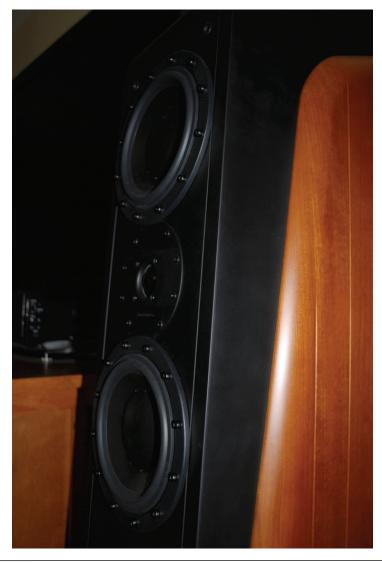
# Affordable\$\$Audio

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## Magnum Dynalab Indoor FM Antenna's By Anthony Nicosia

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#### **Specifications**

SR-100 Silver Ribbon Tunable FM Antenna

An indoor Antenna for both enhanced FM performance and HDTV broad-

Specifications

Base measures 3.5" width x 2.5" deep x 3/4" high

Maximum height of antenna fully extended: approx. 37.5" Maximum width of antenna fully spread: approx. 32"

Cord is approx. 3' long

Warranty: twenty four month limited warranty applies to the first end user

Price: \$35



According to Magnum Dynalab "In an independent test, using a commercially available FM tuner, the following percentile improvements were at-

tained with the SLEUTH on line:

Sensitivity (under 1dB limiting) -170%

Spurious Response Rejection -90%

Image Rejection -380%

Ultimate Sensitivity was rated at 70dB+ Also, the total harmonic distortion (THD) remained unchanged indicating the Sleuth added no measurable distortion of its own."

Specifications

Circuit: 3 varactor-tuned RF stages Gain: VARIABLE -30dB thru +30dB

Tuning Range: 88-110 MHz Bandwidth: Better than 400KHz

Noise: Less than 4dB

Distortion: 0%

Antenna Input: 75 ohms

Power Required: 230/240/110 volts

Size: 17" x 1.75' x 6"

43.18cm x 4.45cm x 15.24cm

Weight: 6 lbs/ 2.65KG

Warranty: twenty four month limited warranty applies to the first end user

Price: \$435

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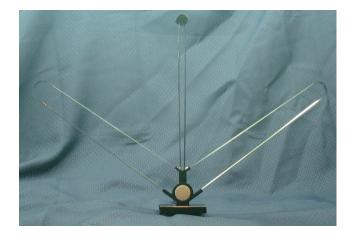
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Looking back twenty-five years ago to 1984, we see a time when Magnum Dynalab introduced its very first product, the Signal Sleuth, which was designed to boost and stabilize FM signals. According to Larry Zurowski, the president of Magnum Dynalab, the biggest difference between that Signal Sleuth and today's model is that the gain curve is now more consistent across the FM band. Later, in September of 1985, the company marketed the FT 101, which was heralded as their first FM tuner. Magnum Dynalab now makes FM tuners, an integrated FM receiver, an integrated amplifier as well as a selection of both indoor and outdoor antennas. Having recently, in the June 2009 issue of "Affordable"





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Audio", taken a look back at the 1960's McIntosh MR67 tube tuners I can only wish I'd had today's Magnum Dynalab products around to help with the review.

I have, as of late, been using a TERK FM+ Indoor Antenna, which was recommended to me by a friend. Unfortunately, I live in a more difficult environment than his, and while this inexpensive antenna priced at only \$9.99 worked better than no antenna it still left me with a desire for something more substantial. When I first contacted Larry Zurowski I was completely upfront with him in explaining that I lived in an area that has great difficulty getting a proper reception. I explained that I am situated at the bottom of a very high steep hill where FM reception is poor, even when it comes to capturing local stations. Add this to the fact that there are large commercial planes flying relatively low, from the San Francisco airport, and you have an FM reception nightmare. Larry never addressed this issue, but rather sent me an email saying he would send the requested products as soon as he could get me an SR-100 Silver Ribbon Tunable FM Antenna, which were at the time on backorder. A few weeks latter both the SR-100 and Signal Sleuth arrived neatly packaged and in perfect condition.

