard dividing line but instead, creates an X-shaped gradient with a specific slope. This then causes certain frequencies to partly overlap.
– Acoustic interference that causes a ‘pounding’ sound effect.

Experiment with the settings to find what best suits the situation.

Status LED

The subwoofer is equipped with a status LED on the front (behind the Devine logo) that lights up when it is powered on.

Overload and security

There is no overload indicator on this subwoofer because it is not designed to be used for listening at high volume levels, especially for longer periods of time. Pay careful attention when listening to the subwoofer to determine whether it is set at a suitable volume level. If there is any distortion and/or crackling noises, lower the volume immediately to prevent damaging any components.

This subwoofer is not designed to perform continually at a high volume and should not be used for parties or events. It should be used for its intended purpose only, which is listening to audio at a comfortable volume. This can include recreational activities like listening to background music or amplifying the sound from your television.

Devine cannot be held responsible for any components damaged due to overload and as such, any instance of damage caused by overload is not covered under warranty.

Component and housing protection
This subwoofer is not designed for mobile use. If it needs to be transported, it should be placed in the original packaging or in a suitable flight case with a foam inlay of sufficient thickness to protect it against damage.

This subwoofer is not impact-resistant because it is designed to be placed in a permanent spot in your studio and because any metal or plastic protective grilles can negatively influence the sound.

The bass port should be kept empty at all times and not used for storage.

Troubleshooting

If you have a problem with your subwoofer, you can consult this troubleshooting section for possible solutions. If, after consulting this section, the problem remains unresolved, please contact your retailer for more information and/or help.

This troubleshooting section contains information on how to solve the most common studio monitor problems, but it does not and cannot cover every eventuality. It is possible that you won't find your problem, cause and solution in this section due to differences between products.

Problem	**Possible cause**	**Solution**
The subwoofer won't turn on	Cables are not (properly) connected	Check the cable connection between the subwoofer and the power socket
	Inactive power socket	Check that the socket is turned on and if using an extension cable with a switch, check that this is also turned on.
	Defective fuse	Check the fuse next to the subwoofer's power connector. If the fuse is blown, replace it with the same type of fuse.
Volume is too low	Output volume from the source is too low	Check the volume on the source device and turn it up if possible. It should not be necessary to turn the volume level on the subwoofer all the way up to bring the sound up to an acceptable level. If changing the volume on the source device is not possible, a good audio interface or preamplifier should also be used.
	Gain control is too low	Turn up the gain control on the monitor
Certain frequencies are too low or too high	The subwoofer has not been placed in an optimal position	Experiment with the positioning of the subwoofer. If not placed correctly this can result in certain frequencies being amplified or dampened.
	EQ or sound transducers	Some computers have built-in sound controls with equalizers or sound presets. These should not be used as they will negatively influence the sound of the subwoofer.
Audible interference	Using unprotected cables	Using unbalanced cables may cause interference. Use balanced cables whenever possible. If this is not possible, using a DI box directly after the output will balance the signal.
	High gain and weak signal	It's possible that there may be interference in the signal that is relatively loud compared to the audio signal itself. This can happen with a weak signal from the source which is then amplified by the subwoofer Ensure that the signal from the source is of sufficient strength so that less amplification is needed.
Interference in signal	Unearthed power sockets	Ensure that your subwoofer is always connected using the included cable and that an earthed power socket is used.
	Equipment in the same power group causing interference	Equipment including fridges, freezers and microwave ovens in the same power group are capable of causing interference. Try to

		connect all of your studio equipment to the same power group with no other devices attached. If this is not possible, experiment by connecting your devices to different power groups to see if that solves the interference problem.
Audible resonance or vibrations	Speakers not isolated from surfaces	When your speaker is placed on a surface like a desk or a monitor stand, it should be isolated to prevent audible resonance or vibrations. Monitor isolation pads are the best solution for this.
Distorted, clipping, crackling sound	Source device is transferring a distorted signal	Check if any of the connected source devices is transferring a distorted signal and turn down the volume on the device if necessary.
	Volume control is too loud	Turn the volume down
	Woofer is defective	If a subwoofer is exposed to a loud, distorted, or clipped signal for a longer period of time, this can cause permanent damage to its internal components. If you suspect that the woofer is damaged, contact your local retailer for assistance.

Specifications

– Active studio subwoofer
– Built-in amplifier
– Bass reflex system
– Sturdy woofer protected by a grille
– Solid wooden housing
– Black or white finish
– Various connection possibilities (RCA, 6.35mm TRS jack, XLR)
– Built-in adjustable crossover
– Backlit Devine logo (status-indicator)
– Built-in overload protection

Technical specifications:
– 10” aramid fibre-glass woofer
– Amplifier power capacity: 225 Watts (dynamic)
– Crossover slope: 24dB/oct
– Frequency range: 36 – 150Hz
– Magnetic shielding
– Dimensions: 383 x 355 x 398 mm
– Weight: 18.8kg