



The Next Generation

The former R1 line source speaker designed by Bo Bengtsson is now updated and improved, and features better performance than ever.

The NEW M3 Pro i



The new M3 Pro *i* incorporates a completely redesigned woofer concept and a brand new and refined ribbon solution while retaining the unique and internationally acclaimed open dipole tweeter. The M3 Pro *i* represents the best that today's technology can offer.

————— *New Modular Woofer concept* ————



M3Pro *i* without ribbon grille cover

M3Pro *i*'s modular woofer sections



Transmission Audio is pleased to present the new M3Pro *i*, a reinterpretation of designer Bo Bengtsson's earlier R1. This speaker has now been completely reworked and we are happy to present the brand-new M3 Pro *i*. The picture to the left illustrates one of many possible finishes. Please note that the picture shows the speaker with the woofer grille cloths on.

To make the speaker extremely rigid, each woofer tower is designed as a free-standing unit wherein each woofer element is housed in its own separate enclosure, or module. This means that an individual woofer has its own bass reflex port which gives plenty of room for the airflow, resulting in no port cavity sound at all.

All modules are bolted together from top to bottom, forming an extremely sturdy and stable design. The pair of speakers can be delivered to the end consumer in small, easy-to-handle shipping cartons and assembled by the consumer on location.

8 powerful woofers, per channel, made to the most exacting specifications, offer a listening experience and impact that few, if any, loudspeakers can match.

The midrange and treble are handled by a total of 3 x 20 inches (50cm) long 1" ribbons, developed in-house, stacked atop each other and forming a seamless dipole line source configuration. All ribbons are driven by a NEO engine, containing the strongest neodymium magnets available on the market. These ribbons are offered either as Dynamic Propulsion™ or as Ultra Propulsion™ units.

The M3Pro *i* is built upon the modular concept.

The modular solution has a number of advantages over conventional designs. First, the relatively large speakers can be delivered to the customer in smaller, easy-to-handle, shipping cartons. No more bulky, back-breaking megacrates! Second, should service ever be called for, (such as a damage on the veneer), the customer only has to ship the faulty module. Third, it is possible for a customer to add more power capability and SPL resources to the system simply by adding more modules. And last but by no means least, it is easy for the manufacturer to implement updates as a function of technological progress, and the customer doesn't have to sell his system, but simply update it.



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Transmission Audio's ribbon systems are largely insensitive to climate and temperature changes. They sound the same, regardless of whether they operate at normal room temperature, at minus 30 degrees Celsius or at plus 50 degrees Celsius. They are rustproof, fireproof, resistant to chemicals and can take any climate/humidity. Their data does not change over time. So what about distortion? In a line-source configuration, 1,5 meter or higher, the distortion is below 0,05% at 120dB SPL. Also, these ribbons are not encapsulated at the back. No cabinet reflections. No resonances. Just pure sound.

This CAD drawing shows how the modular concept on the M3Pro i is designed.

Every woofer is individually mounted in its own optimized cabinet. All walls are made from 40mm MDF to give maximum stability and add mass. The modules are then stacked on top of each other from the base and up using steering rods. In between every "floor" a separate damping plate is inserted in order to further enhance insulation from floor-to-floor.

The whole system is then secured by 4 oversized threaded rods, (running from the top plate, through all woofer modules and secured at the bottom base plate with huge nuts), made from non-magnetic 18/8 stainless steel.

You could say that it is assembled the same way a cylinder head in a car engine is kept in place. Except from giving an enormous strength to the construction as such, this further assists the damping plates between each floor by increasing the contact pressure.

The result is a "dead-silent" cabinet, free from all sorts of vibrations **before** the internal cabinet insulation is applied, in itself a patent-applied-for technology.

The 1" and 2" ribbon units MK II

Originally developed and introduced by Bo Bengtsson in 2003, Transmission Audio's Dynamic Propulsion™ and Ultra Propulsion™ ribbon units have undergone so many refinements that it now introduces the Mk II version, featuring more musicality and definition than ever before. Thanks to new materials and a refined magnet structure, the clarity and power capability have been vastly improved. The Mk II version will be implemented immediately and owners of older units will be offered an upgrade.

One factor that make these ribbon elements stand out from the competition is their extreme X-max. The 1" unit has a displacement of plus/minus 4 millimeter and the 2" unit has a maximum displacement of no less than plus/minus 8 millimeter. Combined with an unheard-of resonance frequency of 8Hz for both units, these ribbons, when stacked as a true line source, can move lots of air, about just as much as or more than many dedicated woofers on the market.

This results in an outstanding reproduction of dynamics and transients. Imagine how effortless these ribbons can reproduce any input from 1kHz to 25kHz. Why two versions? Customers who heard the first 1" version asked us if it was possible to design a ribbon with even more power capability at *lower* frequencies, i.e. below 1kHz.

Specifications

M3Pro i

M3Pro i is a true line-source/open dipole speaker offering extremely musical sound at an affordable price. Ideally suited for Home Theater systems, the M3Pro i is revolutionary refinement of Bo Bengtsson's award-winning R1 design for Red Rose Music, and features:

- 375 square centimeters of ribbon area
- Very high peak power capability.
- A typical distortion figure of 0,05% at 110db
- Higher sensitivity
- 6-Ohm load impedance that suits tube as well as semiconductor amplifiers (Ultra Propulsion)
- Extremely rigid chassis layout

Notable refinements

- Custom-made woofers created to the highest specifications
- New magnet structure
- Modified voice coil assembly
- More linear frequency response
- Accelerometrical analysis of cabinetry to increase physical strength and suppress unwanted vibrations
- Large surface area = good radiation resistance
- Improved air coupling due to increased radiation resistance
- Enhanced overall performance and transparency due to crossover at lower frequencies

The result is a faster and tighter bass response and a midrange that could set a new standard.

The line-source ribbon concept

M3Pro i is available in 2 different configurations: Transformer-driven Dynamic Propulsion mode or trans-former-less Ultra Propulsion mode.

Specifications	M3Pro i
System Type	Bass reflex/Dynamic or Ultra Propulsion™ (dipole) ribbon tweeter section
Circuit Type	First order Butterworth
Enclosure Type	Modular bass reflex with open dipole line source ribbon
Drivers	8 x aperiodically damped high definition woofers (6.5")
Bass Driver	Eight 6.5" heavy duty with diecast aluminum cone woofers, 250-watt each peak power dissipation 10 ms.
Tweeter	3 x50 cm. dipole ribbon tweeters with separate open ribbons in a strong Neo motor structure.
Rear Ambience	True dipole configuration
Frequency Response	22Hz - 30kHz (+/- 2dB)
Impedance	6 Ohm nom. (Dyn. Prop.mode)
Sensitivity	90-93dB @ 1 watt, 1 meter
Power (per channel)	Min - 5 watts rms Max - 500 watts rms Peak - 1500 watts 10ms
Finish	Standard - Rosewood with removable black grille cloth. Other finishes to order.
Dimensions (h x w x d)	188 x 55cm x 58cm (74" x 21.6" x 23")
Weight	Each speaker: 250Kg = 500 lbs
Warranty	3 year transferable (parts and labor), with registration

M3Pro i is currently available in the following finishes:



Other finishes to order. Actual finishes may vary slightly from the photographs.

Our sonic signature

M3Pro i, as do all our speakers, utilizes a true open dipole ribbon structure covering all frequencies from 3kHz and up. The effortless, transparent and resonance-free reproduction, only available via an open dipole structure, is our sonic signature.

transmissionaudio
the ribbon speaker company