To tell you the truth I did not expect very much in the way of an improvement with the SR-100 antenna as I was already using an indoor antenna for my MR-67 tuner. Having tried a variety of other indoor style antennas I never did have much luck picking up stations and was resigned to the fact that I must go the outdoor antenna route. After all this was only a thirty-five dollar investment, how much of a difference would it make being that I live in a difficult FM reception area? As it turned out, it made a huge difference. I was floored with the vast improvement this indoor antenna made and had to put my own antenna back in just to see if maybe the moon and stars were aligned differently that day and had somehow cleared the skies for superior FM reception. But no, switching back to my original antenna resulted in a poorer performance once again that allowed for some stations to drift and others to be difficult to pull in properly. After reinserting the SR-100 I found everything to be right once again. I was sold and spent the rest of the morning listening to music via my newly revamped FM tuner setup. With the SR-100 I was able to pull in stations that before were "edged" with static but now were quite silent. I felt a greater depth to the music as this silent background now afforded me a clearer window with which to hear through, and I enjoyed each musical performance anew. Whereas before I would glide the tuning knob through the various frequencies to hear plenty of static, now for the most part there was silence. It was not so much that it pulled in stations that I could not capture before but rather for me it made the stations I was already receiving sound clearer and more powerful. I liked what it brought to my system as it quite simply did the job it was intended to accomplish and did so for the paltry sum of only thirty-five dollars. Having had other "rabbit ear" style antennas in my listening room before, I must say that my wife finds them quite unattractive, but not so with the SR-100. Its combination of mostly black and silver (an Oakland Raiders fans delight, yes we live less than an hour from their stadium) coupled with its slender simple appearance worked just fine for us from an aesthetics point of view.

#### **Operation**

Now in steps Magnum Dynalab's MD-205 Signal Sleuth FM signal Antenna. Take note that the Sleuth's performance will be directly related to the quality of the antenna attached, as well of course as the reception within the area and the attributes of the tuner used in conjunction with it. It is a tunable RF processor for FM stations across the 88-108 MHZ frequency bandwidth. I naturally used Magnum Dynalabs own SR-100 Silver Ribbon antenna for this evaluation but as previously stated you might even want to try one of their more powerful outdoor antennas for a more "startling" experience. I say startling because that is what this combination of SR-100 and MD-205 felt like to me. For a complete instructional aide of how to set-up the MD-205 please read the owners manual, but for now let me give you a guick summation of the process which may at first seem a little complicated. With your purchase you will be supplied with a patch cord with 'F' connectors on both ends. Connect the FM tuner to the MD-205 via this patch cord to the area marked "Output to Tuner". Connect the MD-205 to your antenna by way of the connector labeled "Antenna Input". Please make sure that both switches located on the front of the MD-205 one labeled "Power", is in the off position, the other "Antenna Signal", is in the Bypass position. The FM tuner should also be turned off. Now use the supplied factory power cord to plug the unit into an outlet. Be very careful as "Significant damage will be done to the unit if the wrong voltage is applied". Appropriate voltage should be marked on the back of the unit. Alright, now turn on the MD-205 by moving the power switch to the "ON" position and then switch the antenna signal switch to the "Amplify" position making sure that all the LED lights turn on with each flip of the switch. Now that it is connected and functioning properly let me explain how to use the Sleuth when dialing in different radio stations, in order to help you tune them in for better reception.

The following should be performed with the tuner's Mute switched "OFF" and the Sleuth's RF Gain control fully turned in the counter-clockwise position past where a 'click' is heard. First turn on the Sleuth with the Antenna Signal switch set to bypass, then turn on your FM Tuner. Make sure that the tuner is set to stereo. Tune to a station that has a fairly strong signal in your area and then set the Sleuth's tuning control to the same approximate frequency. There is no digi-

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tal readout for this, so you have got to trust what we used to do before digital readout, look with your own eyes and listen with your own ears. Now you can switch the Antenna Signal switch to the 'Amplify' position. As you then rotate the RF Gain control to fully clockwise and you will start to feel a click. Looking at the signal strength on the tuner you will rotate the Sleuth's Tune control until you find the highest reading on the signal strength meter, or until you perceive the clearest audio signal. Switching back to the RF Gain control, now rotate it counterclockwise until you get a weaker signal and then rotate it back clockwise until the audio signal is at its optimum. It is now time to turn the Mute switch to the 'ON' position. When you need to switch frequencies on your tuner simply turn the Antenna switch on the Sleuth to the 'bypass' position then tune your FM Tuner to the next desired station. Turn the Sleuth to the corresponding frequency, turn the Antenna switch back to amplify and rotate the Gain control and the Tuning Knob on the Sleuth to regain optimal signal strength or until it sounds best to your own ears.

