

MD

# 90

FM Stereo Tuner



As successor to the FT101A, one of the most sensitive, selective and sonically accurate FM tuners of our time, the MD-90 continues the tradition by re-defining state-of-the-art in analog FM tuner design.

The MD-90 combines the very latest in discrete, analog technology. Its highly renowned in house MOSFET front end provides 3 stages of amplification. Here even the most fragile of signals is strengthened and further defined by using highly effective "group delay" filtering. The result is a sonically correct audio signal, one that contains all the inherent richness and brilliance of the source being broadcast.

The MD-90 incorporates the new MDX motherboard with consistently higher levels of selectivity, which is so important with the milieu of FM congestion that abounds in todays markets. The MD-90 also has a redesigned power supply circuit that maintains the tuners circuitry on standby at all times when the tuner is connected to a live AC supply. The MD-90 allows the optional infra-red remote to be installed internally.

Large, easy-to-read panel meters provide continuous monitoring of RF signal strength, multipath interference level and center-tune. Frequency tuning is via a precision potentiometer infinitely variable which provides a precise, voltage to the tuning varactors. Visual output is via the digital frequency display. Function switching is provided through tactile, toggle switches custom made and gold plated.

#### WHY ANALOG?

In contrast with the frequency synthesis method of tuning, analog is not dependent on a digital microprocessor chip to establish the tuner's receive frequency. With analog, tuning is accomplished using specially-selected, discrete components in the tuner's critical "front end." In the Magnum Dynalab design, these components are selected and matched so that a unique balance of sensitivity, selectivity and sound can be maintained.

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# Features & Benefits:

- Dual, keyed automatic gain control (AGC) – monitors and maintains program signal level and clarity, along with providing a dramatic reduction in interference from strong, local stations
- BW 1/ BW 2 bandwidth control – switch to effectively control adjacent channel interference
- Mute circuit – noise-activated with manual defeat switch
- Auto blend RF circuit – automatically monitors and varies stereo separation insuring optimal “stereo quieting” during your listening sessions
- Stereo/mono mode – user switchable
- Digital frequency display – independent frequency counter derives input from tuner's local oscillator section and displays in soft, amber 0.5” LED numerals

analog FM TUNER



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## Options:

- MDX Triode tube (6922) audio gain stage
- FTR-infra-red analog remote-utilizing the Texas Instrument PCM 1704, laser trimmed ladder logic DAC, we are able to achieve tuning steps of 1/1,000,000 Khz insuring precise tuning and very accurate recall of the preset stations. The remote also includes a preset backup in case of power failure, on/off functions as well as the ability to scan the FM dial are convenient features of the FTR
- Balanced outputs
- Kimber (KCAG) silver wire in the audio path
- High resolution audio upgrade polypropylene capacitors and bypasses in the audio signal path along with the precision of the Burr Brown op amps
- Gold or silver faceplate 17.75”/45 cm or 19”/48.26 cm
- WBT, RCA output connectors
- Precision tuning system

## Specifications:

Usable sensitivity (mono)	10.3dBf
Usable sensitivity (stereo)	11.2dBf
50dB quieting sensitivity (mono)	13.2dBf
50dB quieting sensitivity (stereo)	34.0dBf
Capture ratio	1.5dB
Image rejection	75.0dB
Signal to noise ratio (SNR)	75.0dB
Alternate channel attenuation (wide)	60.0dB
Alternate channel attenuation (narrow)	80.0dB
Adjacent channel attenuation (wide)	9.0dB
Adjacent channel attenuation (narrow)	25.0dB

THD (mono)	0.1%
THD (stereo)	0.18%
Stereo separation	50.0dB
AM suppression	-70.0dB
SCA rejection	-75.0dB
-3dB frequency response	20Hz - 17KHz
Power required	120/220/230/240 vac
Dimensions	19” (w) x 13” (d) x 4.25” (h)
Weight	12 lbs/5.31kgs
Standard faceplates (black)	17.75”/45 cm 19”/48.26 cm 19” Rackmount

Magnum Dyalab reserves the right to change the specifications at any time

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