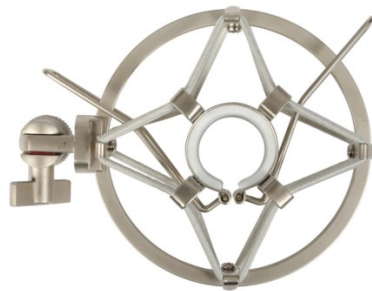


# DEVINE

RM 10

Professional ribbon studio microphone



## User manual

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

*User manual version: 1.0 Creation date + author initials: 26-11-2015 RV Revision date + author initials: -*

# Introduction

Thank you for purchasing this Devine RM 10 recording microphone. This versatility and highly sensitive microphone makes use of special electromagnetic technology, with an electrically conductive ribbon material placed between two magnets. Because sound waves alter the movement of the ribbon, the electromagnetic field changes, causing voltage changes. Ribbon microphones usually have a much flatter frequency response curve, meaning that these are more suitable for studio recording applications where a most natural sound recording is required.

The RM 10 microphone requires phantom voltage to operate properly. Unlike other ribbon microphones, the presence of phantom powered is required to use this microphone properly and will not cause any damage if the requirements are met. This will be explained later on in the user manual.

Please note that the RM 10 microphone is a highly sensitive microphone and it should be handled with care when transported or installed. Large shocks and severe vibrations may have negative impact on the lifespan and performance of the microphone. The RM 10 is supplied with a protective transporting case with foam inlay, protecting the microphone from shocks and impact. Please only transport the microphone in the supplied case to ensure proper protection.

Because the RM 10 microphone is highly sensitive, a shock mount is included to ensure that the microphone is isolated from its mounting surface as much as possible. This prevents that noise is recorded and disturbs your audio track. Therefore it is recommended to only use the included shock mount when using this microphone.

Before you unpack all the received items, carefully read this manual to become familiar with the functions of the microphone. Also check the contents of the box to make sure all necessary parts are included. If the microphone fails to operate properly, or if you have any problems while using it, disconnect it and contact your local dealer for more information and help.



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# Box contents

## **Box contents:**

- 1x Devine RM 10 ribbon microphone
- 1x shock mount
- 1x storage/transport case with foam inlay

## **Unit and accessory inspection**

- If the unit is not going to be used for a longer period of time, disconnect it 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! When you suspect that your unit is broken or damaged, contact your local dealer or a certified technician to inspect the unit.

*Note: Illustrations shown in this manual may vary from the actual product.*



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# Use of the microphone

The Devine RM 10 studio microphone is suitable for lots of studio recording applications. It has a special 'figure of eight' polar pattern, also known as bi-directional. In practice, this means that the microphone captures sound from the front, as well as the back of the microphone. Keep this in mind when setting up the microphone, as sound sources positioned at the back of the microphone may have influence on the audio track during recording.

## **IMPORTANT: Phantom power**

This ribbon microphone does not require +48V phantom power to operate properly. Ensure that the phantom power feature on your mixing board, audio interface or other phantom power capable equipment is turned off before connecting the microphone.

Exposing the RM 10 microphone to a phantom power source for a longer period of time may cause permanent damage and is therefore strongly discouraged.

