

RTM10 Studio Monitor User Manual

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Safety and Warnings

The mains power voltage must never exceed 250 VAC. Connecting the power cord to AC power line voltages over 250 VAC will damage the amplifier and may cause the risk of fire. Such damage is not covered under warranty.

The RTM10 power supply is an auto switching 100/240VAC 50/60Hz. You do not have to make any changes depending on your studio power. Simply plug the monitors in using the supplied IEC power cable and turn them on. The speakers have a green LED logo at the front to indicate power on. If no signal is detected for 45 minutes the speakers will go into a low power standby mode and the green light will shut off. Once signal is detected again, the monitor will power on in a few seconds- the green LED will turn on and signal will be heard.

Warnings:

-Do not remove the rear amplifier panel. There is a risk of electric shock. No user serviceable parts are inside. For any issues, please contact Mesanovic for further help and instructions.

-Never operate the RTM10 with an ungrounded mains power cable or a mains connection that is ungrounded.

-This speaker requires adequate airflow to maintain proper cooling. Do not obstruct airflow around the speaker. The rear amplifier plate can reach temperatures of up to 45-50°C. This is normal and is not a cause for concern.

-Do not operate this device in ambient temperatures above 30°C (85°F). Overtemperature may cause device failure.

Unboxing

The RTM10 is packaged individually and each pair is matched. The label on the carton box will have the serial number of the packaged speaker along with the serial number of the matching speaker. Please make sure that you received correct matched pairs as indicated on the carton labels.

The RTM10 is heavy and care must be taken when unboxing and positioning the speakers. To remove the speaker from the carton safely follow these steps:

- 1) Cut the tape at the top of the box and then lay the box on its side.
- Slowly tilt the box upright making sure to keep the cut open flaps flared out. The top of the box that you cut open should now be facing down with the bottom of the box facing up.
- 3) Slowly lift the box up by the flaps and completely remove it from the speaker. You'll now see the RTM10 sandwiched between two foam inserts. Remove the top insert and carefully lift the speaker out of the bottom insert. The protective clear covering may be slippery so we recommend having an extra person to help with this process.
- 4) Be sure to save the box and the packaging inserts. The inserts and box are custom made for the RTM10 and cost \$100 USD for replacements.

Ribbon Alert and Clip Protection

Ribbon Tweeter Alert:

Before using the monitors make sure to remove the protective film covering the ribbon tweeter. This ribbon is made from pure aluminum and is protected by a metal mesh and special wind blast fabric.

Make sure to keep any blasts of air away from the ribbon (window breeze, fans, outdoors) and be sure to <u>NEVER BLOW INTO THE RIBBON!!!</u>

If you are planning to transport the RTM10 outdoors we recommend covering the ribbons with a piece of tape.

Clip Protection:

The RTM10 has a clip protection limiter. This will protect the speakers from any transients that could potentially cause damage to the drivers at loud listening levels. The LED logo will start blinking red when the limiter is engaged.

Warning: *High SPL levels can cause permanent damage to your hearing.* We highly advise turning down the volume if you ever reach the limiter.

Thermal Protection:

The RTM10 also has thermal protection. If the amplifier is reaching its maximum temperature, the output is lowered by 6dB. Additionally, the protect indication starts blinking once every second. If the maximum temperature is reached, the amplifier is switched off to protect it from damage. Additionally, the protect indication starts blinking twice every second. When the amplifier has cooled down to a safe operating temperature, the thermal protection resets and the RTM10 resumes to normal operation.

Connecting and Positioning

Inputs:

The RTM10 comes with a balanced XLR input and an unbalanced RCA input.

We strongly recommend using the balanced XLR input for the best results.

The default input is the XLR input. In order to switch to using the RCA input you will have to download a separate Hypex software to make these changes. To learn how to do this please download the "Input Change Instruction Manual" on our website. Once again, we recommend using the default XLR input for the best results.

