

## **AM radio reception tips and links**

Here are several original suggestions I discovered for AM radio reception. After these tips are links to pages about improving [AM reception in your home](#) and on a separate page there are links for better [AM reception in your car](#). In both cases this is not just a list of links, I have provided commentary which brings together and organizes the web pages. I have recently added a page of [hints and links for better FM radio reception](#), and bringing in [EWTN on short-wave](#).

**Finally, and best of all, I have collected tips from many other web pages and added my own tips to form what is probably the most complete one web page collection of [AM radio reception tips](#) on the Internet.**

This page was written to help Catholics listen to low power Catholic AM stations, but physics is physics, so they will work for anyone. Because I am not a radio hobbyist and I am simply interested in communication the tips are simple, practical, and inexpensive.

### **Original tips for better AM radio reception**

1. [Turn treble down, bass up for AM talk](#)
  2. [Record the AM signal when it is strong](#)
  3. [Most sources of interference are weak](#)
  4. [Tip the radio to reduce interference](#)
  5. [A loop antenna helps a lot when regular antenna is weak.](#)
  6. [The best position for a loop antenna](#)
  7. [A comparison of some good reasonably priced equipment](#)
  8. [Old radios do not get all of today's AM band](#)
  9. [A good shortwave radio is often a great AM radio](#)
  10. [Are you really interested in that station? Try before you buy.](#)
  11. [Mark the position of your station on the dial](#)
  12. [Experiment, try different things](#)
1. If you are listening to talk radio turn the treble all the way down and the bass all the way up. Or if there is only one control marked tone turn it all the way to the low end. This will give you clear, easy to understand voices. This tip really helps a lot. I usually listen to music with the treble and base in the neutral middle position if the station is strong. I assume that is the way the musicians intended it.
  2. Many weak AM stations, including many Catholic AM stations, cut their power at night, and you may get interference at one time during the day but not another. So you may be able to get a station during the day when you are at work, but not when you are free to listen to the program. You can use an automatic light timer, the type that is used to fool burglars into thinking you are home, to record radio programs when you are not at home. I have a popular web page giving the details of this idea and information and links for other methods of [timed radio recording](#).

The pilot of the Airwaves liked this idea so much that he put it on his [AM radio reception](#) web page. This is the only one of these tips you will find off of this site. The Pilot has a great page and has done me the honor of linking back to this page.

3. Many web sites list many sources of interference, florescent lights, televisions, computers, etc. I have been testing this and found that most of the commonly listed dangers are real, but the interference disappears if the radio is more than a foot, 30 centimeters, or so from the source of interference.

But sometimes a source of interference causes problems over a much wider area. For example, the people who lived down stairs from me at my former apartment had a TV that produced a loud buzz even though the TV was a good 20 feet away from the radio. But the much larger TV in our apartment which was five to ten feet away was no problem. So most of the time the normal sources of interference are a minor problem, but sometimes one of them is a big problem. So you should treat the common lists of interference sources as a list of suspects, not a list of convicted criminals.

4. You can greatly reduce interference by pointing either end of the rod antenna in your radio directly at the source of interference. This is very important, but not at all original.

This is perhaps a more original tip, if the source of interference is higher or lower than the radio you may have to tip the radio to point either end of the antenna at the source of interference. For example, if the interference is downstairs you may need to prop one end of the radio on a book and adjust it so that the radio angles down to aim the end of the antenna at the source of interference. I am not sure this is all that original, but maybe it is, and it helped with that TV downstairs I mentioned in the last suggestion.

5. I have bought a Radio Shack loop antenna which is now being discontinued and have had a chance to experiment with it. With a cheap radio the Radio Shack loop can make a big difference. I pick up the radio and move it away from the antenna and the station disappears all together, reappearing when I move the loop back. But with a good radio like the GE Superadio it is difficult to find any difference.

Many web sites will tell you that the antenna is more important than the radio, but good radios often have good antennas built in. The GE Superadio has a large ferrite antenna built into the back.

6. You get the best reception when the loop antenna is placed so that if it were a wheel it could be rolled toward the broadcast tower.