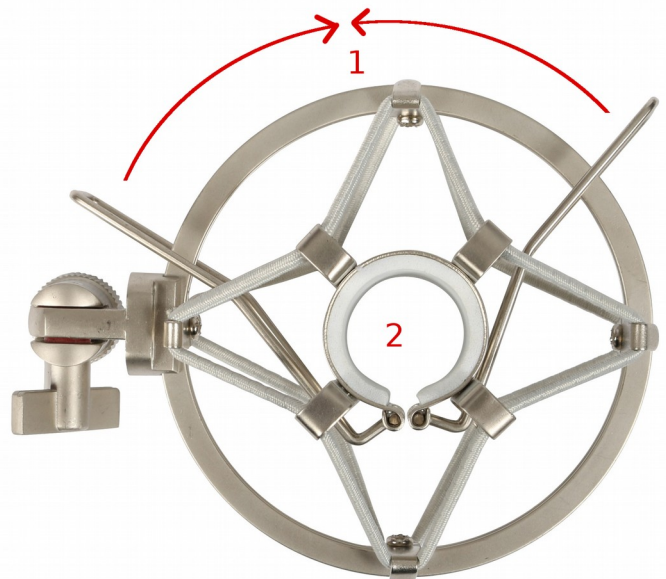
## **Protect your microphone:**

This Devine microphone is equipped with very sensitive electronics to provide optimal audio performance. Make sure the microphone is not exposed to severe shocks, collision, drops from high altitude or any situations that may cause permanent damage. Improper use of the microphone is not covered by warranty. Always transport the microphone in the original package, or in a flightcase with proper foam inlay. The microphone is not intended for on-the-road use.

## **Positioning and using the included accessories:**

The RM 10 includes a shock mount for optimal audio performance. Devine recommends to always use the included shock mount, to prevent audio distortion and background or handling noise.

The shock mount is specifically designed for the RM 10. To insert your RM 10 microphone, please hold the shock mount with one hand. There are metal brackets attached to the inner section in which the microphone can be slid. Use your middle finger and thumb to press the metal brackets to each other (1), which makes the inner section of the microphone mount slightly larger (2). This ensures optimal width for the microphone to slide into the inner section. The section is equipped with foam padding to prevent scratches and damage to your microphone.



The microphone needs to be inserted with the logo facing you, while the shockmount angle adjustment knob is facing away from you. The microphone must be inserted in such a way that the brand and type number can still be seen. This is the most optimal position.

The shock mount can easily be mounted to a microphone stand or microphone broadcasting arm. 5/8" thread is available and with the tightening knob you are able to adjust the angle opposed to the mounting surface. If your microphone stand or arm has smaller thread, you can use an adapter from 3/8" inner to 5/8" outer thread (not included).

## **Connect your microphone to a mixer or audio interface:**

This microphone uses a 3-pin XLR connector for connection with your mixer or audio-interface (cable not included). It is recommended to check the settings on your audio equipment before connecting the microphone. Check your equipment for the following settings:

Mixer/Audio interface:

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- Gain set to the 0-point (in the most final counter-clockwise position)
- Compression/lowcut settings positioned in the off or most neutral position
- EQ settings on the most neutral position
- Pan/Balance settings on the most neutral position
- Volume fader or potentiometer set to the lowest possible position
- Phantom power in the 'on' position (mostly a button per channel, or a group of channels)

Microphone:

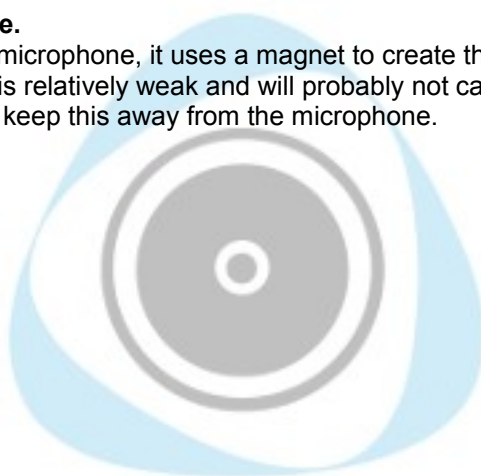
- Steady positioning on a microphone stand, with the included microphone shock mount
- Make sure the audio source (vocalist or instrument) is positioned as close as possible to the microphone

After you checked the settings above, you may start recording the audio source. Placing the audio source as near to the microphone as possible, provides the best audio quality and grants you the ability to reduce overall gain settings, which prevents audio feedback and noise.

Put the volume parameter (potentiometer or fader) on the '0 dB' position for the best audio performance and slowly increase the gain, until slight clipping (mostly indicated with a (LED) VU meter or LED) or distortion is noticed.

### **Magnetic fields and interference.**

As the Devine RM 10 is a ribbon microphone, it uses a magnet to create the desired magnetic field for the ribbon. Even though this magnet is relatively weak and will probably not cause any harm to other nearby electronics, it is recommended to keep this away from the microphone.