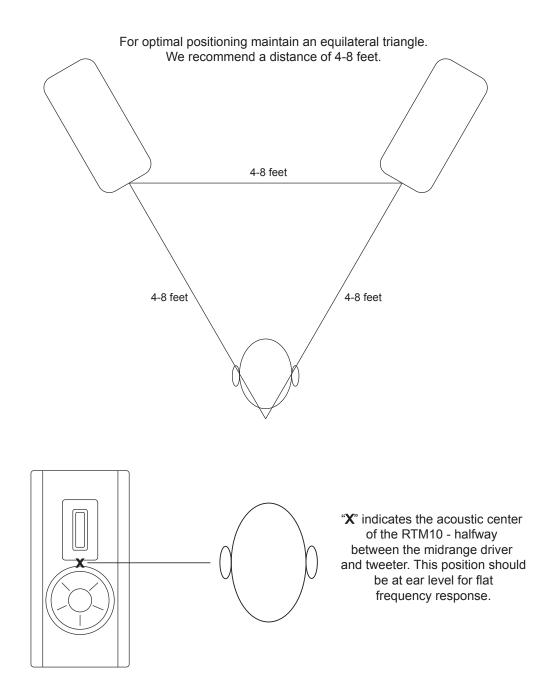
Positioning:

We recommend using the RTM10 at a distance of 4-8 feet in an equilateral triangle with the face of the cabinets facing towards the listener. The speakers are designed to give a flat frequency response with your ear height at the center point between the tweeters and midrange driver. A push button on the rear amplifier panel allows you to change the low end response. We recommend starting in the "Flat" position and adjusting the low end shelf as needed. The subwoofers can be placed facing inwards or outwards.

Please note: The RTM10 has differing horizontal and vertical directivity. We strongly advise to only use the speakers in their upright position and to never have them laid on their sides. If the speakers are laid on their sides the narrower vertical directivity of the speaker will now be changed to a narrower horizontal directivity resulting in a narrow and confused horizontal imaging and soundstage.

See the next page for the positioning diagram.

Positioning



Warranty and Registration

Our studio monitors come with a limited warranty and the warranty period begins when they are purchased by an authorized dealer. The warranty is transferable from the original owner as long as proof of original purchase can be provided. We will repair or replace any monitor components that fail to meet factory specifications (including factory defects or imperfect workmanship) during the following specified warranty periods:

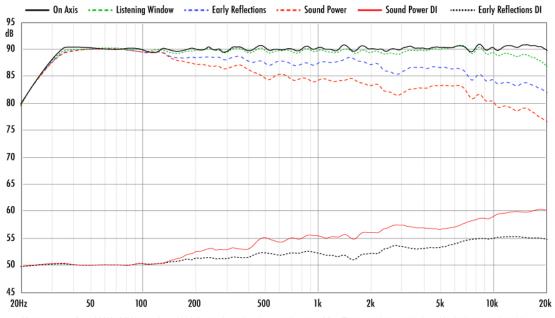
- 3 years for electronic components and cabinetry
- 2 years for moving components (mid range drivers and subwoofers)
- 3 year ribbon tweeter warranty including 1 free reribboning. Replacement tweeter cartridges can be purchased for \$75 USD and we strongly recommend sending the tweeter into Mesanovic allowing us the perform the replacement safely and accurately.

To have a valid warranty, we must receive a product registration form. The warranty does not apply if the monitors have been damaged, misused, disassembled, repaired, or modified by other than Mesanovic Microphones themselves.

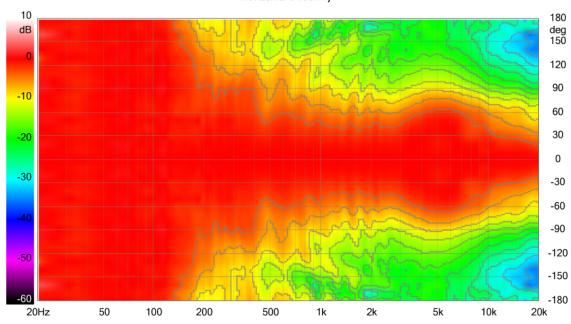
Please visit <u>www.mesanovicmicrophones.com/register</u> to register your monitors.

Measurements

Mesanovic RTM10 Spinorama CEA 2034



Measurements from 200Hz-20kHz conducted in fully anechoic chamber at a distance of 2m. The acoustic center is the midpoint between the midrange woofer and tweeter. Measurements from 20Hz-200Hz conducted with ground-plane technique and merged with anechoic response.



Mesanovic RTM10 Horizontal Directivity

Mesanovic RTM10 Vertical Directivity