This is the opposite of how you use the regular AM antenna in the back of your radio. The antenna in the back of the radio should be placed so it is perpendicular to the signal. Think of it like a sail that is catching the radio waves. If the signal comes from the north then the ends of the radio should point East and West, and the back of the radio should face North or South.

A web page on loop antennas said the loop must be perpendicular to the internal antenna. I have tested this and found that what is relevant is the orientation of the loop antenna to the broadcast tower not the radio.

If the loop is not wired to the radio it will have to be close to the radio. If the loop antenna and the radio form a T, with the front or back of the radio facing the tower you will get an optimal signal, unless there is a source of interference.

7. I have had a chance to test and compare some equipment because other members of my parish had key pieces of equipment. The Select-A-Tenna did work better than the Radio Shack antenna. It also costs about a lot more, about \$60 for the . The Radio Shack loop antenna may presently be available for \$10 or \$20 dollars, but the antenna has been discontinued and Radio Shack is selling out.

I was not able to tell much difference between the CCRadio from Crane and the GE Superadio III. But perhaps there is a difference between the CCRadio and the GE Superadio that I did not notice. The CCRadio is digitally tuned which should save you quite a bit of time over the years if you switch stations a lot. A note in my guest book says that the earlier versions of the GE Superadio were the best, and beat the early CCRadio.

If you listen to a lot of AM on hard to get stations it may well be worth it to pay an extra hundred dollars for even a small difference. The average person listens to over a thousand hours of radio a year. If you are an avid listener you could easily listen to more than 10,000 hours in the next decade, in which case the extra cost is a penny an hour.

On the other hand the CCRadio costs about the same amount as a great short wave radio and the great short wave radio might be almost as good as the CCRadio at bringing in AM. More on this below.

A note on the proper spelling of these products, useful for searching the web. The GE Superadio is spelled superadio, not superradio, or super radio. The CCRadio is not spelled CC Radio or C.C. Radio. The GE Superadio was originally produced by GE but has been produced by Thompson Electronics for many years.

Here is a web site that provides an extensive [ccomparisonof the GE Superadio and the CCRadio](#). Here is an extensive collection of web pages on the [GE Superadio](#).

8. In 1991 the FCC expanded the AM band to include 1605 to 1705. Earlier AM radios did not have those frequencies, so if you are searching for a station in that range you will need a newer radio.

9. Good short-wave radios are frequently good AM radios. This is particularly important to Catholic radio fans because EWTN provides the exact same programming that is broadcast on Catholic stations by a short-wave signal that anyone can pick up.

Many weak AM stations, including many Catholic AM stations have a much stronger signal during the day, but must cut their power at night. The Catholic station which I used to get best, KSMH cuts their signal from 10,000 watts to 1,000 watts at sundown. After sundown you may lose the AM signal but it has commonly been believed that short-wave radio works best when the sun is not shining. To the degree that is true a short-wave that is better at night than the combination of AM and short-wave will provide you with EWTN 24/7, but actually I find that EWTN short-wave works quite well in the day time but you have to listen to it on a different part of the short-wave spectrum.

If you do get a short-wave radio it will need to be a new one, because EWTN is on a new part of the short-wave band.

As a great short wave radio like the Sangean 818 can be had for about 175 dollars you should think carefully before spending that kind of money or more on an AM radio.

People who are not fans of Catholic radio might find the short-wave option interesting if there is short-wave programming similar to the programming that they hope to get on AM. The more expensive AM equipment is popular in places like Alaska where relatively isolated people have great difficulty picking up local news.

I have more information on [short-wave for EWTN here](#).

There is another option, [Sirius Satellite Radio, which is adding EWTN in English and Spanish](#) to its service. Once again one should look at this before spending hundreds on a very high end AM radio.

It also might be mentioned that [DirectTV](#) and [Dish Network](#) now carry EWTN in English. This is a television service not radio so I will leave it at that.

