

Quick Guide to understand installing a FTA receiver.

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Haven't installed your first FTA receiver yet, or are you a professional installing them every day? FTA is maybe the hardest residential satellite system you will ever install. But let me say this, it can be as hard or as easy as YOU make it.

It is most important that you understand how the receivers work. What they do and how they do it differs only a little. The basics are the same for all receivers, and this article outlines what you need to understand to make your install fast and professional.

FTA receivers are not like the analog receivers you may be familiar with and they are not like DirecTV or Dish Network digital receivers although they use the same type of compression and processing. FTA receivers require that you know the parameters of the transponder that you want to derive channels from.

Think of it as a math problem with the receiver being the calculator. If you put in the wrong information, you'll get the wrong answer! No picture! Here's what you need to know.

1. *LO frequency*

The LO setting in the receiver MUST match the LO of the LNBF. Any good LNBF has this information on the label. 10.75 GHz is most common

for Ku in the USA. Your LNBF label might list it as 10,750 MHz. The receiver accepts 10750. Most of the rest of the world uses universal LNBFs. These have two LO frequencies, 0975 and 10600. If you choose "Universal" in the LO menu of the receiver it will give you two places for LO frequencies.

If you are installing C-band, 5.150 is most common.

2. *Transponder frequency*

Depending on what band you are trying to get, this number may be 5 digits or 4 digits. USA Ku falls between 11.700 and 12.200 (so 5 digits), C-band falls between 3.700 and 4.200 (so 4 digits).

3. *Symbol Rate*

This number can be between 2 and 45 MS/s. This will normally be seen as a 5 digit number although some low symbol rates are only 4 digits.

4. *Polarity*

Polarity is simple (but needs to be set right). It's either Horizontal or Vertical (H or V) for linear and Right Hand or Left Hand (RH or LH) for circular. Linear is most common for medium powered Ku.

Know and understand these four parameters and you are on your way to confidently installing FTA receivers.

Transponder frequency, symbol rate, and polarity information can be found

at www.lyngsat.com or www.satcodx.com.

For a quick guide to reading the charts see <http://www.dmsiusa.com/charts.htm>.

Take a look at your receiver menu. Find the menu that allows you to input the LO frequency. This is normally in the "Installation Menu". Make sure the LO frequency matches your LNBF. If it doesn't, you will need to change it.

Since most receivers already have the major satellites and transponders installed in memory, you only need to find the satellite name in the menu and check the transponder list making sure the transponder frequency, symbol rate and polarity are correct. Each satellite has several transponders; so if you are using the receiver to align the dish, make sure you choose a live transponder. If any of the parameters are wrong, you won't get a signal. After you have a good signal, scan the transponder (or entire satellite) and you will see the channels listed in the receiver menu as the scan progresses. Most receivers will show you two lists, one for TV channels and one for Radio channels. When it's finished, back out of the menus and you're ready to watch TV or listen to Radio channels.

It's that simple. When you know what you are doing and how the receivers work it becomes easy.

It's all about being a professional.
What makes you a professional?

Knowing what you are doing and being able to do without letting your customer see you fumbling with the receiver, LNBF, or dish. Not letting him see you cursing the equipment. Not letting him see you calling for help. Know your equipment. Know how to install it and make it work. Learn it and practice on your own time at your own location. Don't go to the customer site unless you are confident that you can do an install without any problems.

Almost all the "help me" installation calls we receive are either wrong settings in the receiver or the installer can't find the signal.

Wrong settings are easily corrected by one of our technicians walking the installer through the settings.

"Can't find the signal" calls are normally due to the wrong transponder selected in the receiver. This happens easily. The C-band transponders for any given satellite are normally listed first in the receiver. If you're shooting for a Ku bird and you've selected a C-band transponder you won't get a signal.

A few "pre-flight" checks will give you the best chance of locking a signal quickly and keep from wasting your valuable time.

I hope this article will help you understand FTA receivers. There's a great future in this field for professional sales and installations.

For more information see www.dmsiusa.com.