#### **Impressions**

Once again this Magnum Dynalab product impressed me with its ability to do exactly what it was designed for. It separated weaker stations by allowing you to finely tune them in and then boosted their signal with up to 30dB of gain, thereby adding power to the selected frequency. The affects of the Sleuth reminded me of a Vinyl pressed Master Recording where music would seem to spring forth from a background of dead silence, quite impressive indeed. As the Sleuth tuned in radio station after station, using the units gain control knob to put on the finishing touches, I was always amazed at how the stations snapped into focus allowing me to hear music as if I had purchased a much more expensive tuner. The only two regrets I had concerning my review of the Sleuth were that I was not using one of their outdoor antennas, to see how good my MR67 tuner could actually be, and secondly that I was not using a modern day tuner made by Magnum Dynalab.

#### Conclusion

Both the SR-100 Silver Ribbon antenna and the MD-205 Signal Sleuth FM signal Antenna added no coloration of their own to the sound, yet they did have an enormous affect on the musical performances heard through them. I suggest that both be used together in order to realize the full potential of each. The SR-100's job is to capture local FM radio stations and is an excellent alternative for audiophiles who do not want to install an outdoor antenna or those of us on a more stringent budget. It is tunable, to maximize FM reception, and, as my wife and I found, quite attractive. The Sleuth on the other hand is a device designed to tune in the weaker FM radio stations in your area, separate them from the stronger ones and add up to a 30dB boost of gain to the appropriate signal. While it is in itself no substitute for a good tuner or antenna it will enhance their performance by its ability to add three RF stages and power to the signal. Using them both together I found the quality of my FM reception vastly expanded while my listening pleasure increased immeasurably. FM broadcasts tuned in easily and the added background silence was indeed a welcome addition. Both products are very highly recommended.

#### The Listening Environment:

The review room is eighteen feet eight inches long by thirteen feet wide. The loudspeakers and equipment are kept on the short wall. The cathedral ceiling starts at eight feet and sloops upwards to thirteen feet at its peak in the middle spanning across the short length of the room for the full thirteen feet height. The hardwood floor has a nine by six foot oriental rug lying down the long ways toward the system placed dead center in between, yet not under, the listener and the review equipment The room has no doors, but has two openings. One is in front of the right Legacy Focus 20/20 loudspeaker, which gives access to the hallway while the other is behind the listening position and opens to the formal dinning area. The room is treated with two floor standing acoustical panels, one behind each speaker, and the audio equipment is located in a Cherry Synergy Twin S30 Salamander audio rack against and in the middle of the short wall. I have two power conditioners that plug into a PS Audio Power Port receptacle located behind the audio rack. There are also two Blue Circle Audio MKIII Power Line Pillows, one on each of two outlets on the long walls next to and behind each loudspeaker. The Legacy speakers are located about six feet seven inches from the rear wall to their front panel. They are also twenty one inches from the rooms side walls to the middle of each loudspeakers. The Legacy's are twelve feet apart from each other to form a triangle with the listening position that is also angled at twelve feet from loudspeaker to listener. In the corner of each short wall behind the Legacy's are a pair of 1989 Klipsch Klipschorn loudspeakers that are sometimes used for reviews. If the Klipsch loudspeakers are used I would then reposition the two acoustical panels to slightly behind the listening position one to the left and the other to the right of it.

### **Review Equipment:**

McIntosh MR67 Tube Tuner and matching wood cabinet with slant legs

Monarchy Audio SM-70 Pro power amplifiers (2 used in mono block configuration), Monarchy Audio M24 Preamplifier, Samsung HD-841 Cd/SACD/DVD Audio universal player, Oracle Delphi MK I turntable, Grace 707 tonearm and Denon DL-301MK II Moving Coil stereo cartridge, Whest Phonostage.20 + MsU.20 power supply(for Moving Coil or Moving Magnet cartridges) PS Audio power port receptacle, Two Blue Circle Audio Mk III power line conditioners, Acoustic Revive RTP-4 Series power conditionerm, Kimber Kable 4TC loudspeaker cable with matching jumper wires, Kimber Kable Hero and Tonik Interconnects Tek Line, PC-8 Signature power cords, two six foot lengths, Mr. Cable, The Musician power cord, a nine foot length Monarchy Audio AC-1 power cord, two six foot lengths, Cherry Synergy Twin S30 Salamander audio rack