10. Before you spend a couple of hundred dollars to bring in a station you might want to find out if you really like it. As mentioned above, the average American spends close to a thousand hours a year listening to radio according to the Statistical Abstract put out by the Bureau of the Census. The majority of that is FM, but a large minority is AM. If you are a radio fan, which you maybe if you have read this far, you might be spending more than a thousand hours a year. So if you listen to something hundreds of hours a year for several years even a couple of hundred dollars is dirt cheap. If you quickly lose interest it can be quite expensive. So how to check out the station without buying the equipment? Here are several ways.

You maybe able to listen to some short-wave stations and even distant AM and FM stations on the Internet to test your interest.

If you have broadband you may simply want to listen to the station this way and skip the equipment, but if you have a dial up modem you will probably not want to tie up your phone line for hours at a time on a regular basis just to save a couple of hundred dollars on the radio equipment that could bring the station in. But even listening on the dial up modem is a good way to try the station before you buy the equipment.

Most libraries have public access to the Internet and you may be able to listen to the station that interests you while surfing the Internet at the library.

If your normal travel by car brings you closer to a station that carries EWTN or any other channel that interests you this provides another opportunity to try before you buy. For example if you live in the San Francisco Bay Area and are thinking of getting short-wave to bring in EWTN you could listen to EWTN on 1620 AM in Sacramento when you are traveling through the valley near Sacramento. You can check the [Internet for stations near you.](#)

If you travel around the country on vacation or business you are likely to be close to an EWTN station at least occasionally. Once again you can check the Internet before each trip to see if your itinerary will carry you within range of an EWTN station.

You might also be able to test your interest during the day on a weekend. As mentioned above the AM signal is often ten times as strong before sundown. If you work most of those hours that might not help during the week. But you might well get the station during the day on the weekend which will allow you to test your interest. For example many people in the San Francisco Bay area might be able to get 1620 AM the Sacramento station with a cheap radio during the day. A good shortwave radio or a GE Superadio might bring it in at night.

This idea of trying before you buy must be a preoccupation of mine. I sent a letter to the editor of the New York Times suggesting that online bookstores put an excerpt, the table of contents, and the index on their web sites so you could try the book before you buy. Some of the online bookstores were already putting few excerpts before the Times published my letter, but nobody to the best of my knowledge was putting the table of contents and the index online. A few months or perhaps a year later Amazon.com put up the "Look Inside" system for many of their books. The "Look Inside" system does everything my letter suggested, three different things I suggested were done, coincidence, maybe, maybe not. But back to AM radio.

11. When tuning in weak stations it is important to know exactly where the station is on the dial. You do not want to waste time carefully tuning in the wrong station. If you do not have digital tuning place a bit of invisible tape on the dial so that one side of the tape lines up with where one side of the needle should be when it is tuned into the desired station. If this is too messy for you, you can remember exactly where the needle lines up with any number AM or FM on the dial.

To find a station you might want to find a place where it comes in well, like outside or next to a window in a tall building, carefully mark where the station is on the dial, and then try again at home.

It also helps to remember strong stations that are near the station you want on the dial. Strong stations with distinctive programming are useful if you want to explain where a station is to a friend. You can also help friends find radio stations by putting the phone up to the radio so they can hear what it is playing while they try to tune it in. I find this helps them a lot. Helping your friends at church find Catholic stations is a great way to build up the faith and help Catholic radio.

This last suggestion, and perhaps some of the others may seem a bit trivial, one can see why a book or magazine article might not include them, but space is free on the Internet so I have attempted to include things that might normally be left out so you could try "every trick in the book."

12. Some one sent me an e-mail that said their reception improved when they were close to or touching their radio. Many people have noted this. I used to set my radio on a gallon jar of water to get a similar effect. Things like this may make reception better or worse. What can I say, experiment.

You can help Catholic radio by spreading information on these and the other tips you will find at various web sites to your fellow parishioners. I demonstrated tips and equipment for the Legion of Mary and my prayer group. If the pastor does not object you might run demonstrations on Sunday morning in front of the church or put some key tips in the Church bulletin.

Here is a web page on Catholic radio stations nation wide, [Catholic Radio in U.S.](#)

In this web page I have been discussing AM radio, which is the American term, internationally the term middle wave is used. The tips are also useful for long wave radio.