



MAGNUM DYNALAB  
PURE SOURCE AUDIO

# MD 100 & MD 100T

Analog FM Tuner



STEREO



MONO

A Benchmark Tuner for Listeners Everywhere.

- .093 THICK PRINTED CIRCUIT BOARD
- BALANCED GOLD PLATED OUTPUT
- RS-232 PORT
- WBT UNBALANCED (RCA) OUTPUT
- MD REFERENCE 6922 VACUUM TUBES
- KIMBER HYPER-PURE COPPER WIRING

## FEATURES

MD 100 & MD 100 Triode FM Tuner

# MD 100 MD 100T

## HIGHLIGHTS

### **.093 THICK PRINTED CIRCUIT BOARD**

A solid footing to minimize any residual vibration in the chassis to allow all components to operate at peak performance. Further, all contact points are generously gold plated to ensure complete signal transfer over the long haul.

### **BALANCED OUTPUT WITH GOLD PLATED NEUTRIK CONNECTORS**

Fully complimentary circuit insures a perfectly balanced signal, and exact dimensions ensure maximum conductivity.

### **RS-232 PORT**

For seamless integration with any whole house audio system.

### **WBT UNBALANCED (RCA) OUTPUT CONNECTORS**

Low tolerance connector made of highly ductile "OFC" copper, with 24 carat gold plated contacts. Ensures a perfect signal transfer for interconnects.

### **DESIGN FEATURES EXCLUSIVE TO THE MD 100T:**

#### **MD REFERENCE 6922 VACUUM TUBES**

Included in the audio amplification stage, our 6922 MD Reference Tubes are designed to our exacting standards and tested individually for specifications.

#### **KIMBER HYPER-PURE COPPER WIRING**

High grade internal wiring provides a clean, uncolored path for the signal through the audio stage of the unit.



## BENCHMARK

### **A Benchmark Tuner for Listeners Around the World**

A proven benchmark for FM Tuners around the world, the award winning MD 100 and 100T are built with the same precision aligned R.F. front end design found in all Magnum Dynalab tuners. In the MD 100T, we have added the specially designed MD Reference 6922 tubes in the audio amplification stage, providing audio realism for those customers with a special partiality for the tube experience. The MD 100 features the proven solid state audio circuitry that formed the backbone of our original line of FM tuners. Both products offer not only a new reference in terms of sonic realism, but also yields the utmost in flexibility through our optional Precision Analog Remote System, and standard balanced audio outputs.

As in all Magnum Dynalab analog tuners, we design and build the MD 100 and 100T's highly adept 4-stage RF front end in-house. This unit is sure to extract the most intricate signals from amongst the milieu of FM congestion that abounds in today's urban markets. Additional support is given through our custom Auto Blend RF circuit, which constantly monitors and varies your stereo separation insuring optimal "stereo quieting" during your listening sessions.

## RF

### **Primary RF Highlights**



**Tunable four stage ANALOG front end:** Four stages of RF filtration, providing station separation without affecting stereo separation. As always, the front end is a custom designed and manufactured in-house design.

**Multiple Bandwidth Settings:** Both tuners offer 2 bandwidth settings to produce the best sound where adjacent channel interference is, or is not a factor.



**Dual AGC (automatic gain control) stage:** This automatic circuit design eliminates the need for a local and distant switch, altering the amount of relative gain that's added to the incoming signal.

**Auto Blend RF Circuit:** Automatically monitors and adjusts stereo separation to maximize "stereo quieting", insuring the quietest stereo signal as possible. This greatly eliminates background noise.

**Defeatable Mute:** Eliminates any interstation noise while tuning.

**Analog Meters:** Functional and easy-to-read multipath/signal strength measurements showcased through an analog meter.

Through the hand matching of internal IF components, the MD 100 and 100T excel in RF Selectivity and tuning Sensitivity. Both products will assure you the consistency of performance our customers have come to expect from Magnum Dynalab.

# ANALOG

## Why Analog?

Many people question why we are one of the only companies that continue to build a truly ANALOG FM tuner and ANALOG remote control. The answer is very simple. The best SOUND can only be produced when the signal received by the tuner is tuned and maintained in the ANALOG domain. By maintaining the signal in the ANALOG domain the customer has infinite tuning across the FM band; this is achieved by the use of a knob instead of the pushbutton step function tuning offered by a digital tuner. Because of our design and manufacturing process, the front end and the IF (intermediate frequency) amplifiers are precision aligned, which guarantees that all specifications are met all the time; this is not possible in a digitally tuned tuner, as they are dependent on the tolerances of the components.



# SPECS

## Specifications

- Usable sensitivity (Mono) – **0.7 u V 9.0 dBf**
- 50 dB quieting (Mono) – **2.0 u V 9.9 dBf**
- 50 dB quieting (Stereo) – **2.3 u V 25.0 dBf**
- Capture ratio – **1.5 dB**
- Image rejection – **110.0 dB**
- Signal to noise ratio – **80.0 dB**
- Alternate channel (Wide) – **40.0 dB**
- Alternate channel (Narrow) – **70.0 dB**
- Adjacent channel (Wide) – **3.0 dB**
- Adjacent channel (Narrow) – **35.0 dB**
- THD (Mono) – **0.10 %**
- THD (Stereo) – **0.18 %**
- Stereo separation – **50.0 dB**
- AM suppression – **70.0 dB**
- SCA rejection – **80.0 dB**
- IF rejection – **80.0 dB**
- 19 KHz and 38 KHz component rejection – **75.0 dB**
- Audio frequency response (+/- 1 dB) – **15 Hz – 17KHz**
- Balanced audio output – **2.2 V**
- Line audio output (RCA) – **1.0 V**
- Line power (Must be specified) (110/220/230/240) – **VAC**
- Dimensions (inches H.W.D.) – **4 x 19 x 15**
- Dimensions (cm H.W.D.) – **11.43 x 48.3 x 38.1**
- Weight (lbs./kgs) – **18/7.96**
- Power consumption (Typ/Max) – **50w/100w**
- Tube Specifications for MD 100T:
  - Filament current (max) 330 mA (min) 270 mA
  - Anode current (1) (max) 1.07 mA (min) 0.92 mA
  - Anode current (2) (max) 1.07 mA (min) 0.92 mA
  - Total harmonic distortion < 1.8%
  - Tubes position 1 and 2 – MD Reference 6922

MAGNUM DYNALAB LTD. RESERVES THE RIGHT TO CHANGE OR MODIFY THE SPECIFICATIONS WITHOUT FURTHER NOTICE



By calibrating and aligning the IF (intermediate frequency) amplifiers we are optimizing **SOUND, SENSITIVITY** and **SELECTIVITY**.

# UPGRADE

## The Precision Analog Remote System

The Precision Analog Remote System is now available as an option on all production Magnum Dynalab tuners, receivers and as an update to all previous Magnum Dynalab tuners and receivers.

For more details, please visit [www.magnumdynalab.com](http://www.magnumdynalab.com).



**MAGNUM DYNALAB**  
PURE SOURCE AUDIO

Magnum Dynalab Ltd.  
8 Strathearn Avenue, Unit 9  
Brampton, Ontario, Canada L6T 4L9  
P: 905.791.5888  
F: 905.791.5583  
TF in North America: 800.551.4130  
info@magnumdynalab.com  
www.magnumdynalab.com