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# Troubleshooting

Problem	Possible Cause	Solution
No sound, or very low sound signal	No phantom power Volume set too low	Connect or activate phantom power supply Increase incoming volume and gain on your mixer, interface or other sound processing device
Rattling and cracking sounds	Microphone positioned too far away Moist inside the microphone	Place the microphone closer to the sound source Let the microphone dry on room temperature and avoid use of the microphone in humid or moist environments. Do not let the microphone come in contact with water or liquids.
Loud high frequencies coming from the speakers	Microphone positioned too close to the speakers, which causes feedback	Move the microphone further away from the speakers, or change the position to prevent the microphone to be aimed directly at the speakers.
Interruption of the microphone signal	Loose cable or broken cable	Check if the cable is plugged into the microphone correctly. If that does not solve the problem, try to change the cable.
Distortion and/or noise in the captured sound	Too much airflow caused by vocal airflows	Use a pop filter (sold separately)

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# Technical specifications

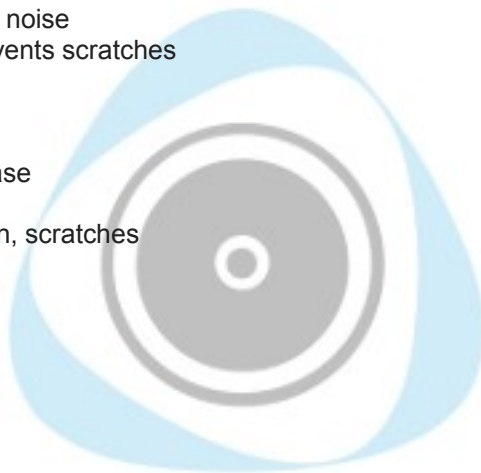
- studio recording microphone
- ribbon pickup with ribbed diaphragm, mounted between magnets to create a magnetic field
- bi-directional (figure-of-eight) polar pattern
- frequency response: 20 Hz – 18 kHz
- sensitivity: -52 dB +/- 2 dB (0dB = 1V/Pa @ 1 kHz)
- output impedance: 350 Ohms +/- 30% (@ 1 kHz)
- load impedance: greater than or equal to 1000 Ohms
- self noise: 10 dBA
- maximum input SPL: 140 dB (@ 1 kHz, max. 1% T.H.D.)
- S/N ratio: 84 dB
- Body dimensions: 25 (radius) x 168 mm
- gold-plated XLR connector
- suitable for vocal and instrument recording

## Included shock mount

- shock mount reduces unwanted noise
- padded microphone holder, prevents scratches
- angle adjustable
- 5/8" thread

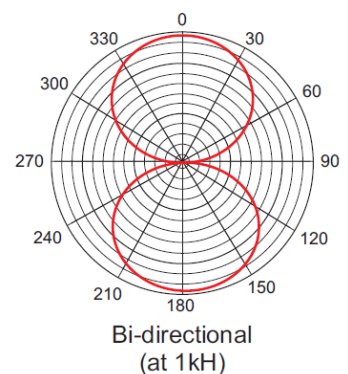
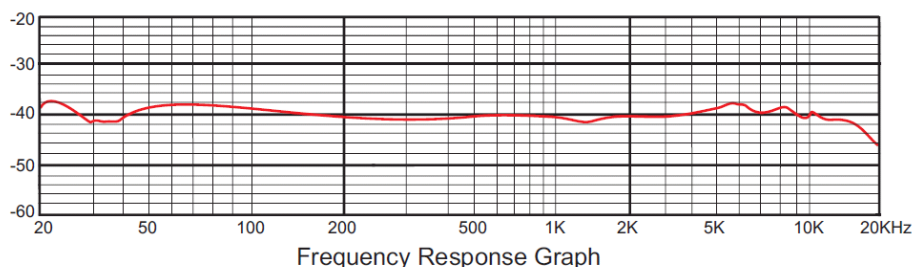
## Included storage and transport case

- foam padded interior
- protects against shocks, collision, scratches



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## Frequency response and polar pattern graph:



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